NJPDES Rule Index

The New Jersey Department of Environmental Protection has been charged with implementing and enforcing the Federal Clean Water Act and other Federal and State requirements pertaining to enhancing, protecting and restoring the quality of the waters of the State. The adoption of the NJPDES rules in 1997 represented a significant part of a comprehensive reform of the Department's water resources management program. Attainment of our water quality goals requires the cooperative action of the Department and its partners in other government agencies, communities, and businesses.

This index was originally written to assist DEP water quality permit program staff in finding applicable provisions of the NJPDES rules. The Department decided to post the index to its web site to assist interested persons; including students, citizens, and members of the regulated community in understanding the NJPDES rules. The Department points out that the index is not intended to comprehensively answer all inquiries about the NJPDES rules, and is not a substitute for competent legal counsel. The index does not establish or affect legal rights or obligations. Among other things, the Department does not accept errors and/or omissions in this index as an defense for non-compliance with applicable provisions of NJPDES rules or other requirements. Permit program decisions in any particular case will be made applying the applicable law and regulations on the basis of specific facts.

Interested persons are invited to contact the Department for guidance regarding the application of the NJPDES rules.

Regulatory Index

Revised March 1999

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POLLUTANT DISCHARGE ELIMINATION SYSTEM

SUBCHAPTER 1. ABBREVIATIONS, ACRONYMS, AND DEFINITIONS

Statutory authority: N.J.S.A. 13:1B-3 et seq., 13:1D-1 et seq., 13:1E-1 et seq., 26-2C-1 et seq., 58:10-23.11 et seq., 58:10A-1 et seq., 58:11-49 et seq., 58:11-64 et seq., 58:11A-1 et seq., and 58:12A-1 et seq.

Date last amended: October 1, 2007

For regulatory history and effective dates see the New Jersey Administrative Code Table of Contents

SUBCHAPTER 1. ABBREVIATIONS, ACRONYMS, AND DEFINITIONS

7:14A-1.1 Abbreviations and acronyms

(a) As used in this chapter, the following abbreviations and acronyms shall have the following meaning:

"ACR" means acute to chronic ratio.

"AM" means additional measure.

"BAT" means best available technology.

"BCT" means best conventional technology.

"BOD" means biochemical oxygen demand.

"BPJ" means best professional judgment.

"BPT" means best practical control technology.

"BMP" means best management practices.

"BR" means baseline report.

"*C1*" means Category One waters.

"C2" means Category Two waters.

"CBOD" means carbonaceous biochemical oxygen demand.

"CI" means confidence interval.

"CCC" means the criteria continuous concentration.

- "CERCLA" means Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended.
- "CFR" means the Code of Federal Regulations.

"*CMC*" means the criteria maximum concentration.

"COD" means chemical oxygen demand.

- "CPO" means chlorine produced oxidants.
- "CSO" means combined sewer overflow

"CV" means coefficient of variation.

- "CWA" means the Federal Act or the Clean Water Act.
- "CWEA" means the Clean Water Enforcement Act, P.L. 1990, c.28; N.J.S.A. 58:10A-1 et seq.

"DAC" means Discharge Allocation Certificate.

"DEP" means the New Jersey Department of Environmental Protection.

"DGW" means Discharge to Ground Water.

"DLA" means delegated local agency.

"DMR" means Discharge Monitoring Report.

"DOC" means dissolved organic carbon.

"DRBC" means the Delaware River Basin Commission.

"DSW" means Discharge to Surface Water.

"DTW" means domestic treatment works.

"ECRA" means Environmental Cleanup Responsibility Act.

"*EC50*" means the median effective concentration resulting in at least 50 percent mortality to the test species.

"EDP" means effective date of permit.

"ERP" means enforcement response plan.

"FSOD" means first stage oxygen demand.

"FW" means freshwater

"GIS" means Geographic Information System.

"GPD" means gallons per day.

"*GWQS*" means the Ground Water Quality Standards as defined in N.J.A.C. 7:9-6.

"IC" means the inhibition concentration.

"*IPP*" means industrial pretreatment program.

"ISRA" means Industrial Site Recovery Act.

"ITW" means industrial treatment works.

"IWMF" means industrial waste management facility.

"*kg/day*" means kilograms per day.

"LA" means load allocation.

"*LC50*" means the median lethal concentration resulting in at least 50 percent mortality to the test species.

"LLAMA" means Letter of Land Application Management Approval.

"LTA" means long term average effluent concentration.

- "*MA1CD10*" means the minimum average one day flow with a statistical recurrence interval of ten years.
- "*MA30CD5*" means the minimum average 30 consecutive day flow with a statistical recurrence interval of five years.

"*MA7CD10*" means the minimum average seven consecutive day flow with a statistical recurrence interval of 10 years.

"MCL" means maximum contaminant level

"*MDL*" means method detection level.

"*MF*" means membrane filter technique.

"MGD" means million gallons per day.

"*mg/L*" means milligrams per liter.

"*ml/L*" means milliliters per liter.

"MOA" means Memorandum of Agreement.

"MOU" means Memorandum of Understanding.

"MPN" means most probable number.

"MRF" means Monitoring Report Form.

"MS4" means municipal separate storm sewer system.

"*MSWLF*" means a municipal solid waste landfill as defined in 40 CFR part 258.2.

"NBOD" means nitrogenous biochemical oxygen demand.

"NCCW" means non-contact cooling water.

"N.J.A.C." means New Jersey Administrative Code.

"NJPDES" means the New Jersey Pollutant Discharge Elimination System.

"N.J.S.A." means New Jersey Statutes Annotated.

"NOAEC" means no observed adverse effect concentration.

"NOEC" means no observable effect concentration.

"NPDES" means the National Pollutant Discharge Elimination System.

"NT" means non-trout waters.

"OEP" means the Office of Environmental Planning.

"OM" means optional measure.

"*PL*" means the general surface water classification applied to Pinelands Waters.

"POTW" means publicly owned treatment works.

"PPSNC" means pretreatment program significant noncompliance.

"PQL" means practical quantification level.

"PVSC" means Passaic Valley Sewerage Commissioners.

"RCRA" means Resource Conservation and Recovery Act.

- "RFA" means Request For Authorization under a general NJPDES permit.
- "SBR" means Statewide Basic Requirement.
- *"SC*" means the general surface water classification applied to coastal saline waters.
- "SDWA" means the Federal or State Safe Drinking Water Acts (P. L. 95-523, as amended by P. L. 95-1900; 42 U.S.C. §§300f et seq. and N.J.S.A. 58:12A-1 et seq., respectively).
- "SE" means the general surface water classification applied to saline waters of estuaries.
- "SESCP" means soil erosion and sediment control plan.
- "SIC" means Standard Industrial Classification.
- "SIU" means significant indirect user.
- "SNC" means significant non-compliance.
- "SOD" means sediment oxygen demand.
- "SSMP" means Statewide Sludge Management Plan.

"*TDS*" means total dissolved solids.

"TKN" means total Kjeldahl nitrogen.

"TM" means trout maintenance.

"TMDL" means total maximum daily load.

"TOC" means total organic carbon.

"TP" means trout production.

"TSD" means the USEPA Technical Support Document (See USEPA TSD).

"TSS" means total suspended solids.

"TTO" means total toxic organics.

" TU_A " means toxic units acute

" TU_C " means toxic units chronic

"TWA" means Treatment Works Approval.

"TWTDS" means treatment works treating domestic sewage.

"UIC" means Underground Injection Control program.

"*ug/L*" means micrograms per liter.

- "USEPA" or "EPA" means the United States Environmental Protection Agency.
- "USEPA TSD" means the USEPA <u>Technical Support Document for Water</u> Quality Based Toxics Control, (EPA/505/2-90-001), March 1991.

- "USDA" means the United States Department of Agriculture.
- "*USDA-NRCS*" means the United States Department of Agriculture Natural Resources Conservation Service.
- "USDW" means underground source of drinking water.
- "USGS" means United States Geological Survey.
- "USNRC" means the United States Nuclear Regulatory Commission.
- "UST" means underground storage tank.
- "VOC" means volatile organic compounds.
- "WET" means whole effluent toxicity.
- "WLA" means wasteload allocation.
- "WQBEL" means water quality based effluent limitation.
- "WQM plan" means Water Quality Management plan.
- "WSC" means Written Statement of Consent.

7:14A-1.2 Definitions

- As used in this chapter, the following words and terms shall have the following meanings:
 - "*Abandoned well*" means a well whose use has been discontinued or which is in a state of disrepair such that it cannot be used for its intended purpose or for observation purposes.
 - "*Acidizing*" means the injection of acid through the borehole or well into a formation to increase permeability and porosity by dissolving the acid-soluble portion of the rock constituents.
 - "*Action levels*" means permit conditions which are not effluent limitations but require a permittee to act if breached.
 - "*Actual flow*" means the volume of sewage and other wastes which a treatment works receives. Actual flow shall be determined by the arithmetic average of the metered daily volumes of waste received at a treatment works for the preceding period of three consecutive calendar months. Where peak flows have been determined by the Department to be seasonal in nature, the seasonal peak flow period shall be used in determining actual flow.
 - "*Acute to* chronic *ratio*" means the ratio of the acute toxicity of an effluent or a toxicant to its chronic toxicity. It is used as a factor for estimating chronic toxicity on the basis of acute toxicity data, or for estimating acute toxicity on the basis of chronic toxicity data.
 - "*Acute toxicity*" means a lethal or severe adverse sublethal effect (for example, immobilization of daphnids) to an organism exposed to a toxic substance

for a relatively short period of time. Acute toxicity is measured by short-term bioassays, generally of 48 or 96 hour duration.

- "Adequate conveyance capacity" means:
- 1. In the downstream sewers, the peak dry weather flow does not exceed 80 percent of the depth of the pipe and the peak wet weather flow does not result in overflows or discharges from any unpermitted discharge location; and
- 2. In downstream pumping stations with two pumps, peak dry weather flow shall be handled by one pump, and in pumping stations with more than two pumps, peak dry weather flow shall be handled with the largest pump out of service, and the peak wet weather flow does not result in any overflow or discharge from any unpermitted discharge location.
- "*Administratively*" means those procedures used by the Department in conducting normal business operations.
- "*Administratively continued*" means the procedure used by the Department to extend the time period for a permit, authorization, or approval beyond the administrative expiration date of that permit, authorization, or approval.
- "*Administrator*" means the Administrator of the United States Environmental Protection Agency (USEPA) or an authorized representative.
- "Affected person" means a person who has asserted (and not waived or withdrawn) a confidentiality claim covering information submitted to the Department.
- "Affected sewerage entity" means any public or private sewerage authority, municipal utilities authority, joint meeting, State agency, county, municipality, or other entity which owns or operates any sewage treatment plant or sewage collection system, into which a treatment works will discharge; or which has jurisdiction to treat or convey sewage or other wastewater in the service area in which the proposed treatment works are to be located.
- "Agricultural land," for the purpose of N.J.A.C. 7:14A-20, means land on which a food crop, a feed crop, or a fiber crop is grown. This includes range land and land used as pasture.
- "Agronomic rate" means the whole residual application rate on a dry weight basis designed:
- 1. To provide the amount of nitrogen or other nutrients needed by the food crop, feed crop, fiber crop, cover crop or vegetation grown on the land;
- 2. To minimize the amount of nitrogen or other nutrients from residual and all other fertilizer sources that passes below the root zone of the crop or vegetation grown on the land to the ground water or that runs off to surface waters; and

- 3. To provide the amount of calcium or magnesium oxides capable of neutralizing soil acidity.
- "*Algaecide*" means chemical agents which have the capacity to destroy or otherwise control phytoplankton (algae) in water.
- "*Aliquot*" means an individual sample of specified volume used to make up a total composite sample.
- "*Amalgam separator*" is a device to remove amalgam and its metal constituents from dental facility wastewater.

"Amalgam waste" means and includes:

- 1. Non-contact amalgam (amalgam scrap that has not been in contact with patient);
- 2. Contact amalgam (including but not limited to extracted teeth containing amalgam);
- 3. Amalgam sludge captured by chairside traps, vacuum pump filters, screens, and other amalgam trapping devices;
- 4. Used capsules containing amalgam; and
- 5. Leaking or unusable amalgam capsules.
- "*Ambient study*" means a water quality, biological, mixing zone, or other study conducted to determine the existing physical, chemical, or biological conditions in a waterbody, existing effects of a discharge or other activity on the physical, chemical, or biological conditions in a waterbody, and/or to predict the potential physical, chemical, or biological effects of a discharge or other activity on a waterbody.
- "Anadromous fish" means fish that spend most of their life in saline waters and migrate to fresh waters to spawn.
- "*Animal feeding operation*" means a lot or facility (other than an aquatic animal production facility) where the following conditions are met:
- 1. Animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period; and
- 2. Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.
- "Animal units" means the unit of measurement for any animal feeding operation calculated as follows: the number of slaughter and feeder cattle multiplied by 1.0, plus the number of mature dairy cattle multiplied by 1.4, plus the number of swine weighing over 25 kilograms (approximately 55 pounds) multiplied by 0.4, plus the number of sheep multiplied by 0.1, plus the number of horses multiplied by 2.0.

- "Annual pollutant loading rate" means the maximum amount of a pollutant listed in 40 CFR 503.13 that can be applied to a unit area of land during a 365 day period.
- "*Annual whole residual application rate*" means the maximum amount of a residual (dry weight basis) that can be applied to a unit area of land during a 365 day period.
- "*Applicant*" means any person, corporation, government body or other legal entity which applies for a NJPDES permit or Departmental approval pursuant to this chapter.
- "*Application rates*" means the hydraulic or loading limits determined and set by the Department governing the application of pollutants to the land or waters of the State.
- "*Apply residual or residual applied to the land*" means land application of residual. This definition shall include apply sludge or sludge applied to the land as well as apply sewage sludge or sewage sludge applied to the land.
- "*Approved industrial pretreatment program*" means an industrial pretreatment program prepared by a local agency and approved by the Department in accordance with 40 CFR Part 403 and N.J.A.C. 7:14A-19.
- "Aquatic substrata" means soil material and associated biota underlying the water.
- "*Aquaculture projects*" means a defined managed water area which uses discharges of pollutants into that designated area for the maintenance or production of harvestable freshwater, estuarine, or marine plants and animals.
- "Aquifer" means a geologic formation, group of geologic formations, or a portion of a geologic formation capable of yielding a significant amount of ground water to wells or springs.
- "*Area of review*" means the area surrounding an injection well described by the criteria set forth in N.J.A.C. 7:14A-8.13.
- "Areawide plan" means any water quality management plan adopted pursuant to Sections 208 and 303 of the Federal Act and Section 5 of the "New Jersey Water Quality Planning Act," N.J.S.A. 58:11A-1 et seq.
- "Authorized representative" means those persons whose presence is in place of the actual entity, person, or Department, with all rights and responsibilities.
- "Average monthly discharge limitation" means the highest allowable average of "daily discharges" over a calendar month calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

- "Average weekly discharge limitation" means the highest allowable average of "daily discharges" over any seven consecutive days, calculated as the sum of all daily discharges measured during any seven consecutive days, divided by the number of daily discharges measured during that period.
- "Background ground water quality" is the ground water quality that is not influenced by the discharge.
- "*Base flood*" means a flood that has a one percent chance of occurring in any given year (that is, a flood with a magnitude equaled once in 100 years).
- "*Baseline Report*" means a report required following promulgations of a Federal categorical standard, pursuant to 40 CFR 403.12(b).
- "Batch discharge" means a "discharge" which occurs with interruption throughout the operating hours of the facility.
- "Best management practices" or "BMPs" for purposes of this chapter means:
- 1. Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State; or
- 2. Methods, measures, or practices selected by an agency to meet its nonpoint source control needs.
- BMPs also include treatment requirements, operating procedures, and techniques to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs include, but are not limited to, structural and nonstructural controls and operation and maintenance procedures. BMPs can be applied before, during, and after pollution-producing activities to reduce or eliminate the introduction of pollutants into receiving waters.

"Bimonthly" means occurring every two months.

- "*Bioaccumulation*" means the increase of the concentration of a substance within the tissues of an organism, to levels in excess of that substance's ambient environmental concentration, directly from the water or through the ingestion of food (usually other organisms).
- "*Bioassay*" means a toxicity test using aquatic organisms to determine the concentration or amount of a toxic substance causing a specified response in the test organisms under stated test conditions.
- "*Biocide*" means chemical agents with the capacity to destroy biological life forms. Bactericides, insecticides, and pesticides are examples of biocides.
- "*Biological monitoring method*" means a testing method which utilizes any biological system or any of its parts for assessing the presence or effects of one or more pollutants and/or environmental factors, either alone or in combination.

- "*Biochemical* oxygen demand" or "BOD" means the quantity of dissolved oxygen in milligrams per liter (mg/l) either in an effluent or in a waterbody, required during stabilization of decomposable organic matter by aerobic biochemical action as determined by analytical procedures set forth in the <u>Manual of Methods for Chemical Analysis of Water and Wastes</u> (USEPA, Office of Technology Transfer, Washington, D.C., March 1983).
- "*Biota*" means the animal and plant life of an ecosystem; flora and fauna collectively.
- "Biweekly" means occurring every two weeks.
- "*Board or body*" means any governmental entity, who has or shares authority to approve all or portions of permits either in the first instance, as modified or reissued, or on appeal.
- "*Bulk residual*" means residual that is not sold or given away in a bag or other container for application to the land. This definition shall include bulk sludge or bulk sewage sludge.
- "*Bunker silo*" means a structure with low walls, a sloping floor of an impervious material (usually concrete), and a leachate collection system, designed to hold dewatered residuals.
- "*Bypass*" means the anticipated or unanticipated intentional diversion of waste streams from any portion of a treatment works.
- "*Carbonaceous* biochemical oxygen demand" or "CBOD" means that portion of the biological oxygen depletion either in an effluent or in a waterbody which is due to the oxidation of carbon containing compounds.
- "*Casing*" means a pipe or tubing of varying diameter and weight, lowered into a borehole during or after drilling in order to support the sides of the hole and thus prevent the walls from caving, to prevent loss of drilling mud into porous ground, or to prevent water, gas, or other fluid from entering the hole. For injection wells in Classes I, II, III, and IV, the pipe or tubing shall be a heavy metal (steel or iron).
- "*Catastrophic collapse*" means the sudden and total failure of overlying strata caused by removal of underlying materials.
- "*Category one waters*" means those waters designated in the tables in N.J.A.C. 7:9B-1.15(c) through (h), for purposes of implementing the antidegradation policies as set forth at N.J.A.C. 7:9B1.5(d), the SWQS, for protection from measurable changes in water quality characteristics because of their clarity, color, scenic setting, other characteristics of aesthetic value, exceptional ecological significance, exceptional recreational significance, exceptional water supply significance, or exceptional fisheries resources(s). These waters may include, but are not limited to:

- 1. Waters originating wholly within Federal, Interstate, State, County, or municipal parks, forests, fish and wildlife lands, and other special holdings that have not been designated as FW1 in N.J.A.C. 7:9B-1.15(h), Table 6;
- 2. Waters classified in N.J.A.C. 7:9B-1.15(c) through (g) as FW2 trout production waters and their tributaries;
- 3. Surface waters classified in this subchapter as FW2 trout maintenance or FW2 nontrout that are upstream of waters classified in this subchapter as FW2 trout production;
- 4. Shellfish waters of exceptional resource value; or
- 5. Other waters and their tributaries that flow through, or border, Federal, State, county or municipal parks, forest, fish and wildlife lands, and other special holdings.
- "*Category* Two *waters*" means those waters not designated as Outstanding National Resource Waters or Category One in N.J.A.C. 7:9B-1.15, the SWQS, for purposes of implementing the Antidegradation Policies.
- "*Cementing*" means the operation or process whereby a cement slurry is pumped into a drilled hole and/or forced behind the casing.
- "Certified laboratory" means a laboratory certified by the Department in accordance with N.J.A.C. 7:18.
- "Cesspool" means a covered pit with open-jointed lining into which untreated sewage is discharged, the liquid portion of which is disposed of by leaching into the surrounding soil, the solids or sludge being retained within the pit. A cesspool is an injection well."
- *Chemical oxygen demand*" or "*COD*" means a measure of the oxygen required to oxidize all compounds in water, both organic and inorganic (in milligrams per liter, mg/l) in a waste sample under specific conditions of an oxidizing agent, temperature and time as determined by analytical procedures set forth in the for Chemical Analysis of Water and Wastes (USEPA, Office of Technology Transfer, Washington, D.C., March 1983).
- "Chlorine produced oxidants" means the sum of free and combined chlorine and bromine as measured by the methods approved under N.J.A.C. 7:18. In fresh waters the oxidants measured are comprised predominantly of hypochlorous acid (HOCl), hypochlorite ion (OCl-), monochloramine and dichloramine. In saline waters the oxidants measured are comprised predominantly of the oxidants listed for fresh waters plus hypobromous acid (HOBr), hypobromous ion (OBr-) and bromamines.
- "*Chronic toxicity*" means death or other adverse impacts that affect the growth, survival, or reproductive success of an organism or its progeny after a relatively long exposure period to toxic substances. Chronic toxicity is measured using intermediate-term or long-term bioassays.

- "Class 1 sewage sludge management facility" means any domestic treatment works (DTW) required to have an approved industrial pretreatment program under 40 CFR 403.8(a) (including any DTW located in a state that has elected to assume local program responsibilities pursuant to 40 CFR part 403.10(e)) and any treatment works treating domestic sewage classified as a Class 1 sewage sludge management facility by the Regional Administrator, or, in the case of State sewage sludge management program approval, the Regional Administrator in conjunction with the Commissioner, because of the potential for its sewage sludge use or disposal practice to affect public health and the environment adversely.
- "*Clean Water Act*" (CWA) also known as the Federal Act or Federal Clean Water Act (33 U.S.C. et seq.) including all subsequent supplements and amendments.
- "*Clean Water Act and regulations*" means the Clean Water Act (CWA) and applicable regulations promulgated thereunder. In the case of an approved State program (NJPDES), it includes State program requirements.
- "*Closed conduit*" means any closed natural or artificial duct, such as a pipe, for conveying fluids.
- "Coefficient of variation" means the statistical measure of variability calculated as the standard deviation divided by the estimated mean.
- "col/100 mL" means the coliform colonies per 100 milliliters.
- "*Cold water aquatic animals*" means, but is not limited to, the Salmonidae family of fish (for example, trout and salmon).
- "*Combined sewer overflow*" means the excess flow from the combined sewer system which is not conveyed to the domestic treatment works for treatment, but transmitted by pipe or other channel directly to waters of the State.
- "*Combined sewer system*" means a sewer system that is designed to carry sanitary sewage at all times and that also is designed to collect and transport stormwater from streets and other sources, thus serving a combined purpose.
- "*Commercial unit*" means one or more buildings, or one or more rooms within a building, which will be occupied by a single individual, corporation, company, association, society, firm, partnership or joint stock company, and used for nonresidential purposes.
- "*Commissioner*" means the Commissioner of the New Jersey Department of Environmental Protection or an authorized representative.
- "*Committed flow*" means the sum of the actual flow plus the sum of all flows which are anticipated from connections which have been approved but are not yet in operation. The flow to be anticipated from any such connections shall be that flow approved by the Department.

- "Complete permit application" means a permit application which is both administratively and technically complete. An administratively complete permit application is a permit application which complies with all of the requirements in the permit application checklist referenced in N.J.A.C. 7:14A-15.3(c). A technically complete permit application is a permit application which has been determined to be administratively complete and satisfactorily addresses the requirements in the permit application checklist and any specific permit application requirements for the particular type of discharge set forth in this chapter.
- "*Compliance monitoring report*" means a report periodically submitted by a permittee to verify continued compliance. This term includes a Discharge Monitoring Report (DMR) and any report required in an SIU permit pursuant to 40 CFR 403.12(e).
- "Composite sample" means a sample composed of several discrete samples combined in a known proportion. For NJPDES wastewater monitoring, a composite sample is a sample composed of several discrete samples collected at equal time intervals, or proportionally to the flow rate of the discharge.
- "*Composting*" means the biological decomposition of dewatered organic residuals under controlled conditions of temperature, pH, oxygen and moisture, by which the volatile fraction, the putrescibility, and the pathogen concentrations in the residuals are reduced.
- "*Concentrated animal feeding operations*" means an animal feeding operation which meets the criteria set forth in N.J.A.C. 7:14A-2.13.
- "*Concentrated aquatic animal production facilities*" means a commercial aquarium, hatchery, fish farm, or other facility which meets the criteria set forth in N.J.A.C. 7:14A-2.14.
- "Confidence interval" means the interval above and below the mean of the sample data set within which the true mean of the entire data set would be expected to be found.
- "*Confidence interval for individual data points*" means the interval above and below the mean of the sample data set within which any individual datum would be expected to be found.
- "*Confidentiality claim*" means a claim or allegation that information is entitled to confidential treatment because such information constitutes a trade secret.
- "*Confined aquifer*" means an aquifer bounded above and below by impermeable beds or by beds of distinctly lower permeability than that of the aquifer itself; an aquifer containing confined ground water.
- "*Confining bed*" means a body of impermeable or distinctly less permeable material stratigraphically adjacent to one or more aquifers.

- "*Confining zone*" means a geological formation, group of formations, or part of a formation that is capable of limiting fluid movement above an injection zone.
- "Connection" means, for purposes of N.J.A.C. 7:14A-22 only, any physical or operational change, associated with an increase in projected flow, to a collection system of any building, facility, or other structure either proposed or existing for which a building permit or other municipal approval including site plan or subdivision approval is required, and which connects directly or indirectly to any portion of a treatment works.
- "Connection approval" means a treatment works approval to construct and/or operate a connection pursuant to N.J.S.A. 58:10A-6, N.J.A.C. 7:14A-2 or 7:14A-22 or a permit to construct and operate a sewer connection.
- "Conservation Plan" means the information provided to a land user that includes guidance, alternatives, and decisions as needed to plan and apply resource management systems consistent with the National Conservation Planning Manual, Title 11, Natural Resources Conservation Service, United States Department of Agriculture, including all future amendments and supplements.
- "Conservative parameter" means any parameter which is not significantly degraded by physical, chemical, or biological processes which may occur in a waterbody.
- "*Construction*" means any placement, assembly or installation of facilities, equipment or treatment works, or modification of existing buildings, structures or facilities which is necessary for the placement, assembly or installation of new source facilities, equipment or treatment works, or entering into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss and contracts for feasibility, engineering and design studies do not constitute a contractual obligation for the purposes of this definition.
- "*Construction* waste" means a construction waste as defined in N.J.A.C. 7:26-1.4, examples of which are identified in N.J.A.C. 7:26-1.7(e)1iii.
- "*Control* authority" means the entity responsible for administering an industrial pretreatment program pursuant to 40 CFR 403 and N.J.A.C. 7:14A-19 and shall be the Department in areas of the State served by a local agency without an approved industrial pretreatment program or the delegated local agency in all other areas of the State.
- "*Controlled streams*" means any uni-directional waterbody where the quantity or timing of water flow is determined by dams which restrict or otherwise regulate the flow in the waterbody.

- "*Contaminant*" means any physical, chemical, biological, or radiological pollutant or matter in water.
- "*Contiguous zone*" means the entire zone established by the United States under Article 24 of the Convention on the Territorial Sea and the Contiguous Zone.
- "*Continuous discharge*" means a discharge which occurs without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities.
- "*Conventional pollutant*" means a pollutant designated under Section 304(b)(4) of the Federal Act.
- "Co-permittee" means, for purposes of N.J.A.C. 7:14A-24.2 and 25.9 only, a permittee that is only responsible for NJPDES permit conditions relating to the discharge for which that permittee is an operating entity.
- "*Cover crop*" means a crop of close growing grasses, legumes, or small grains grown primarily for seasonal protection and soil improvement. A cover crop usually is grown for one year or less, except where there is permanent cover as in orchards.
- "*Criteria*" means those elements of the Surface Water Quality Standards, set forth at N.J.A.C. 7:9B, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports a designated use. When the criteria are met, water quality will generally protect the designated use.
- "*Criteria* continuous concentration" means the chronic aquatic life criteria set forth in N.J.A.C. 7:9B-1.
- "*Criteria* maximum concentration" means the acute aquatic life criteria set forth in N.J.A.C. 7:9B-1.
- "*Critical biological periods*" means those time periods when significant portions of the biological community may be adversely affected by discharge activities, including reproductive periods or periods of stress resulting from non-biotic factors such as elevated temperature.
- "*Critical conditions*" means the combination of those ambient conditions when the ambient water quality standards are more likely to be violated, such as elevated temperature or low flow periods.
- "*Cumulative pollutant loading rate*" means the maximum amount of a pollutant listed in 40 CFR 503.13 that can be applied to an area of land.
- "*Cumulative substance*" means a substance that may be bioaccumulated within an organism to concentrations that exert a toxic effect on that organism or render it unfit for consumption.
- "Daily" means every calendar day including weekends and holidays.

- "*Daily discharge*" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant expressed in designated units, calculated over the day.
- "*Daily monitoring*" means monitoring conducted every calendar day, including weekends and holidays.
- "Day" means an operating day or 24-hour period.
- "*Delegated local agency*" means a local agency with an industrial pretreatment program approved by the Department.
- "*DEP Bulletin*" means the publication issued by the Department designed to provide public notice of certain Department actions.
- "*Dental facility*" means any dental clinic, dental office, or dental practice, including hospitals, dental schools, and community health centers.
- "Department" means the New Jersey Department of Environmental Protection.
- "*Designated use*" means those surface water or ground water uses, both existing and potential, that have been established by the Department for waters of the State.
- "*Design flow*" means the average daily volume of wastewater which a domestic treatment works was designed to treat or convey, or the maximum permissible volume of flow to a domestic treatment works as established by a NJPDES permit or a treatment works approval, whichever is most stringent.
- "*Designated* project area" means the portions of the waters of the State within which the permittee or permit applicant plans to confine the cultivated species, using a method or plan of operation (including, but not limited to, physical confinement) which, on the basis of reliable scientific evidence, is expected to ensure that specific individual organisms comprising an aquacultural crop will enjoy increased growth attributable to the discharge of pollutants, and be harvestable within a defined geographic area.
- "*Diadromous fish*" means fish that spend most of their life in one type of water, either fresh or saline, and migrate to the other type to spawn.
- "*Diffuser*" means a device which is attached to the outfall pipe to improve the mixing of the effluent with the receiving water.
- "*Dike*" means an embankment or ridge of either natural or man-made materials used to prevent the movement of liquids, sludges, solids or other materials.

- "Direct discharge" means a discharge to surface water. A direct discharge includes any discharge through a separate storm sewer that does not lead to a DTW.
- "*Director*" means the Director of the Department's Division of Water Quality, it's predecessor or successor, or an authorized representative.
- "Discharge" means an intentional or unintentional action or omission resulting in the releasing, spilling, leaking, pumping, pouring, emitting, emptying, or dumping of a pollutant into the waters of the State, onto land or into wells from which the pollutant might flow or drain into such waters, or into waters or onto lands outside the jurisdiction of the State which pollutant enters the waters of the State, and shall include the release of any pollutant into a municipal treatment works. A leak into a secondary containment system which does not involve a release into the waters or lands of this State is not a "discharge" for purposes of applying the rules under this chapter to violations of the Underground Storage of Hazardous Substances Act, N.J.S.A. 58:11-49 et seq. and the rules promulgated pursuant thereto, N.J.A.C. 7:14B.
- "*Discharge Allocation Certificate*" or DAC means the certificate issued by the Department which designates the quantity and quality of pollutants which may be discharged by any person planning to undertake any activity which will result in a discharge to surface water or a substantial modification in a discharge to surface water.
- "*Discharge Monitoring Report*" means the EPA's uniform national form, as amended, for the reporting of self-monitoring results by permittees, and includes Baseline Reports.
- "*Discharger*" means any person, corporation, municipality, sewerage authority or other entity, who causes or allows any discharge.
- "*Discharge to surface water*" or "*DSW*" means a direct discharge to surface water as defined in N.J.A.C. 7:9B. DSW does not include a discharge to a DTW.
- "*Disinfection*" means the removal, destruction, or inactivation of pathogenic and indicator organisms.
- "*Disposal*" means the storage, treatment, utilization, processing, resource recovery of, or the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid or hazardous waste into or on any land or water so that the solid or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.
- "*Disposal well*" means a well used for the disposal of waste into a subsurface stratum.

- "Dissolved metal" means that concentration of metal that passes through a 0.45 μ m membrane filter.
- "District Sludge Management Plan" means the formalized document developed by a Solid Waste Management District under the New Jersey Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., or its designated or delegated lead planning agency(ies) for submission to the State for certification as mandated in the Solid Waste Management Act. The Plan is adopted by the District and approved by the State. The District Sludge Management Plan is comprised of all forms in Appendix K of the Statewide Sludge Management Plan and is divided into four documents: an Inventory and Strategy Document, an Alternatives Document, a Selection Document, and an Implementation Document. For the purposes of the Statewide Sludge Management Plan, the District Sludge Management Plan shall also include the sludge management plans prepared by a sludge generator directed by the Department to plan in the event of District failure to plan.
- "*Domestic pollutant*" means a pollutant which results from the discharge of household, commercial or other wastes from bathrooms, toilet facilities, home laundries and kitchens which are predominantly the result of natural human waste elimination associated with bodily function and food preparation.
- "*Domestic septage*" means either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives process wastewater and does not include grease removed from a grease trap.
- "*Domestic sewage*" means waste and wastewater from humans or household operations that is discharged to or otherwise enters a treatment works.
- "*Domestic treatment works*" or "DTW" means all publicly owned treatment works as well as any privately owned treatment works processing primarily domestic wastewater and pollutants together with any ground water, surface water, stormwater or process wastewater that may be present.
- "*Domestic* wastewater" means the liquid waste or liquid borne wastes discharged into a domestic treatment works.
- "*Draft permit*" means a publicly noticed document indicating the Department's intent to issue, deny, modify, revoke and reissue, revoke, or reissue a permit.
- "*Dredged spoil*" means sediments, known as spoil, removed during dredging operations.

- "*Drilling mud*" means a heavy suspension used in drilling an injection well, introduced down the drill pipe and through the drill bit.
- "*Dry weight basis*" means calculated on the basis of having been dried at 105 degrees Celsius until reaching a constant mass (that is, essentially 100 percent solids content).
- "*EC50*" means the median effective concentration of a toxic substance expressed as a statistical estimate of the concentration that has a specified adverse effect on 50 percent of the test organisms under specified test conditions, based on the results of an acute bioassay.
- "*Effective date of a UIC program*" means the date that a State UIC program is approved or established by the Administrator.
- "Effluent concentrations consistently achievable through proper operations and maintenance" means:
- 1. For a given pollutant parameter, the 95th percent value for the 30-day average effluent quality achieved by a treatment works in a period of at least two years, excluding values attributable to upsets, bypasses, operational errors, or other unusual conditions; and
- 2. A seven-day average value equal to the product of the value derived under paragraph 1 of this definition, multiplied by 1.5.
- "Effluent data" means with reference to any source of discharge of any pollutant:
- 1. Information necessary to determine the identity, amount, frequency, concentration, temperature, or other characteristics (to the extent related to water quality) of any pollutant which has been discharged by the source (or of any pollutant resulting from any discharge from the source), or any combination of the foregoing;
- 2. Information necessary to determine the identity, amount, frequency, concentration, temperature, or other characteristics (to the extent related to water quality) of the pollutants which, under an applicable standard or limitation, the source was authorized to discharge (including, to the extent necessary for such purpose, a description of the manner or rate of operation of the source); and
- 3. A general description of the location and/or nature of the source to the extent necessary to identify the source and to distinguish it from other sources (including, to the extent necessary for such purposes, a description of the device, installation, or operation constituting the source).
- 4. Notwithstanding 1 through 3 above, the following information shall be considered to be "effluent data" only to the extent necessary to allow the Department to disclose publicly that a source is (or is not) in compliance with an applicable standard or limitation, or to allow the Department to

demonstrate the feasibility, practicability, or attainability (or lack thereof) of an existing or proposed standard or limitation:

- i. Information concerning research, or the results of research, on any product, method, device, or installation (or any component thereof) which was produced, developed, installed, and used only for research purposes; and
- ii. Information concerning any product, method, device, or installation (or any component thereof) designed and intended to be marketed or used commercially but not yet so marketed or used.
- "Effluent limitation" means any restriction on quantities, quality, discharge rates and concentration of chemical, physical, thermal, biological, radiological, and other constituents of pollutants established by permit, or imposed as an interim enforcement limit pursuant to an administrative order, including an administrative consent order.
- "Effluent limitation guidelines" means a regulation published by the Administrator under Section 304(b) of the Federal Act.
- "Emergency permit" means a permit issued in accordance with N.J.A.C. 7:14A-6.14.
- "Epilimnion" means the freely circulating upper region of a thermally stratified waterbody extending from the surface to the thermocline.
- "Excessive inflow/infiltration" means the quantities of infiltration/inflow (I/I) which can be economically eliminated from a sewer system as determined in a cost effectiveness analysis that compares the cost for correcting the I/I conditions to the total costs for transportation and treatment of the I/I (see also the definitions for "nonexcessive infiltration" and "nonexcessive inflow").
- "Existing discharge" means a permitted discharge which is not a new source.
- "*Existing injection well*" means an injection well other than a new injection well.
- "*Existing source*" means any source which is not a new source, including presently existing discharges which are not currently permitted.
- "Existing uses" means the following:
- 1. As related to the Ground Water Quality Standards, means those uses of ground water actually attained, whether or not they are included in the Ground Water Quality Standards, N.J.A.C. 7:9C; and
- 2. For surface waters, those uses actually attained in the waterbody on or after November 28, 1975, whether or not they are included in the Surface Water Quality Standards, N.J.A.C. 7:9B.
- "Facility" or "activity" means any hazardous waste management facility, injection well, NJPDES point source or treatment works treating domestic

sewage, or State approved dredge or fill activity, pursuant to Section 404 of the Federal Act, or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the RCRA, UIC, NJPDES, or 404 programs.

- "Facilities eligible for treatment equivalent to secondary treatment" means treatment works which are eligible for consideration for effluent limitations described for treatment equivalent to secondary treatment if:
- 1. The BOD5 and TSS effluent concentrations consistently achievable through proper operation and maintenance of the treatment works exceed the minimum level of the effluent quality set forth in N.J.A.C. 7:14A-12;
- 2. A trickling filter or waste stabilization pond is used as the principal process; and
- 3. The treatment works provide significant biological treatment of municipal wastewater.
- "*Facility-wide permit*" means a single permit issued by the Department to the owner or operator of a priority industrial facility incorporating the permits, certificates, registrations, or any other relevant Department approvals previously issued to the owner or operator of the priority industrial facility pursuant to the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., the Air Pollution Control Act, N.J.S.A. 26:2C-1 et seq., and the appropriate provisions of the Pollution Prevention Plan prepared by the owner of operator of the priority industrial facility pursuant to N.J.S.A. 13:1D-41 and 42.
- "*Federal Act*" means the Clean Water Act or the Federal Water Pollution Control Act (33 U.S.C. §§1251 et seq.) including all subsequent supplements and amendments.
- "Feed crops" means crops produced primarily for consumption by animals.
- "*Fiber crops*" means crops produced primarily for the production of plant fiber, but which also can be grown to produce products consumed by humans. Fiber crops include crops such as flax and cotton.
- "*Final* cover," for the purpose of N.J.A.C. 7:14A-20, means the last layer of soil or other material placed on a surface disposal site at closure.
- "Final permit decision" means the Department's determination to issue, deny, modify, suspend, or revoke a permit. Such a determination is a final agency action which is deemed pursuant to N.J.S.A. 58:10A-7 to constitute a contested case under the Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq.
- "*Flow* proportional composite" means a single sample which receives equal aliquots at equal flow intervals.

- "*Flow rate*" means the volume per time unit given to the flow of gases or other fluid substance which emerges from an orifice, pump, or turbine or passes along a conduit or channel.
- "*Flow-through bioassay*" means a toxicity test in which the test solutions flow into and out of the test chambers on a once-through basis for the duration of the test, in accordance with N.J.A.C. 7:18.
- "Fluid" means, for the purposes of N.J.A.C. 7:14A-8, any material or substance which flows or moves whether in a semisolid, liquid, sludge, gas, or any other form or state.
- "*Food crops*" means crops consumed by humans. These include, but are not limited to, fruit, vegetables, and tobacco.
- "Food-chain crops" means food crops, fiber crops, and/or feed crops.
- "*Foreign material*" means material contained in a residual which is neither process oriented nor product oriented, or material which is not compatible with land application (for example, aeration piping or Phragmites rhizomes).
- "Forest," for the purpose of N.J.A.C. 7:14A-20, means a tract of land thick with trees and underbrush.
- "*Formation*" means a body of rock or unconsolidated sediments characterized by a degree of lithologic homogeneity which is prevailingly, but not necessarily, tabular and is mappable on the earth's surface or traceable in the subsurface.
- "Formation fluid" means "fluid" present in a "formation" under natural conditions as opposed to introduced fluids, such as "drilling mud."
- "*Freeboard*" means the vertical distance between the top of a surface impoundment and the surface of the waste contained therein.
- "*Free liquids*" means liquids which readily separate from the solid portion of a waste as defined by method 9095 (Paint Filter Liquids Test), as described in <u>Test Methods for Evaluating Solid Wastes</u>, <u>Physical/Chemical Methods</u> (EPA Pub. No. SW-846).
- "*Fresh water(s)*" means all nontidal and tidal waters generally having a salinity, due to natural sources, of less than or equal to 3.5 parts per thousand at mean high tide.
- "FW" means the general surface water classification applied to fresh waters.
- "*FW1*" means those fresh waters, as designated in N.J.A.C. 7:9B-1.15(h), Table 6, that are to be maintained in their natural state of quality (set aside for posterity) and not subjected to any man-made wastewater discharges or increases in runoff from anthropogenic activities. These waters are set aside for posterity because of their clarity, color, scenic setting, other characteristic of aesthetic value, unique ecological significance,

exceptional recreational significance, or exceptional water supply significance.

- "*FW2*" means the general surface water classification applied to those fresh waters that are not designated as FW1 or Pinelands Waters.
- "*Froude number*" means the numerical quantity used to characterize the type of flow in an open channel from which a representative grab sample may be taken for the purposes of this subchapter.
- "General permit" means a NJPDES permit authorizing a category of discharges within a geographic area. General permits include permits for similar types of discharges including, but not limited to, stormwater associated with industrial activity, non-contact cooling water, and car dealership car washes.
- "*Governmental entity*" means a Federal, State, interstate agency, county or municipal government or school district whose jurisdiction is partially or entirely within the State.
- "Grab sample" means an individual sample collected over a time period of less than 15 minutes.
- "*Ground water*" means that portion of water beneath the land surface that is within the saturated zone.
- "Ground Water Quality Standards" means the New Jersey rules at N.J.A.C. 7:9C which set forth a designated use or uses for the ground waters of the State, use classifications, water quality criteria for the State's waters based upon such uses, and the Department's policies concerning these uses, classifications and criteria.
- "*Grit and* screenings" means solid waste generated during the preliminary treatment of domestic sewage in a treatment works. Grit includes sand, gravel, cinders or other materials with a high specific gravity. Screenings include relatively large materials such as rags typically removed by mechanical screening of domestic wastewater prior to primary or secondary treatment at a DTW.

"Hazardous pollutant" means:

- 1. Any toxic pollutant;
- 2. Any hazardous substance as defined by the New Jersey Spill Compensation and Control Act, N.J.S.A. 58:10-23.11; or
- 3. Any substance regulated as a pesticide under the Federal Insecticide, Fungicide and Rodenticide Act, 7 U.S.C. §§136 et seq.; or
- 4. Any substance the use or manufacture of which is prohibited under the Federal Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; or

- 5. Any substance identified as a known carcinogen by the International Agency for Research on Cancer; or
- 6. Any hazardous waste designated pursuant to the New Jersey Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq. or the Federal Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq.
- "*Hazardous substance*" means any substance designated under 40 CFR 116 pursuant to Section 311 of the Federal Act, the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11 et seq., or Section 4 of the State Act.
- "*Hazardous waste*" means any waste that is defined or identified as a hazardous waste pursuant to the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., N.J.A.C. 7:26G, or 40 CFR Part 261.
- "*Headworks analysis*" means a mathematical method used to determine the maximum allowable loading of a pollutant at the "headworks" or influent to the treatment plant.
- "*Heating oil*" means any grade of petroleum product including, but not limited to, No. 1, 2, 4 (light and heavy), 5 (light and heavy), and fuel oils, diesel and kerosene or any grade or type used to heat residential buildings.
- "*Holding time*" means the length of the time from collection of the sample until the time of initiation of the analysis.
- "*Hydraulic jump*" means the sudden passage of water in an open channel from low depth to high depth, during which the velocity changes from supercritical (Fr>1) to subcritical (Fr<1), where Fr stands for Froude Number.
- "*Hypolimnion*" means the lower region of a stratified waterbody that extends from the thermocline to the bottom of the waterbody, and is isolated from circulation with the upper waters, thereby receiving little or no oxygen from the atmosphere.
- "Illicit connection" means, for purposes of N.J.A.C. 7:14A-25 only, any physical or non-physical connection that discharges the following to a municipal separate storm sewer system (unless that discharge is authorized under a NJPDES permit other than the NJPDES permit for discharges from that system):
- 1. Domestic sewage;
- 2. Non-contact cooling water, process wastewater, or other industrial waste (other than stormwater); or
- 3. Any category of non-stormwater discharges that a permittee for the MS4 identifies as a source or significant contributor of pollutants pursuant to 40 C.F.R. 122.26(d)(2)(iv)(B)(1) or 122.34(b)(3)(iii).
- Non-physical connections may include, but are not limited to, leaks, flows, or overflows into the municipal separate storm sewer system.

- "*Important species*" means species that are commercially valuable (for example, within the top ten species landed, by dollar value); recreationally valuable; threatened or endangered; critical to the organization and/or maintenance of the ecosystem; or other species necessary in the food web for the well-being of the species identified in this definition.
- "*Impoundment*" means a body of water confined by a dam, dike, floodgate, or other barrier.
- "*Incineration*" means the combustion of organic or inorganic matter, or both, at high temperatures in an enclosed device.
- "*Income*" means all sources of revenue from wherever derived, including wages, retirement benefits, consultant fees, interest, and stock dividends.
- "*Incorporated place*" means the District of Columbia, or a city, town, township, or village that is incorporated under the laws of the State in which it is located.
- "*Indirect discharge*" means any discharge, excluding any discharges by municipal collection systems, into any domestic treatment works.
- "Indirect user" means an entity with an indirect discharge.
- "*Individual subsurface sewage disposal system*" means a system for the disposal of sewage into the ground, which is designed and constructed to treat sanitary sewage in a manner that will retain most of the settleable solids in a septic tank and discharge the liquid effluent to a disposal field.
- "*Industrial pollutants*" means non-domestic pollutants, including but not limited to, those pollutants regulated under Section 307(a), (b) or (c) of the Federal Act.
- "*Industrial* pretreatment program" means a program designed to regulate the introduction of pollutants into a local agency's treatment works from any nondomestic source.
- *"Industrial Pretreatment Program Permit*" or "IPP Permit" means authorization, license, or equivalent control document issued by a delegated local agency to implement the requirements of the IPP. An IPP Permit includes a letter of agreement entered into between a delegated local agency and a user of its municipal treatment works, setting effluent limitations and other conditions on the user of the agency's municipal treatment works.
- "Industrial treatment works" means a treatment works which treats primarily process wastewater and/or industrial pollutants as determined by the percentage of process wastewater, or mass loading of BOD, COD or suspended solids in the wastewater flow. Industrial treatment works shall also include any treatment works, whether publicly or privately owned, which treats primarily wastewater or leachate from a municipal solid waste

facility or a potable water treatment plant. This definition shall includes SIU pretreatment works.

- "*Industrial waste*" means non-domestic waste, including, but not limited to, those pollutants regulated under Section 307(a), (b), or (c) of the Federal Clean Water Act.
- "*Industrial wastewater treatment system*" means any structure or structures by means of which industrial liquid waste or sludges are subjected to any treatment process.
- "Industrial water supply" means water used for processing or cooling.
- "*Infiltration percolation lagoon*" means a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to transmit pollutants to the subsurface and which is not an injection well.
- "*Inhibition concentration*" means that concentration of effluent which produces the specified inhibition effect in a chronic whole effluent toxicity test. An IC25 is the concentration of effluent which produces an inhibition of 25 percent for the monitored effect as compared to the control.
- "*Injection well*" means a well, septic system, subsurface disposal bed, cavity, tube or pipe, or any structure used to deliver fluids directly to a point below the ground surface.
- "*Injection zone*" means a geological formation, group of formations, or part of a formation receiving fluids through a well.

"Interference" means:

- 1. Inhibiting or disrupting the operation of a DTW or its treatment processes so as to contribute to, or cause a violation of any condition of a State or Federal permit;
- 2. Discharging industrial process wastewater which, in combination with existing domestic flows, is of such quantity and/or quality as to exceed the treatment process design capacity; or
- 3. Preventing the use or disposal of sludge produced by the DTW in accordance with Section 405 of the Federal Act, the Federal Resource Conservation and Recovery Act (42 U.S.C. §§3251 et seq.), the Federal Clean Air Act (42 U.S.C. §§7401 et seq.), the Federal Toxic Substances Control Act (15 U.S.C. §§2601 et seq.), the Marine Protection, Research and Sanctuaries Act (33 U.S.C. §§1401 et seq. and 16 U.S.C. §§1431 et seq.), Sections 2, 4 and 6 of the State Act, and any regulations, criteria, or guidelines developed pursuant thereto, including, but not limited to, N.J.A.C. 7:14A-20, and the Statewide Sludge Management Plan.
- "*Intermittent stream*" means a stream with a MA7CD10 flow of less than one-tenth (0.1) cubic foot per second.

- *"Interstate agency"* means an agency of two or more states established by or under an agreement or compact approved by the Congress, or any other agency of two or more states.
- *"ISO 11143"* is the International Organization for Standardization's standard for amalgam separators and specifically means ISO 11143:1999. The standard is available from the ISO at <u>http://www.iso.org</u>.
- "*Irreparable harm*" means significant undesirable effects occurring after the date of permit issuance which cannot be reversed after cessation or modification of the discharge.
- "*Joint meeting*" means the meeting or assembly of the members of the governing bodies or boards of the several municipalities having authority to make and enter into contracts for the construction jointly of the works or improvements authorized by N.J.S.A. 40:63-70.
- "Lake, pond, or reservoir" means any impoundment, whether naturally occurring or created in whole or in part by the building of structures for the retention of surface water, excluding sedimentation control and stormwater retention/detention basins and ponds designed for treatment of wastewater. Lakes, ponds, and reservoirs are characterized by a long term or permanent downgradient restriction of surface water flow from the impoundment and areas of quiescent water within the body of the impoundment. Lakes, ponds, and reservoirs are frequently characterized by greater water depths within the impoundment than either the upgradient or downgradient surface water flow and by shallow water lateral edges containing emergent or submerged plant species. For regulatory purposes, the upgradient boundary of a lake, pond, impoundment, or reservoir shall be considered to be the point at which areas of greater depth and relatively quiescent water can be differentiated from the upgradient surface water input into the impoundment under average flow conditions.

"Landfill" see sanitary landfill.

- "*Land application*" means the controlled discharge of pollutants onto or into the surface soil horizon in such a manner that the materials are treated by and/or become incorporated into and blended with the soil.
- "Land application of residual" means the spraying or spreading of residual onto the land surface; the injection of residual below the land surface; or the incorporation of residual into the soil so that the residual can either condition the soil or fertilize crops or vegetation grown in the soil. This definition shall include the land application of sludge and the land application of sewage sludge.
- "Land-based sludge management criteria" means those standards established by the Department in the Statewide Sludge Management Plan adopted pursuant to the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., or

established pursuant to the Federal Act, or any regulations adopted pursuant thereto.

- "Large municipal separate storm sewer system" means all municipal separate storm sewers, other than those owned or operated by the United States, that discharge to surface water and are either:
- 1. Located in an incorporated place with a population of 250,000 or more as determined by the 1990 Decennial Census by the Bureau of the Census. See 40 CFR Part 122, Appendix F (Newark is listed); or
- 2. Located in the counties listed in 40 CFR Part 122, Appendix H (No New Jersey counties are listed), except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties; or
- 3. Owned or operated by a municipality other than those described in paragraph 1 or 2 of this definition and that are designated by the Department as part of the large or medium municipal separate storm sewer system due to the interrelationship between the discharges of the designated storm sewer and the discharges from municipal separate storm sewers described under paragraph 1 or 2 of this definition. In making this determination the Department may consider the following factors:
- i. Physical interconnections between the municipal separate storm sewers;
- ii. The location of discharges from the designated municipal separate storm sewer relative to discharges from municipal separate storm sewers described in paragraph 1 of this definition;
- iii. The quantity and nature of pollutants discharged to waters of the United States;
- iv. The nature of the receiving waters; and
- v. Other relevant factors; or
- 4. Upon petition, designated by the Department as a large municipal separate storm sewer system, municipal separate storm sewers located within the boundaries of a region defined by a stormwater management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one or more of the systems described in paragraphs 1, 2, or 3 of this definition.
- "*LC50*" means the median lethal concentration of a toxic substance, expressed as a statistical estimate of the concentration that kills 50 percent of the test organisms under specified test conditions, based on the results of an acute bioassay.
- "Leachate" means liquid that has been in contact with solid waste.

- "*Leachate collection system*" means a system or device installed immediately above a liner that is designed, constructed, maintained, and operated to collect and remove leachate.
- "*Lead* planning agency (delegated)" means the POTW which, by agreement with the District as defined in the Statewide Sludge Management Plan, is to execute sludge management and planning for that District.
- "Letter of Land Application Management Approval" or "LLAMA" means the letter issued by the Department pursuant to N.J.A.C. 7:14A-20 and the Statewide Sludge Management Plan, containing a determination that use of residual or the operations at a residual land application site satisfy the requirements of the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., if operated consistently with the requirements stated within the letter.

"Level of pollutant control actually achieved" means:

- 1. For conventional and nonconventional pollutants, the effluent concentration consistently achieved through proper operation and maintenance as defined in this section with a 30-day and seven-day average effluent limitation.
- 2. For toxic pollutants, the effluent limitations based on existing effluent quality as defined at N.J.A.C. 7:14A-13.8 with a 30 day average and a daily maximum effluent limitation.
- "*Level of treatment*" means the degree of waste removal and accompanying residual wastewater effluent to be attained by any discharger.
- "*Limiting nutrient*" means a nutrient whose absence or scarcity exerts a restraining influence upon an aquatic biological population.
- "Liner" means a continuous layer of soil or synthetic material which restricts the downward or lateral escape of any waste, waste constituents, or leachate. For the purposes of N.J.A.C. 7:14A-20, a liner shall have a hydraulic conductivity of 1x10(E-7) centimeters per second or less.
- "*Lithology*" means the description of rocks on the basis of their physical, chemical and mineralogical characteristics.
- "*Load allocation*" means the portion of a receiving water's total maximum daily load (TMDL) for a specific pollutant that is allocated to existing or future nonpoint sources of pollution.
- "*Local agency*" means a political subdivision of the State, or an agency or instrumentality thereof, that owns or operates a municipal treatment works.
- "Local limits" means any restriction on quantities, quality, or concentrations of pollutants discharged into a local agency's treatment works, developed to prevent upset, interference, or pass-through of pollutants to the treatment

works, and to protect worker health and safety, and protect/improve the quality of the sludge generated by the treatment works.

- "Log sorting and log storage facilities" means facilities whose discharges result from the holding of unprocessed wood, for example, logs or roundwood with bark or after removal of bark held in self-contained bodies of water (mill ponds or log ponds) or stored on land where water is applied intentionally on the logs (wet decking). (See 40 CFR part 429, subpart I, including the effluent limitations guidelines).
- "Long term average effluent concentration" means the statistical estimation of the true mean of the entire population of effluent data points, considering effluent variability and the number of actual data points available to estimate the mean.
- "Long term harmonic mean flow" means the number of daily flow measurements divided by the sum of reciprocals of the measured flows. It is the design flow used in calculating pollutant allocations for surface water quality standards which protect for health effects occurring after long term exposures. It is calculated by:

Flow =
$$\frac{n}{\sum \frac{1}{Q_1} + \frac{1}{Q_2} + \dots + \frac{1}{Q_n}}$$

- where n is the number of recorded flows and Q is the combined receiving water and effluent flow.
- "*Lower explosive limit for methane* gas," for the purpose of N.J.A.C. 7:14A-20, means the lowest percentage of methane gas in air, by volume, that propagates a flame at 25 degrees Celsius and atmospheric pressure.

"Major facility" means:

- For industrial facilities, any facility which scores 80 or more points on the NPDES permit rating work sheet using the USEPA rating criteria. A facility with less than the required score of 80 may still be classified as a Major facility by the Regional Administrator or the Department. In those situations, the Department shall state the reasons for doing so; and
- 2. For municipal facilities, any POTW with a design flow of 1.0 Million Gallons per Day or greater.
- "*Major modification to a permit*" means any change to a permit the scope of which is described in N.J.A.C. 7:14A-16.4.

"Manmade" for purposes of this chapter, means constructed by man.

"*Marketable residual product*" or "sludge-derived *product*" means any residual or material derived from a residual which has been prepared for land application of residual in accordance with a permit issued pursuant to N.J.A.C. 7:14A-20 and which, at a minimum, meets the pollutant

concentrations in 40 CFR 503.13(b)(1), the Class B pathogen requirements in 40 CFR 503.32 and one of the vector attraction reduction requirements in 40 CFR 503.33(b)(1) through (b)(8).

- "*Maximum daily discharge limitation*" means the highest allowable "daily discharge" during the reporting period.
- "*Maximum projected effluent concentration*" means the maximum effluent concentration that would be expected, based on the maximum reported concentration and the statistical variability of the reported effluent data.
- "*Maximum sewage treatment capacity*" means the hydraulic, biological and sludge handling capacity limitations necessary to assure compliance with the terms and conditions of the NJPDES or NPDES Permit.
- "*Maximum* value" means the highest value measured during the monitoring period.
- "*Medical waste*" means isolation wastes; infectious agents; human blood and blood products; pathological wastes; sharps; body parts; contaminated bedding; surgical wastes and potentially contaminated laboratory wastes; dialysis wastes; and such additional medical items as the Administrator shall prescribe by regulation.
- "Medium municipal separate storm sewer system" means all municipal separate storm sewers, other than those owned or operated by the United States, that discharge to surface water and are either:
- Located in an incorporated place with a population of 100,000 or more but less than 250,000, as determined by the 1990 Decennial Census by the Bureau of the Census. (40 CFR Part 122, Appendix G) (Elizabeth, Jersey City, and Paterson are listed); or
- 2. Located in the counties listed in 40 CFR Part 122, Appendix I (No New Jersey counties are listed); or
- 3. Owned or operated by a municipality other than those described in paragraph 1 or 2 of this definition and that are designated by the Department as part of the large or medium municipal separate storm sewer system due to the interrelationship between the discharges of the designated storm sewer and the discharges from municipal separate storm sewers described under paragraph 1 or 2 of this definition. In making this determination the Department may consider the following factors:
- i. Physical interconnections between the municipal separate storm sewers;
- ii. The location of discharges from the designated municipal separate storm sewer relative to discharges from municipal separate storm sewers described in paragraph 1 above;
- iii. The quantity and nature of pollutants discharged to waters of the United States;

- iv. The nature of the receiving waters; or
- v. Other relevant factors; or
- 4. The Department may, upon petition, designate as a medium municipal separate storm sewer system, municipal separate storm sewers located within the boundaries of a region defined by a stormwater management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one or more of the systems described in paragraphs 1, 2, or 3 above.
- "*Membrane filter technique*" means the method used to analyze for bacteria (that is, coliform bacteria) which utilizes sample filtration to trap bacterial organisms on a membrane filter.
- "*Memorandum of Agreement*" means the agreement entered into under the Federal Act between the Administrator and the Commissioner, governing the relationship, duties, and rights of the parties in operating State NPDES and UIC programs (NJPDES).
- "*Minimum value*" means the lowest data value measured during the monitoring period.
- "*Minor facility*" means any facility or activity not classified a "major facility" by the Regional Administrator or the Department.
- "*Minor modification*" means a change to a permit which does not constitute a major modification pursuant to N.J.A.C. 7:14A-16.4.
- "*Mixing zones*" means areas of surface waters at or near the discharge location, as may be designated by the Department, into which wastewater effluents may be discharged for the purpose of mixing, dispersing, or dissipating such effluents.
- "*Monitoring report form*" means the standard Department form, including any subsequent additions, revisions or modifications, for the reporting of self-monitoring results by permittees.
- "*Monthly*" means one normal operating day each calendar month, on which, a reasonably representative sample of the discharge may be obtained. This day should be the same day every month (for example, the 2nd Tuesday of each month), unless otherwise directed in the permit. A normal operating day shall be a period of time reasonably representative of normal operating conditions.
- "Monthly minimum percent removal" means the lowest percentage obtained for any single sampling event performed during the calendar month (minimum percent removal limitation).
- "*Monthly monitoring*" means monitoring conducted at a minimum of once every calendar month.

- "*Most* probable number" means the statistical estimate of bacterial densities used for reporting results from the multiple-tube fermentation technique.
- "Multiple grab composite" means a combination of individual samples (aliquots) collected at a specific frequency over a specified time period. Each aliquot shall be analyzed individually before being combined into a single composite sample. The recorded values will be both the individually analyzed aliquots and the composite sample.
- "*Municipal authority*" means a municipal authority as defined in the Municipal and County Utilities Authorities Law at N.J.S.A. 40:14B-3(5), and shall include a municipal utilities authority created by one or more municipalities and a county utilities authority created by a county.
- "Municipality" means a city, town, borough, county, parish, district, association or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or a designated and approved management agency under Section 208 of the Federal Act (33 U.S.C. §1288), except as provided at N.J.A.C. 7:14A-25.1(b).
- "Municipal separate storm sewer" means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):
- Owned or operated by the United States, an interstate agency, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe organization, or a designated and approved management agency under section 208 of the CWA (33 U.S.C. §1288) that discharges to surface water or groundwater;
- 2. Designed and used for collecting or conveying stormwater;
- 3. Which is not a combined sewer;
- 4. Which is not part of a POTW; and
- 5. Which is not either of the following:
- i. A separate storm sewer(s) that is at an industrial facility, and that collects or conveys stormwater discharges associated with industrial activity that occurs at that facility; or
- ii. A separate storm sewer(s) that is at a construction site, and that collects or conveys stormwater discharges associated with small construction activity that occurs at that site.

- "Municipal separate storm sewer system" or "MS4" means a "large," "medium" or "small" municipal separate storm sewer system as defined in this section.
- "*Municipal treatment works*" means the treatment works of any municipality, county, or State agency or any agency or subdivision created by one or more municipal, county, or State governments and the treatment works of any public utility as defined in N.J.S.A. 48:2-13.
- "*National Pollutant Discharge Elimination System*" or "NPDES" means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318, and 405 of the Federal Act. The term includes any State program which has been approved by the Administrator.
- "*National Pretreatment Standard*" means any regulation containing pollutant discharge limits promulgated by the USEPA in accordance with Section 307 (b) and (c) of the Federal Act, which applies to Indirect Users. This term includes prohibitive discharge limits established pursuant to 40 CFR 403.5.
- "*Natural flow*" means the water flow that would exist in a waterway without the addition of flow of artificial origin.
- "*Natural water quality*" means the water quality that would exist in a waterway or a waterbody without the addition of water or waterborne substances of artificial origin.

"New discharger" means any building, structure, facility, or installation:

- 1. From which there is or may be a discharge of pollutants;
- 2. Was not an existing source prior to August 13, 1979;
- 3. Which is not a new source; and
- 4. Which has never received a final NJPDES permit for discharges at that site.
- This definition includes an indirect user which commences discharging into waters of the State after August 13, 1979. It also includes any existing mobile point source (other than an offshore or coastal oil and gas exploratory drilling rig) such as a seafood processing rig, seafood processing vessel, or aggregate plant, that begins discharging at a site for which it does not have a permit; and any offshore or coastal mobile oil and gas exploratory drilling rig or coastal mobile oil and gas development drilling rig that commences the discharge of pollutants after August 13, 1979, at a site for which it is not covered by an individual or general permit and which is located in an area determined by the Department in the issuance of the final permit to be an area of biological concern. In determining whether an area is an area of biological concern, the

Department shall consider the factors specified in 40 CFR 125.122(a)(1) through (10).

- An offshore or coastal mobile exploratory drilling rig or coastal mobile developmental drilling rig will be considered a new discharger only for the duration of its discharge in an area of biological concern.
- "*New injection well*" means an injection well which begins injection after, August 15, 1983, the date New Jersey became authorized to implement the NPDES/UIC Program, as specified in 40 CFR 147.1550, Subpart FF.
- "*New Jersey Pollutant Discharge Elimination System*" or "NJPDES" means the New Jersey system for the issuance of permits pursuant to the State Act.
- "New source" means any building, structure, facility, or installation, from which there is or may be a discharge of pollutants, the construction of which commenced:
- 1. After promulgation of standards of performance under Section 306 of the Federal Act which are applicable to such source;
- 2. After proposal of standards of performance in accordance with Section 306 of the Federal Act, which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal; or
- 3. After the publication of the Pretreatment Standards under Section 307(c) of the Act which will be applicable to such source if such Standards are thereafter promulgated in accordance with that section, provided that:
- i. The building, structure, facility or installation is constructed at a site at which no other source is located;
- ii. The building, structure, facility or installation totally replaces the process or production equipment that cause the discharge of pollutants at an existing source; or
- iii. The production or wastewater generating processes of the building, structure, facility or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source should be considered.
- 4. Construction of a new source as defined under this definition has commenced if the operating entity has:
- i. Begun, or caused to begin as part of a continuous onsite construction program:
- (1) Any placement, assembly, or installation of facilities or equipment; or

- (2) Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or
- ii. Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this definition.
- "*Nitrogenous* biochemical oxygen demand" or "NBOD" means that portion of the biochemical oxygen depletion either in an effluent or in a waterbody which is due to the oxidation of nitrogen containing compounds.
- "*No observed adverse effect concentration*" or "NOAEC" means the lowest concentration at which the organisms are adversely affected as compared to the control determined using hypothesis testing technique.
- "*No observable effect concentration*" or "NOEC" means the maximum effluent concentration which results in no observable effect for the evaluated endpoint. The NOEC is usually determined as the next lower tested concentration than the concentration which results in the lowest observable effect as compared to the controls. For discharge permits where the limitation is expressed as an NOEC, the results shall be reported as the calculated IC25 and shall be considered equivalent to the observed NOEC.
- "*No measurable acute toxicity*" or "NMAT" means a type of water quality based acute whole effluent toxicity limit imposed in accordance with N.J.A.C. 7:9B-4.6(c)5i(2), which requires that no mortality occurs in any acute toxicity test concentration, including 100 percent effluent, above normal background mortality levels for the test organism population. The normal background mortality level is the acceptable level of control mortality for a valid test specified in N.J.A.C. 7:18-6.6(v).
- "Non-contact cooling water" means water used to reduce temperature for the purpose of cooling. Such waters do not come into direct contact with any raw material, intermediate product (other than heat) or finished product. Non-contact cooling water may however contain algaecides, or biocides to control fouling of equipment such as heat exchangers, and/or corrosion inhibitors.
- "*Non-conventional pollutant*" means any pollutant not defined as a conventional pollutant or a toxic pollutant.
- "*Non-delegated local agency*" means a local agency which does not have an industrial pretreatment program approved by the Department.

- "*Nonexcessive infiltration*" means the quantity of flow which is less than 120 gallons per capita per day (domestic base flow and infiltration) or the quantity of infiltration which cannot be economically and effectively eliminated from a sewer system as determined in a cost-effectiveness analysis. For domestic treatment works receiving wastewater from combined sewers, nonexcessive infiltration means the quantity of flow attributable to infiltration during dry weather shall be less than 40 gallons per capita per day (gpcd) or 1,500 gallons per day per inch diameter per mile of sewer.
- "*Nonexcessive inflow*" means the maximum total flow rate during storm events which does not result in chronic operational problems related to hydraulic overloading of the treatment works or which does not result in a total flow of more than 275 gallons per capita per day (domestic base flow plus infiltration plus inflow) during a significant rainfall event which causes surface ponding and surface runoff. Chronic operational problems may include surcharging, backups, bypasses, and overflows.

"Non-hazardous waste" means a solid waste which is not a hazardous waste.

"*Nonpersistent*" means degrading relatively quickly, generally having a halflife of less than 96 hours.

"Nonpoint source" means:

- 1. Any man-made or man-induced activity, factor, or condition, other than a point source, from which pollutants are or may be discharged;
- 2. Any man-made or man-induced activity, factor, or condition, other than a point source, that may temporarily or permanently change any chemical, physical, biological, or radiological characteristic of waters of the State from what was or is the natural, pristine condition of such waters, or that may increase the degree of such change; or
- 3. Any activity, factor, or condition, other than a point source, that contributes or may contribute to water pollution.
- "*Nontrout waters*" means fresh waters that have not been designated in N.J.A.C. 7:9B-1.15(c) through (h) as trout production or trout maintenance. These waters are generally not suitable for trout because of their physical, chemical, or biological characteristics, but are suitable for a wide variety of other fish species.
- "*Nutrient*" means a chemical element or compound, such as nitrogen or phosphorus, which is essential to and promotes the growth and development of organisms.
- "*Ocean waters*" means those waters of the open seas lying seaward of the base line from which the territorial sea is measured, as provided for in the Convention on the Territorial Sea and the Contiguous Zone.

- "Oil and grease" includes the nonpetroleum-based pollutants of animal and vegetable origin, and petroleum-based pollutants, which are analyzed by an EPA and/or New Jersey State Certified Laboratory approved method for oil and grease referenced in 40 CFR Part 136, as amended, including subsequent amendments, and the petroleum-based pollutants analyzed by an EPA and/or New Jersey State Certified Laboratory approved method for petroleum hydrocarbons cited in <u>Methods for Chemical Analysis of Water and Wastes</u>, USEPA, as amended.
- "*Open channel*" means any natural or artificial waterway or closed conduit, including a gravity sewer, in which water flows with a free surface.
- "Operating entity" or "operator" means any person who alone or along with other persons has primary management and operational decision-making authority over any part of a facility. This definition is not applicable to "operator" as that term is used in N.J.A.C. 7:14A-4.9(b)2, 22.6(a)4, 22.6(c)3, 23.25(a)3, or 23.25(a)4i.
- "*Other container*" means either an open or closed receptacle that has a load capacity of one metric ton or less and may include, but is not limited to, a bucket, a box, a carton, and a vehicle or trailer.
- "*Outfall*" means any point source which discharges directly to waters of the United States and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other waters of the United States and are used to convey waters of the United States.
- "*Outstanding National Resource Waters*" means high quality waters that constitute an outstanding national resource (for example, waters of National/State Parks and Wildlife Refuges and waters of exceptional recreational or ecological significance) as designated in N.J.A.C. 7:9B-1.15(i).
- "*Owner or operator*" means the owner or operator of any facility or activity subject to this chapter.
- "*Overburden*" means any material of any nature, consolidated or unconsolidated, that overlies a mineral deposit, excluding topsoil or similar naturally-occurring surface materials that are not disturbed by mining operations.
- "*Overland flow*" means the controlled discharge, by spraying or other means, of pollutants onto sloping land with maintained vegetation where a proportion of the wastewater may appear as runoff. Overland flow is also the movement of pollutants across the surface of the land where infiltration may occur.
- "Packer" means a device lowered into a well to produce a fluid-tight seal.

- "*Participating municipality*" means a municipality or other body which is a member of an affected sewerage entity or which has contracted to obtain sewage treatment services from a sewerage entity or other domestic treatment works.
- "*Passaic Valley Sewerage Commissioners*" means the body described by that name under N.J.S.A. 58:14-2.
- "*Pass through*" means a discharge which exits the POTW into waters of the State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NJPDES permit (including an increase in the magnitude or duration of a violation).
- "*Pasture*" means, for the purpose of N.J.A.C. 7:14A-20, land on which animals feed directly on feed crops such as legumes, grasses, grain stubble, or stover.
- "Pathogen-free material" means a residual material generated from nondomestic processes where there is no contact with human wastes, animal wastes or other wastes which may contain pathogenic organisms. Pathogen-free material may include, but is not limited to, water treatment plant residual and certain types of food processing residual.
- "*Pathogenic organisms*" means disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova.
- "*Percent removal*" means a percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent pollutant concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.
- "*Performance based limitations*" means effluent limitations calculated using the existing effluent quality or the anticipated performance of a facility.
- "*Periodic report*" means compliance monitoring report required pursuant to N.J.A.C. 7:14A-21.3(f).
- "*Permit*" means an authorization, license, or equivalent control document issued by the Department or a delegated local agency to implement the requirements of this chapter even where any or all of the conditions of the permit have been stayed. Permit does not include any permit which has not yet been the subject of final agency action, such as a "draft permit". Permit includes a letter of agreement entered between a delegated local agency and a user of its municipal treatment works, setting effluent limitations and other conditions on the user of the agency's municipal treatment works. Permit also includes a general permit and a permit-byrule.

- "*Permit by rule*" means a provision of this chapter stating that a "facility or activity" is deemed to have a NJPDES permit if it meets the requirements of the applicable regulations.
- "*Permitted flow*" means a treatment work's maximum allowable flow (usually in million gallons per day, or other appropriate unit of flow such as gallons per day) as stated in the facility's NJPDES Permit or TWA, which ever is more stringent.
- "*Permittee*" means any person authorized to conduct activity pursuant to a permit.
- "*Permitting authority*" means, for the purpose of N.J.A.C. 7:14A-20, either EPA or a State with an EPA-approved sewage sludge management program.
- "*Persistent*" means relatively resistant to degradation, generally having a half life of over 96 hours.
- "*Person*" means an individual, corporation, company, partnership, firm, association, owner or operator of a treatment works, political subdivision of this State and any state, Federal or interstate agency or an agent or employee thereof. "Person" shall also mean any responsible corporate official for the purpose of enforcement action under Section 10 of the State Act.
- "*Person who prepares residual*" means either the person who generates a residual during the treatment of domestic sewage and/or process wastewater in a treatment works or the person who derives a material from the residual. This definition also includes a person who prepares sludge or a person who prepares sewage sludge.
- "Petroleum hydrocarbons" or "petroleum-based oil and grease" includes the petroleum-based pollutants analyzed by an EPA and/or New Jersey State Certified Laboratory approved method for petroleum hydrocarbons cited in Methods for Chemical Analysis of Water and Wastes, USEPA, as amended.
- "Pinelands waters" means all waters within the boundaries of the Pineland Area, except those waters designated as FW1 in N.J.A.C. 7:9B-1.15(h) Table 6, as established in the Pinelands Protection Act, N.J.S.A. 13:18A-1 et seq., and as shown on Plate 1 of the "Comprehensive Management Plan" adopted by the New Jersey Pinelands Commission in November 1980.
- "Plugging" means the act or process of stopping the flow of water, oil, or gas in a formation penetrated by a borehole or well.
- "*Plugging record*" means a systematic listing of permanent or temporary abandonment of water, oil, gas, test, exploration and waste injection wells, and may contain a well log, description of amounts and types of plugging

material used, the method employed for plugging, a description of formations which are sealed and a graphic log of the well showing formation location, formation thickness, and location of plugging structures.

- "Point source" means any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.
- "Pollutant" means any dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, refuse, oil, grease, sewage sludge, munitions, chemical wastes, biological materials, medical wastes, radioactive substance (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. §§2011 et seq.)), thermal waste, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, agricultural, and construction waste or runoff or other residue discharged directly or indirectly to the land, ground waters or surface waters of the State, or to a DTW. "Pollutant" includes both hazardous and nonhazardous pollutants.
- "Pollutant limit" means, for the purpose of N.J.A.C. 7:14A-20, a numerical value that describes the amount of a pollutant allowed per unit amount of residual (for example, milligrams of pollutant per kilogram of total solids); the amount of a pollutant that can be applied to a unit area of land (for example, kilograms of pollutant per hectare); or the volume of a material that can be applied to a unit area of land (for example, gallons per acre.)

"Pond" see the definition for lake.

"Pressure" means the total load or force per unit area acting on a surface.

"*Pretreatment*" means the reduction in the amount of pollutants, the elimination or pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a DTW. The reduction or alteration may be obtained by physical, chemical, or biological processes, process changes or by other means, except by dilution. Appropriate pretreatment technology includes control equipment, such as equalization tanks or facilities, for protection against surges or slug loadings that might interfere with or otherwise be incompatible with the DTW. However, where wastewater from a regulated process is mixed in an equalization facility with unregulated wastewater or with wastewater from another regulated process, the effluent from the equalization facility must meet an adjusted pretreatment limit calculated in accordance with 40 CFR 403.6(e) (the Combined Wastestream Formula).

- "*Pretreatment Act*" means the Pretreatment Standards for Sewerage, N.J.S.A. 58:11-49 et seq.
- "*Pretreatment* program significant noncompliance" or "PPSNC" means noncompliance by a source of indirect discharge which requires notification pursuant to 40 CFR 403.8(f)(2)(vii).
- "*Pretreatment standard*" means any limitation on quantities, quality, rates, or concentrations of pollutants discharged into municipal or privately owned treatment works, adopted pursuant to the Pretreatment Act, Section 4 of the State Act, or any applicable National, State, or local regulations.
- "*Primary contact recreation*" means water-related recreational activities that involve significant ingestion risks and includes, but is not limited to, wading, swimming, diving, surfing, and water skiing.
- "*Primary industry category*" means any industry category listed in the NRDC settlement agreement (National Resources Defense Council et al. v. Train, 8 E.R.C. 2120 (D.D.C. 1976), modified 12 E.R.C. 1833 (D.D.C. 1979)); also listed in N.J.A.C. 7:14A-4—Appendix B, Table 1.
- "Primary liner" means a liner consisting of synthetic material designed to prevent the flow of liquid from surface impoundments. A primary liner shall have properties of such a nature so as to impede the flow of liquids from surface impoundments throughout their active life, closure, and postclosure periods. Typically, a liner meeting these criteria will be at least 30 mil (0.03 inches) in thickness.
- "Privately owned treatment works" means any device or system which is:
- 1. Used to treat wastes from any facility whose operator is not the operator of the treatment works; and
- 2. Is not a "POTW."
- "*Process wastewater*" means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product. Process wastewater includes, but is not limited to, leachate and cooling water other than non-contact cooling water. This definition includes the terms commercial wastewater and industrial wastewater as used in 40 CFR Part 503.
- "*Projected flow*" means that flow which is estimated or anticipated to be generated from a facility, based upon the criteria contained in N.J.A.C. 7:14A-23.
- "*Property*" means, for the purposes of N.J.A.C. 7:14A-8.1(b)1iv, all the contiguous block(s) and lots(s), including vacant land owned or otherwise under the control of the owner or operator of the regulated facility, upon which a discharge is conducted or controlled as a result of the operation of a facility.

- "*Proper operations and maintenance*" means the activities required to assure the dependable and economical function of a treatment works.
- 1. Operation means the control of the unit processes and equipment which make up the treatment works, including financial and personnel management, records, laboratory control, process control, safety and emergency operation planning.
- 2. Maintenance means the preservation of functional integrity and efficiency of equipment and structures. This includes preventative maintenance, corrective maintenance and replacement of equipment as needed.
- "*Proprietary information*" means commercial or financial information which is used in one's business and is of a type customarily held in strict confidence or regarded as privileged and not disclosed to any member of the public by the person to whom it belongs.
- "*Public contact site*" means, for the purpose of N.J.A.C. 7:14A-20, land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.
- "*Public hearing*" is a hearing before a representative of the Department which provides the opportunity for public comment, but which does not include cross-examination.
- "*Publicly owned or operated*" means owned or operated by the State, a county, a municipality, or other public body.
- "Publicly owned treatment works" or "POTW" means any device or system used in the storage and treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature which is owned by a State or municipality. This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment. Treatment works associated with potable water treatment and solid waste facilities shall be considered industrial treatment works for purposes of this chapter.
- "*Quarterly monitoring*" means monitoring conducted at a minimum frequency of once every three calendar months.
- "*Radioactive waste*" means any waste which contains radioactive material in concentrations which exceed those listed in 10 CFR Part 20, Appendix B, Table II, Column 2, or exceed the "Criteria for Identifying and Applying Characteristics of Hazardous Waste and for Listing Hazardous Waste" in 40 CFR Part 261, whichever is applicable.
- "*Range land*" means, for the purpose of N.J.A.C. 7:14A-20, open land with indigenous vegetation.

- "*RCRA*" means the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976, as amended, 42 U.S.C. §§6901 et seq.
- "*Reclamation site*" means drastically disturbed land that is reclaimed using residual. This includes, but is not limited to, strip mines and construction sites.
- "*Regional Administrator*" means the Regional Administrator of the appropriate Regional Office of the USEPA or an authorized representative of the Regional Administrator.
- "*Regional pump station*" means any wastewater pumping station which conveys wastewater from more than one municipality or from at least 25 percent of a single municipality's sewer service area, and has a design capacity of at least 0.5 MGD.
- "*Reissuance of a permit*" means the process of issuing a NJPDES permit after a permit has been revoked, or the process of renewing a permit.
- "*Remediation effluent standards*" means the set of effluent limitations in N.J.A.C. 7:14A-12 Appendix C which have been developed using a specified technology and which are used for limitations for remediation projects in the absence of an adopted TMDL.
- "*Request for authorization*" is the document submitted under N.J.A.C. 7:14A-6.13 to obtain authorization to discharge under a general permit.
- "*Reservoir*" see the definition for lake.
- "*Residual*" means a solid waste that consists of the accumulated solids and associated liquids which are by-products of a physical, chemical, biological, or mechanical process or any other process designed to treat wastewater or any other discharges subject to regulation under the State Act. For purposes of this chapter, residual includes, but is not limited to, marketable residual product, sludge and sewage sludge. Residual excludes screened vegetative waste and grit and screenings.
- "*Residual land application site*" means the site used for land application of residual.
- "*Residual leachate collection system*" means a system or device installed immediately above a liner that is designed, constructed, maintained, and operated to collect and remove leachate from a surface disposal site. This definition includes a sewage sludge leachate collection system.
- "*Residual-only facility*" means any treatment works treating domestic sewage whose methods of sludge use or disposal are required to obtain a permit under 40 CFR 122.1(b)(3) or N.J.A.C. 7:14A-20. This term shall also apply to any treatment works whose method of residual use or disposal is required to obtain a permit under N.J.A.C. 7:14A-20.

- *"Residual stabilization"* means the reduction of the volatile and putrescible fraction of sludge with attendant reduction in the numbers of pathogens. Residual stabilization processes include, but are not limited to, digestion, composting, heat treatment, and alkaline stabilization.
- "*Residual transport container*" means a leakproof, closed, modular receptacle which is maintained in a nuisance-free manner, including, but not limited to, containing residual and odor.
- "*Residual use or disposal practice*" means the collection, storage, treatment, transportation, processing, monitoring, use, or disposal of residual. This definition includes a sewage sludge use or disposal practice.
- "Revocation of a permit" means the process of terminating of a permit.
- "*Reynolds number*" means the numerical quantity used to characterize the type of flow in a closed conduit from which a representative grab sample may be taken for the purposes of this subchapter.
- "*River mile*" or "R.M." means the distance, measured in statute miles, between two locations on a stream, with the first location designated as mile zero. For example, mile zero for the Delaware River is located at the intersection of the center line of the navigation channel and a line between the Cape May Light, New Jersey, and the tip of Cape Henlopen, Delaware.
- "Rock crushing and gravel washing facilities" means facilities which process crushed and broken stone, gravel, and riprap (See 40 CFR part 436, subpart B, including the effluent limitations guidelines).
- "*Runoff*" means, for the purpose of N.J.A.C. 7:14A-20, rainwater, leachate, or other liquid that drains overland on any part of a land surface and runs off of the land surface.
- "Runoff coefficient" means the fraction of total rainfall that will appear at a conveyance as runoff.
- "Saline waters" means waters having salinities generally greater than 3.5 parts per thousand at mean high tide.
- "*Sanitary landfill*" means a solid waste facility, as defined in N.J.A.C. 7:26, at which solid waste is deposited on or into the land as fill for the purpose of permanent disposal or storage for a period of time exceeding six months, except that it shall not include any waste facility approved for disposal of hazardous waste pursuant to N.J.A.C. 7:26.
- "Sanitary sewage" means any liquid waste containing animal or vegetable matter in suspension or solution, or the water carried wastes resulting from the discharge of water closets, laundry tubs, washing machines, sinks, dishwashers, or any other source of water carried waste of human origin or containing putrescible material. This term specifically excludes industrial, hazardous or toxic wastes and materials.

- "*Saturated zone*" or "*zone of saturation*" means that part of the earth's crust in which all voids are filled with water.
- "*Schedule of compliance*" or "*compliance schedule*" means a schedule of remedial measures including an enforceable sequence of actions, operations leading to compliance with water quality standards, an effluent limitation or other limitation, prohibition or standard.
- "Seasonal high water table" means the maximum level to which ground water will be normally expected to rise due to the effects of natural precipitation and infiltration of water.
- "Secondary contact recreation" means recreational activities where the probability of water ingestion is minimal and includes, but is not limited to, boating and fishing.
- "Secondary liner" is a liner consisting of either soil or earthen materials at least three feet (0.91 meters) in thickness with a saturated hydraulic conductivity under maximum hydrostatic head conditions not more rapid than 1x10(E-7) centimeters per second, or synthetic material at least 30 millimeters (0.03 inches) in thickness designed to prevent the flow of liquid from surface impoundments. A secondary liner shall have properties of such a nature so as to ensure the prevention of the flow of liquids from surface impoundments throughout their active life, closure, and postclosure periods.
- "*Secretary*" means the Secretary of the Army, acting through the Chief of Engineers.
- "*Sediment* oxygen demand" means that portion of the oxygen depletion present in a receiving waterbody which is due to the substrate present in the waterbody.
- "*Separate sewer system*" means a sewer system that is designed to only carry sanitary sewage and not designed to collect and transport stormwater from streets and other sources, thus serving a combined purpose.
- "Separate storm sewer" means a conveyance or system of conveyances (including roads with drainage systems, streets, catch basins, gutters, ditches, man-made channels, or storm drains):
- 1. Designed or used for collecting or conveying stormwater;
- 2. Which is not part of a combined sewer system; and
- 3. Which is not part of a publicly owned treatment works (POTW).
- "*Septage*" means the liquid and solid material pumped from a septic tank, cesspool, or similar domestic sewage treatment system, or a holding tank when the system is cleaned or maintained.

- "*Serious violation*" means an exceedance, as set forth in a permit, administrative order, or administrative consent agreement, including interim enforcement limits, as follows:
- 1. For effluent limitations for pollutants that are measured by concentration or mass, except for whole effluent toxicity;
- i. Violations of an effluent limitation that is expressed as a monthly average;
- (1) By 20 percent or more for a hazardous pollutant; and
- (2) By 40 percent or more for a nonhazardous pollutant;
- ii. Violations of an effluent limitation that is expressed as a daily maximum or daily minimum without a monthly average;
- (1) By 20 percent or more of the average of all of the daily maximum or minimum values for hazardous pollutant; and
- (2) By 40 percent or more of the average of all of the daily maximum or minimum values for a nonhazardous pollutant;
- 2. For effluent limitations for whole effluent toxicity as follows:
- i. For any violation of an LC50 or a NOEC limit when, upon subtracting the toxicity test result from the whole effluent toxicity limit, the difference is as follows:

Whole Effluent Toxicity

Limit (Percent Effluent)	Difference (Percent Effluent)
Greater than or equal to 80	Greater than or equal to 20
and less than or equal to	
100	
Greater than or equal to 50	Greater than or equal to 15
and less than 80	
Greater than 10 and less	Greater than or equal to 10
than 50	
Less than or equal to 10	Greater than or equal to 9

ii. For any violation of whole effluent toxicity limitations expressed as no measurable acute toxicity (NMAT) with greater than or equal to 50

percent mortality in any test concentration, including 100 percent effluent; and

- 3. The greatest violation of a pH effluent range in any one calendar day which violation deviates from the midpoint of the range by at least 40 percent of the midpoint of the range excluding the excursions specifically excepted by a NJPDES permit with continuous pH monitoring. For example: Assuming that a permittee's effluent limitation range for pH is 6.0 to 9.0, the midpoint would be 7.5.
- If the five separate readings of pH during a given day were 4.3, 5.8, 6.5, 6.0 and 6.5, the reading of 4.3 would be a serious violation as follows:

 $\frac{7.5 \text{ (midpoint)} - 4.3 \text{ (greatest exceedance) x 100}}{7.5 \text{ (midpoint)}} = 42.6\%$

- For example: Using the same information as above. Forty percent of 7.5 is 3; therefore, if the greatest violation of a pH effluent range for any calendar day has a pH of 4.5 or less or a pH of 10.5 or greater, the violation would be a "serious violation."
- 4. Notwithstanding the above, the Department may utilize, on a case-by-case basis, a more stringent factor of exceedance to determine a serious violation if the Department states the specific reasons therefore, which may include the potential for harm to human health or the environment.
- "Seven day average value" means the greatest sum of all daily discharges measured during any seven consecutive days, divided by the number of daily discharges measured during that period. Results are commonly expressed in loading (kg/day) and/or concentration (mg/L).
- "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- "*Sewage*" means any wastes, including wastes from humans, households, commercial establishments, industries, and stormwater runoff, that are discharged to or otherwise enter a DTW.
- "Sewage authority" see sewerage entity.
- "Sewage from vessels" means human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes that are discharged from vessels, including graywater and regulated under Section 312 of the Federal Act or under the State Act. For the purposes of this definition, "graywater" means galley, bath, and shower water.

- "Sewage sludge" means the solid, semi-solid, or liquid residue generated by the processes of a domestic treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and any material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.
- "Sewage sludge use or disposal practice" means the collection, storage, treatment, transportation, processing, monitoring, use, or disposal of sewage sludge.
- "Sewerage authority" means a sewerage authority created pursuant to the Sewerage Authorities Law, N.J.S.A. 40:14A-1 et seq.
- "*Sewerage entity*" means a county or municipal utilities authority, municipality, corporation, or other legal entity which owns or operates a sewerage facility (that is, a sewage authority).
- "*Sewer extension*" means any sewer pipe, line, structure or appurtenance used for the conveyance of domestic or industrial waste of a liquid nature, whether forced or by gravity, which:
- 1. Will extend along an easement through more than two properties, a roadway, or public right-of-way;
- 2. Conveys flows from more than two buildings; or
- Conveys, or will convey, 8,000 gallons per day or more of sewage flow determined in accordance with the criteria specified in N.J.A.C. 7:14A-23.3. This includes all sewer lines from a single building if the building utilizes more than one sewer line to convey waste to the sewer system and the aggregate waste flow is 8,000 gallons per day or more.
- "Sheen" means an iridescent appearance on the surface of water.
- "*Shellfish*" means those mollusks commonly known as clams, oysters, or mussels.
- "Shellfish waters" means waters classified as Approved, Seasonally Approved, Special Restricted, Seasonally Special Restricted or Condemned that support or possess the potential to support shellfish which are within the Coastal Area Facility Review Act (CAFRA) zone as delineated in 1973, (excluding: 1—The Cohansey River upstream of Brown's Run; 2—The Maurice River upstream of Route 548; 3—The Great Egg Harbor River upstream of Powell Creek; 4—The Tuckahoe River upstream of Route 50; 5—The Mullica River upstream of the Garden State Parkway) plus the adjacent areas between Route 35 (from its juncture with the CAFRA zone just north of Red Bank to its juncture with the CAFRA zone just south of Keyport) and the CAFRA zone and the area from the C.A.F.R.A, zone on

the south northwesterly along Route 35 to the northern shore of the Raritan River, then easterly along the northern shore of the Raritan River to the southeast point of Perth Amboy, then due east to the New Jersey jurisdictional limit, and seaward along the jurisdictional limit to the Atlantic Ocean.

- "Significant biological treatment" means the use of an aerobic or anaerobic biological treatment process in a treatment works to consistently achieve a 30-day average of at least 65 percent removal of BOD5.
- "Significant indirect user" or "SIU" means, solely for the purposes of this chapter:
- 1. Any user in the State including, but not limited to, any significant industrial user as defined in 40 CFR 403.3(t) but excluding municipal collection systems, who discharges wastewater into a local agency where:
- i. The user is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N;
- ii. The user's average volume of process wastewater exceeds 25,000 gallons per day;
- iii. The amount of BOD, COD or Suspended Solids in the industrial process wastewater discharge exceeds the mass equivalent of 25,000 gallons per day of the domestic waste of the affected local agency;
- iv. The volume of industrial process wastewater in the discharge exceeds five percent or more of the average daily dry weather flow of the local agency;
- v. The user's discharge of process wastewater contributes, five percent or more of the daily mass loading of any of the pollutants listed in N.J.A.C. 7:14A-4, Appendix A Tables II through V;
- vi. The user is designated as an SIU by the control authority on the basis that the user has a reasonable potential for adversely affecting the local agency's operation;
- vii. The user is designated as an SIU by the control authority on the basis that the user has been in violation of any Federal, State, or local pretreatment standard or requirement, including, but not limited to, significant noncompliance as defined in 40 CFR 403.8(f)(2)(vii); or
- viii. The control authority determines it would be consistent with the intent of the Pretreatment Act or State Act to require a permit for the indirect user; and
- 2. Any user in areas of the State in which the Department is the control authority where:
- i. The user is determined to be a hazardous waste facility that received a permit in accordance with N.J.A.C. 7:26G-12;

- ii. The user's discharge consists of landfill leachate, which is either pure, treated, or diluted; or
- iii. The user's discharge consists of 25,000 gallons per day or more of process wastewater and/or polluted ground water which is pumped from the ground in order to decontaminate an aquifer; however
- 3. Upon finding that any user in the State has no reasonable potential for adversely affecting the local agency's operation or for violating any Federal, State, or local pretreatment standard or requirement, the control authority may at any time, on its own initiative or in response to a petition received from a user or a local agency, and in accordance with 40 CFR 403.8(f)(6), determine that any user specified in paragraphs 1 or 2 above, unless the user is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N, is not a significant indirect user.
- "Significant materials" means, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges.
- "Significantly more stringent limitations" means BOD5 and TSS limitations necessary to meet the percent removal requirements of at least five mg/l more stringent than the otherwise applicable concentration-based limitations (for example, less than 25 mg/l in the case of the secondary treatment limits for BOD5 and TSS), or the percent removal limitations in N.J.A.C. 7:14A-12, if such limit as would, by themselves, force significant construction or other significant capital expenditure.
- "Significant noncomplier" or "SNC" means any person, except a local agency for an exceedance of an effluent limitation for flow, who commits any of the violations described below, unless the Department uses, on a case-bycase basis, a more stringent frequency or factor of exceedance to determine a significant noncomplier and the Department states the specific reasons therefor, which may include the potential for harm to human health or the environment. Violations which cause a person to become or remain an SNC include:
- 1. A serious violation for the same pollutant, at the same discharge point source, in any two months of any consecutive six month period;
- 2. Exceedance of an effluent limitation expressed as a monthly average, for the same pollutant, at the same discharge point source, by any amount in any four months of any consecutive six month period;

- 3. If there is not an effluent limitation for a particular pollutant expressed as a monthly average, exceedance of the monthly average of the daily maximums for the effluent limitation, for the same pollutant, at the same discharge point source, by any amount in any four months of any consecutive six month period;
- 4. Any exceedance of an effluent limitation for pH by any amount, excluding the excursions specifically excepted by a NJPDES permit with continuous pH monitoring, at the same discharge point source in any four months of any consecutive six month period; or
- 5. Failure to submit a completed discharge monitoring report in any two months of any consecutive six month period.
- "Significant portion of income" means 10 percent or more of gross personal income for a calendar year, except that it means 50 percent or more of gross income for a calendar year if the recipient is over 60 years of age and is receiving that portion under retirement, pension, or similar arrangement.
- "*Silviculture*" means the management of forest land for timber. This practice sometimes contributes to water pollution as in clear-cutting.
- "Silvicultural point source" means any discernible, confined and discrete conveyance related to rock crushing, gravel washing, log sorting, or log storage facilities which are operated in connection with silvicultural activities and from which pollutants are discharged into waters of the United States. The term does not include non-point source silvicultural activities such as nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, or road construction and maintenance from which there is natural runoff. However, some of these activities (such as stream crossing for roads) may involve point source discharges of dredged or fill material which may require a CWA section 404 permit (See 33 CFR 209.120 and part 233).
- "*Site*" means the land or water area upon which a source and its water pollution control facilities are physically located, including, but not limited to, adjacent land used for utility systems, repair, storage, shipping or processing areas, or other areas incidental to the industrial, manufacturing, or water pollution treatment processes.
- "Site specific allocation" means a wasteload allocation for a specific pollutant to an existing or future point source based on site specific considerations rather that from a total maximum daily load (TMDL).
- "*SIU* pretreatment works" means any treatment works serving exclusively a SIU facility and treating the facility's industrial process wastewater, or a combination of its process and domestic wastewater, prior to the discharge thereof into a domestic treatment works.

- "*Six hour composite sample*" means a combination of individual aliquots obtained at a minimum frequency of one aliquot at 30-minute intervals over a six-hour period.
- "*Sludge*" means the solid residue and associated liquid resulting from the physical, chemical or biological treatment of domestic or industrial wastewaters.
- *"Slug discharge"* means any discharge of a non-routine, episodic nature, including, but not limited to, an accidental spill or a non-customary batch discharge.
- "*Slurry tank*" means a stationary, above or below ground tank, usually made of steel or preformed concrete, designed to hold liquid residuals. These tanks are generally uncovered and conventionally used for storage of manures.
- "Small business exemption" means an exemption from submitting specific quantitative data for any business that qualifies as a small business as specified in N.J.A.C. 7:14A-4.3(c).
- "Small minor facility" means any facility which discharges to surface water and meets one of the following descriptions:
- 1. Facilities receiving domestic wastewater with an effluent design flow or effluent permitted flow less than 0.5 MGD with no significant industrial or commercial component;
- 2. Elementary schools and churches with no off-site contributors;
- 3. Commercial dischargers, high schools, and technical schools with an effluent design flow or effluent permitted flow less than 0.1 MGD; or
- Industrial facilities that meet the definition of a small business at N.J.A.C.
 7:14A-4.3(c) and discharges less than 10,000 gallons per day, conditional upon approval by the Department.
- "Small municipal separate storm sewer system" or "small MS4" means all municipal separate storm sewers (other than "large" or "medium" municipal separate storm sewer systems as defined in this section) that are:
- 1. Owned or operated by municipalities described under N.J.A.C. 7:14A-25.1(b);
- 2. Owned or operated by county, State, interstate, or Federal agencies, and located at public complexes as described under N.J.A.C. 7:14A-25.2(a)2;
- Owned or operated by county, State, interstate, or Federal agencies, and located at highways and other thoroughfares as described under N.J.A.C. 7:14A-25.2(a)3; or
- 4. Owned or operated by county, State, interstate, Federal, or other agencies, and receive special designation under N.J.A.C. 7:14A-25.2(a)4.

- "Soil erosion and sediment control plan" means a scheme which indicates land treatment measures, including a schedule of the timing for their installation, to minimize soil erosion and sediment in accordance with the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq.
- "*Sole or principal source aquifer*" means an aquifer which has been designated by the Administrator pursuant to Section 1424 (a) or (e) of the SDWA.
- "Solids/floatables" means any wastes or debris, floating, suspended, or otherwise contained in wastewater capable of being discharged to waters of the State.
- "Solid waste" means a solid waste as defined in N.J.A.C. 7:26-1.6.
- "Solid waste facility" means a facility as defined at N.J.A.C. 7:26-1.4.
- "*Source*" means any facility or activity, from which there is or may be a discharge of pollutants.
- "Spray irrigation" means a system for land application of pollutants, over maintained vegetated ground surfaces using sprinkler heads or nozzles as a method of application.
- "Standards for residual use or disposal" means the standards at N.J.A.C. 7:14A-20, 7:26, 7:27 and 40 CFR Parts 257, 258 and 503 which govern minimum requirements for residual quality, management practices, and monitoring and reporting applicable to residual or the use or disposal of residual by any person. These standards may include, but are not limited to, standards for sewage sludge use or disposal.
- "Standards for sewage sludge use or disposal" means the standards at N.J.A.C. 7:14A-20, 7:26, 7:27 and 40 CFR Part 258 and 503 which govern minimum requirements for sewage sludge quality, management practices, and monitoring and reporting applicable to sewage sludge or the use or disposal of sewage sludge by any person.
- "State" means the State of New Jersey.
- "*State Act*" means the New Jersey "Water Pollution Control Act," N.J.S.A. 58:10A-1 et seq., as amended.
- "*State/USEPA Agreement*" means an agreement between the Regional Administrator and the State which integrates and coordinates USEPA and State activities, responsibilities and programs under the Federal Act, RCRA, and SDWA.
- "Statewide sludge management plan" ("SSMP") means the most recent version of the document which has been adopted by the Department under the authority of N.J.S.A. 13:1E-46, as the component of the State Solid Waste Management Plan and the Statewide Water Quality Management Plan that establishes the objectives, criteria, and standards for the management of sewage sludge and domestic septage in New Jersey. The SSMP includes

district and directed generator sludge management plans approved by the Department.

- "*Storage of residual*" means the containment or placement of residual on land on which the residual remains for six months or less. The storage of residual does not include the treatment of residual. This definition includes the storage of sewage sludge.
- "*Storage pad*" means a large, gently sloping surface, constructed of an impervious material (usually concrete), surrounded by a curb, with a drainage system for collection of leachate, designed to hold dewatered residuals.
- "Stormwater" means water resulting from precipitation (including rain and snow) that:
- 1. Runs off the land's surface;
- 2. Is transmitted to the subsurface; or
- 3. Is captured by separate storm sewers or other sewerage or drainage facilities, or conveyed by snow removal equipment.
- "Stormwater discharge (or stormwater DSW) associated with industrial activity" means:
- 1. A discharge to surface water, from a point source or a nonpoint source, of stormwater that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NJPDES program under N.J.A.C. 7:14A-7:14A-2.5.2.5. For the categories of industries identified in this paragraph, the term includes, but is not limited to, stormwater discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined in 40 CFR part 401); sites used for the storage and maintenance of material handling equipment; sites used for treatment, storage, or disposal of by-product or waste product; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater. For the purposes of this paragraph, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with stormwater drained from the above described areas. The term also

excludes discharges that qualify for "Permanent No Exposure" exclusion under N.J.A.C. 7:14A-24.6. Industrial facilities include industrial facilities that are Federally, State, or municipally owned or operated that meet the description of the facilities listed in subparagraphs 1i through 1xi below. The following categories of facilities are considered to be engaging in "industrial activity" for purposes of this paragraph:

- i. Facilities subject to stormwater effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR subchapter N (except facilities with toxic pollutant effluent standards which are exempted under subparagraph 1xi below);
- ii. Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283 and 285), 29, 311, 32 (except 323), 33, 3441, 373.
- iii. Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR 434.11(1) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of non-coal mining operations which have been released from applicable State or Federal reclamation requirements after December 17, 1990) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge stormwater contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; (inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operating entity; inactive mining sites do not include sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, nor sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim);
- iv. Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under subtitle C of RCRA;
- v. Landfills, land application sites, and open dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described under this paragraph) including those that are subject to regulation under subtitle D of RCRA;
- vi. Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093;

- vii. Steam electric power generating facilities, including coal handling sites;
- viii. Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-25), 43, 44, 45, and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under subparagraphs 1i through 1vii above or subparagraphs 1ix through 1xi below are associated with industrial activity;
- ix. Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 MGD or more, or required to have an approved pretreatment program under 40 CFR part 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with section 405 of the Federal Act;
- x. Construction activity including clearing, grading and excavation, except operations that result in the disturbance of less than five acres of total land area. Construction activity also includes the disturbance of less than five acres of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb five acres or more. For a facility (other than an airport, powerplant, or uncontrolled sanitary landfill) that is owned or operated by a municipality with a population of less than 100,000, this subparagraph does not include construction activity that commenced prior to March 3, 2004, unless such activity required, but did not have, certification or approval issued under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq., prior to March 3, 2004; and
- xi. Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, and 4221-25; and
- 2. Any discharge to surface waters of stormwater that does not meet paragraph 1 above, but that the Department classifies as a "stormwater discharge associated with industrial activity" at the request of the permittee, applicant, or prospective applicant for that discharge. Such requests may be withdrawn at any time before or after such classification.
- "Stormwater discharge (or stormwater DSW) associated with small construction activity" means the discharge to surface water, from a point source or a nonpoint source, of stormwater from:

- 1. Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than one acre and less than five acres. Small construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres. Small construction activity does not include:
- i. Routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility; or
- ii. Construction activity that commenced prior to March 3, 2004, unless such activity required, but did not have, certification or approval issued under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq., prior to March 3, 2004; and
- 2. Any other construction activity designated by the Department or the USEPA Regional Administrator, based on the potential for contribution to a violation of a surface water quality standard, or for significant contribution of pollutants to waters of the State.
- "Stratum" means a single sedimentary bed or layer, regardless of thickness, that consists of generally homogeneous rock material.
- "*Stream temperature*" means the temperature of a stream outside of a designated heat dissipation area.
- "*Subsidence*" means the lowering of the natural land surface in response to any of the following: earth movements; lowering of fluid pressure; removal of underlying supporting material by mining or solution of solids, either artificially or from natural causes; compaction due to wetting (hydrocompaction); oxidation of organic matter in solids; or added load on the land surface.
- "Surface casing" means the first string of well casing to be installed in the well.
- "Surface disposal site" means an area of land where sewage sludge is placed or was left in place for final disposal. For the purposes of this chapter, "place sewage sludge" or "sewage sludge placed" shall refer to the surface disposal of sewage sludge. This definition does not include an area of land used for the land application of residual.
- "Surface impoundment" or "impoundment" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may include a liner), which is designed to hold an accumulation of liquid or solid wastes or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling and aeration pits, ponds, and lagoons.

- "*Surface water*" means water at or above the land's surface which is neither ground water nor contained within the unsaturated zone, including, but not limited to, the ocean and its tributaries, all springs, streams, rivers, lakes, ponds, wetlands, and artificial waterbodies.
- "*Surface water classifications*" means names assigned by the Department in N.J.A.C. 7:9B to waters having the same designated uses and water quality criteria (for example, FW1, PL, FW2-NT, SE1, SC, Zone 1C).
- "Surface Water Quality Standards" means the rules at N.J.A.C. 7:9B which set forth, for the surface waters of the State, designated uses, use classifications, and water quality criteria, and the Department's policies concerning these uses, classifications and criteria.
- "Surrogate parameter" means a parameter which is used as an indicator of the pollutant concentration for one or more other parameters.
- "Suspended Solids" see "total suspended solids".
- "Suspension of a permit" means the temporary revocation of a permit for a specified period of time during the five year permit cycle.
- "*Synoptic well data*" means a set of ground water related measurements sufficiently simultaneous so that the piezometric surface and ground water flow direction can be inferred accurately, and important fluctuations will not affect interpretation.
- "*Thermal alterations*" means the increase or decrease in the temperature of surface waters, above or below the natural temperature, that may be caused by the activities of man.
- "*Thermal discharge*" means the component of any discharge which is comprised of heat, and which shall be limited in accordance with Sections 301, 306, 316 of the Federal Act, Section 6 of the State Act.
- "*Thermocline*" means the plane of maximum rate of change in temperature with respect to depth.
- "30 day average" or "monthly *average value*" means the sum of all daily discharges measured during a calendar month, divided by the number of daily discharges measured during that month. Results are commonly expressed in loading (kg/day) and/or concentration (mg/L).
- "*Tidal waters*" means fresh or saline water under tidal influence, up to the head of tide.
- "*Time proportional composite*" means a single sample which receives equal aliquots at equal time intervals.
- "*Total dissolved solids*" or "TDS" means the total dissolved (filterable) solids as determined by use of the method specified in 40 CFR Part 136.

- "*Total Kjeldahl* nitrogen" or "TKN" means the summation of the organic nitrogen containing compounds present in effluent or ambient waters which is measured by the total Kjeldahl nitrogen analytical methodology in 40 CFR Part 136, Method 351.
- "Total maximum daily load" or "TMDL" means a total maximum daily load formally established pursuant to Section 7 of the Water Quality Planning Act (N.J.S.A. 58:11A-7) and Section 303(d) of the Clean Water Act, 33 U.S.C. §§12512 et seq. A TMDL is the sum of individual wasteload allocations for point sources, load allocations for nonpoint sources of pollution, other sources such as tributaries or adjacent segments, and allocations to a reserve or margin of safety for an individual pollutant.
- "Total recoverable metal" means the concentration of metal in an unfiltered sample following treatment with hot dilute mineral acid (as defined in Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1979).
- "*Total suspended solids*" or "TSS" means the total nonfilterable residue as determined by analytical procedures set forth in the <u>Manual of Methods</u> <u>for Chemical Analysis of Water and Wastes</u> (USEPA Office of Technology Transfer, Washington, D.C. March 1983).
- "Total suspended solids concentrations achievable with waste stabilization ponds" means a TSS value, determined by the Department subject to USEPA approval, which is equal to the effluent concentration achieved 90 percent of the time within the State or appropriate contiguous geographical area by waste stabilization ponds that are achieving the monthly average values for BOD5 specified in N.J.A.C. 7:14A-12.
- "Toxicity test" see "bioassay".
- "*Toxic pollutant*" or "toxic *substance*" means any pollutant identified pursuant to the Federal Act, or any pollutant or combination of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly or indirectly by ingestion through food chains, may, on the basis of information available to the Department, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformation, in such organisms or their offspring. Toxic pollutants shall include but not be limited to those pollutants identified pursuant to Section 307 of the Federal Act or Section 4 of the State Act, or in the case of "sludge use or disposal practices," any pollutant identified pursuant to Section 405(d) of the Federal Act.
- "*Trade secret*" means the whole or any portion or phase of any scientific, technical or otherwise proprietary information, design, process, procedure, formula, or improvement which is used in one's business and is secret and

of value. A trade secret shall be presumed to be secret when the owner takes measures to prevent it from becoming available to persons other than those selected by the owner to have access thereto for limited purposes. A trade secret shall not apply to effluent data as provided in Section 9(c) of the State Act and as defined in this section.

- "*Treatment of hazardous waste*" means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such wastes or so as to recover energy or material resources from the waste, or so as to render such waste nonhazardous, or less hazardous; safer to transport, store or dispose of; or amenable for recovery, amenable for storage, or reduce in volume.
- "*Treatment of residual*" means the preparation of a residual for final use or disposal. Treatment of residual includes, but is not limited to, thickening, stabilization, and dewatering of the residual. Treatment of residual does not include storage of the residual. This definition includes the treatment of sewage sludge.
- "*Treatment works*" means any device or system whether public or private, used in the storage, treatment, recycling, or reclamation of municipal or industrial waste of a liquid nature including intercepting sewers, outfall sewers, sewage collection systems, cooling towers and ponds, pumping, power and other equipment and their appurtenances; extensions, nts, remodeling, additions, and alterations thereof; elements essential to provide a reliable recycled supply such as standby treatment units and clear well facilities; and any other works including sites for the treatment process or for ultimate disposal of residues resulting from such treatment. Additionally, "treatment works" means any other method or system for preventing, abating, reducing, storing, treating, separating, or disposing of pollutants, including stormwater runoff, or industrial waste in combined or separate stormwater and sanitary sewer systems.
- "Treatment works treating domestic sewage" means a DTW or any other sewage sludge or wastewater treatment devices or systems, regardless of ownership (including Federal facilities) used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge. This definition does not include septic tanks or similar devices. The Regional Administrator or Commissioner may designate any person subject to the standards for sewage sludge use or disposal in 40 CFR Part 503 or N.J.A.C. 7:14A-20, as a "treatment works treating domestic sewage" through issuance of a permit where it is found that there is a potential for adverse effects on public health and the environment from sludge quality or sludge handling, or residual use or disposal practices, or where there is a finding that such designation is necessary to ensure that such person is in compliance with 40 CFR Part 503 or N.J.A.C. 7:14A-20.

- "*Treatment works approval*" means an approval issued pursuant to N.J.S.A. 58:10A-6 and N.J.A.C. 7:14A-22, or pursuant to former N.J.S.A. 58:12-3 (Repealed by P.L. 1977, c. 74, Section 14 effective July 24, 1977).
- "*Trout maintenance waters*" means waters designated in N.J.A.C. 7:9B for the support of trout throughout the year.
- "*Trout production waters*" means waters designated in N.J.A.C. 7:9B for use by trout for spawning or nursery purposes during their first summer.
- "24-hour *composite sample*" means a combination of individual aliquots obtained at a minimum frequency of one aliquot at hourly intervals over a 24- hour period.
- "201 Facilities Plans" means plans for wastewater treatment facilities adopted pursuant to Section 201 of the Federal Act.
- "Type I error" means an error that occurs when a true null hypothesis is rejected erroneously. In the monitoring context a Type I error occurs when a test incorrectly indicates contamination or an increase in contamination at a regulated unit.
- "UIC permit" means a NJPDES-DGW permit issued for underground injection control.
- "*Ultimate sludge management alternative*" means the final management of sludge at a facility or operation such that no additional permit or approval actions are required for further processing or movement.
- "*Uncontrolled sanitary landfill*" means a landfill or open dump, whether in operation or closed, that does not meet the requirements for runon or runoff controls established pursuant to subtitle D of RCRA.
- "Underground injection" means a well injection.
- "Underground source of drinking water" or "USDW" means an aquifer or its portion which supplies any public water system; or
- 1. Which contains a sufficient quantity of ground water to supply a public water system; and
- i. Currently supplies drinking water for human consumption; or
- ii. Contains fewer than 10,000 mg/1 total dissolved solids; and
- 2. Which is not Class III ground water, in accordance with N.J.A.C. 7:9-6.5(f).
- "*Unsaturated zone*" means the subsurface volume between the land's surface and the top of the saturated zone (water table), where moisture does not fill all the pore spaces in the formation or soil.
- "Unstable area" means land subject to natural or human-induced forces that may damage the structural components of a surface disposal site. This

includes, but is not limited to, land on which the soils are subject to mass movement.

- "*Uppermost aquifer*" means the geologic formation nearest the natural ground surface that is an aquifer, as well as, lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary.
- "USEPA approved model" means water quality models which have been accepted by the USEPA Center for Exposure Assessment Modeling in Athens, Georgia, and for which the Center provides technical support.
- "USEPA <u>Technical Support Document</u>" means the USEPA <u>Technical Support</u> <u>Document for Water Quality Based Toxics Control</u>, (EPA/505/2-90-001), dated March 1991, as amended, incorporated herein by reference.
- "*User*" means any person, individual, firm, company, partnership, corporation, association, group or society, mobile source, and includes political subdivisions of this State and any Federal, State or interstate agency discharging to a DTW.
- "Variance" means any mechanism or provision under Sections 301 or 316 of the Federal Act or under 40 CFR Part 125, or in the applicable "effluent limitations guidelines" which allows modification to or waiver of the generally applicable effluent limitation requirements or time deadlines of the Federal Act. This includes provisions which allow the establishment of alternative limitations based on fundamentally different factors or on Section 301(c), 301(g), 301(h), 301(i), or 316(a) of the Federal Act.
- "Vector attraction" means the characteristic of a residual that attracts rodents, flies, mosquitoes, or other organisms capable of transporting infectious agents.
- "*Warm water aquatic animals*" means and includes, but is not limited to, the Ameiuride (catfish), Centrarchidae (sunfish) and Cyprinidae (minnow) families of fish.
- "*Wasteload*" means the amount of chemical, physical, radiological, or biological matter contained within a waste discharge.
- "*Wasteload allocation*" means the portion of a receiving water's total maximum daily load for a specific pollutant that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality-based effluent limitation.
- "*Waste management unit boundary*" means a vertical surface located at the hydraulically downgradient limit of the MSWLF unit. This vertical surface extends down into the uppermost aquifer.
- "*Water quality based effluent limitations*" means effluent limitations established so that the quality of the waters receiving a discharge will meet the Surface Water Quality Standards of N.J.A.C. 7:9B, after the introduction of the effluent.

- "*Water quality criteria*" means a designated concentration of a constituent that, when not exceeded, will protect an organism, an organismic community or a prescribed water use or quality.
- "*Water quality management plans*" or "WQMPs" means the plans prepared pursuant to Sections 208 and 303 of the Federal Act and the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., including the Statewide, areawide, and county WQM plans.
- "*Water quality standards*" means the physical, chemical, biological and esthetic characteristics of a water body as described by State water quality criteria, N.J.A.C. 7:9B, or the water quality which would result from existing discharges under design conditions, whichever is more stringent as determined by the Department.
- "*Waters of the State*" means the ocean and its estuaries, all springs, streams and bodies of surface or ground water, whether natural or artificial, within the boundaries of the State of New Jersey or subject to its jurisdiction.
- "*Weekly*" means every seventh day (the same day each week) and a normal operating day, unless otherwise specified in the permit. A normal operating day shall be a period of time reasonably representative of normal operating conditions, on which a representative sample of the discharge may be obtained.
- "*Weekly monitoring*" means monitoring conducted at a minimum of once every seven calendar day period.
- "*Well*" means a bored, drilled or driven shaft, or a dug hole, whose depth is greater than the largest surface dimension.
- "*Well injection*" means the subsurface emplacement of fluids through an injection well.
- "*Well log*" means a log obtained from a well showing such information as relative location and depth of soils horizons and geologic units indicating textural and other petrologic characteristics. Well logs may also show geophysical properties such as resistivity, radioactivity, spontaneous potential and acoustic velocity as in function of depth.
- "*Well monitoring*" means the measurement by on-site instruments or laboratory methods of the quality of water in a well.
- "*Well plug*" means a watertight and gastight seal installed in a borehole or well to prevent movement of fluids.
- "*Well record*" means a concise statement of the available data regarding a well, such as a scout ticket; a full history or day-by-day account of a well, from the day the well was surveyed to the day production ceased.
- "*Well stimulation*" means several processes used to clean the well bore, enlarge channels, and increase pore space in the interval to be injected thus

making it possible for wastewater to move more readily into the formation, and includes surging, jetting, blasting, acidizing, or hydraulic fracturing.

- "*Wetlands*" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions commonly known as hydrophytic vegetation. The Department shall evaluate the parameters of hydrology, soils, and vegetation to determine the presence and extent of wetlands.
- "*Whole* effluent toxicity" or "WET" means the aggregate toxic effect of an effluent measured by a toxicity test.
- "*Working hours*" means the established core operation hours of the Department, including but not limited to 8:00 A.M. through 5:00 P.M., Monday through Friday.
- "*Written statement of consent*" means a Departmental form or a resolution by a governmental entity (as specified by the Department for the action requested) signed by an authorized representative of the governmental entity, which expresses that entity's acknowledgment of an application submitted to the Department for approval.
- "*Zone*" means the general surface water classification applied to the mainstem Delaware River and Delaware Bay.
- "Zone of saturation" means saturated zone.

SUBCHAPTER 2. GENERAL PROGRAM REQUIREMENTS

7:14A-2.1 PURPOSE AND SCOPE

- (a) This chapter establishes the regulatory framework under the authority of N.J.S.A. 58:10A-1 et seq., 58:11A-1 et seq., 58:11-49 et seq., 58:10-23.11 et seq., 58:11-18.10 et seq., 13:1D-1 et seq., 13:1E-1 et seq., 58:4A-5, 58:4A-4.1, 58:12A-1 et seq. 42 U.S.C. §§300F et seq., and 33 U.S.C. §§1251 et seq., within which the Department regulates the discharge of pollutants to the surface and ground waters of the State.
- (b) The intent of these rules is to:
 - 1. Restore, enhance, and maintain the chemical, physical, and biological integrity of the waters of the State;
 - 2. Protect public health and safety;
 - 3. Protect potable water supplies;
 - 4. Safeguard fish and aquatic life and scenic and ecological values;
 - 5. Enhance the domestic, municipal, recreational, industrial, agricultural and other uses of water; and
 - 6. Prevent, control, and abate water pollution.
- (c) This chapter sets forth the rules concerning implementation and operation of the New Jersey Pollutant Discharge Elimination System (NJPDES) permit program and the Treatment Works Approval (TWA) program. Each delegated local agency (DLA) shall issue and administer permits in accordance with an approved industrial pretreatment program, and the requirements of N.J.A.C. 7:14A-19 and applicable sections of N.J.A.C. 7:14A-21.
- (d) It shall be unlawful for any person to discharge any pollutant except in conformity with a valid NJPDES permit issued by the Department, unless specifically exempted by this chapter.
- (e) It shall be unlawful for any person to build, install, modify, or operate any facility for the collection, treatment, or discharge of any pollutant, except in conformance with the TWA requirements contained in N.J.A.C. 7:14A-22 and 23.

7:14A-2.2 LIBERAL CONSTRUCTION AND SEVERABILITY

(a) This chapter shall be liberally construed to permit the Department to effectuate the purposes of the State and Federal Acts.

(b) If any subchapter, section, subsection, provision, clause, or portion of this chapter or the application thereof to any person is adjudged unconstitutional or invalid by a court of competent jurisdiction, such judgment shall be confined in its operation to the subchapter, section, subsection, clause, portion, or application directly involved in the controversy in which such judgment shall have been rendered and it shall not affect or impair the remainder of this chapter or the application thereof to other persons.

7:14A-2.3 INCORPORATION BY REFERENCE

- (a) The requirements applicable to the NJPDES program of the Federal Clean Water Act (33 U.S.C. §§1251 et seq.), the Federal Safe Drinking Water Act (42 U.S.C. §§300F et seq.), the State Act, and all Federal regulations cited in this chapter, including, but not limited to, 40 CFR Parts 110, 122, 123, 124, 125, 129, 133, 136, 144, 258, 264, 403, and National Pretreatment Standards in 40 CFR chapter I, subchapter N, and including all amendments and supplements thereto, are incorporated into this chapter by reference unless the context clearly indicates otherwise. A copy of the Federal Act, the State Act, or any Federal regulation cited in this chapter may be obtained at the State Library.
- (b) The Delaware River Basin Commission Water Quality Regulations, including all amendments and supplements thereto, and the Interstate Environmental Commission Water Quality Regulations, including, all amendments and supplements thereto, are incorporated into this chapter by reference unless the context clearly indicates otherwise.
- (c) Wherever the requirements of this chapter are more stringent than existing requirements of a Federal regulation, the requirements of this chapter shall apply.
- (d) For provisions of this chapter that incorporate Federal statutory requirements, amendments to the Federal statutes after the promulgation of these rules supersede these rules, as of the effective date of such amended Federal statute, to the extent that such Federal statutory amendments are not inconsistent with State statutory requirements. For provisions of this chapter that incorporate State statutory requirements, amendments to the State statute after the promulgation of these rules supersede these rules, as of the effective date of such amended State statute. The Department shall, subsequently, amend this chapter as necessary in accordance with the State Administrative Procedure Act.

7:14A-2.4 ACTIVITIES THAT REQUIRE A NJPDES PERMIT.

(a) The NJPDES permitting program shall regulate and issue permits for the discharge of pollutants to surface and ground waters of the State, pursuant to

the State and Federal Acts, except for those activities specifically prohibited or exempted pursuant to N.J.A.C. 7:14A-2.4(d) and 2.5, respectively.

- (b) The Department shall, at a minimum, issue NJPDES permits for the following activities:
 - 1. Discharge of pollutants to surface and ground waters;
 - 2. A discharge from an indirect user;
 - 3. The land application of municipal wastewaters and/or industrial wastewaters, including, but not limited to, spray irrigation, overland flow, and infiltration-percolation lagoons;
 - 4. The discharge from facilities under the jurisdiction of the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq.;
 - 5. The storage of any liquid or solid pollutant, in a manner designed to keep it from entering the waters of the State;
 - 6. The discharge of pollutants into wells;
 - 7. Discharges from concentrated animal feeding operations as specified in N.J.A.C. 7:14A-2.13;
 - 8. Discharges from concentrated aquatic animal production facilities as specified in N.J.A.C. 7:14A-2.14;
 - 9. Discharges from aquaculture projects;
 - 10. Discharges from silvicultural point sources;
 - 11. Discharges of stormwater to surface water and groundwater, including discharges through storm sewers, as set forth in N.J.A.C. 7:14A-24 and 25;
 - 12. Discharges from site remediation projects;
 - 13. The treatment, storage or disposal of hazardous waste which is not regulated by the Hazardous Waste Regulations, N.J.A.C. 7:26G; and
 - 14. Those treatment works treating domestic sewage, or residual use or disposal practices, pursuant to Section 405(d) of the Federal Act and Sections 4 and 6 of the State Act, including, but not limited to, the land application of residual.
- (c) The Department shall determine, on a case-by-case basis, that facilities which are otherwise eligible for general permits and which do not generally require

individual permits may be required to obtain an individual permit because of their contributions to water pollution. Whenever the Department determines that an individual permit is required under this section, the Department shall notify the discharger in writing of the reasons for such a determination and shall include an application form with such notice. The discharger shall apply under N.J.A.C. 7:14A-4 for a permit within 60 days of receipt of such notice, except for a discharger of stormwater under N.J.A.C. 7:14A-24.2, who shall apply within 180 days unless the Department approves a later date. In such a case, comment regarding the appropriateness of the initial determination to require an individual permit may be submitted during the public comment period under N.J.A.C. 7:14A-15.11 and in any subsequent hearing.

(d) The Department shall not issue a permit when prohibited by 40 CFR 122.4 or N.J.S.A. 58:10A-6(e).

7:14A-2.5 EXEMPTIONS

- (a) The following activities are exempt from the requirements to obtain a NJPDES permit from the Department:
 - 1. Any direct discharge of sewage from vessels, effluent from properly functioning marine engines, laundry, shower, and galley sink wastes, or any other discharge incidental to the normal operation of a vessel. This exemption does not apply to the following:
 - i. Rubbish, trash, garbage, or other such materials discharged overboard; or
 - ii. Other discharges when the vessel is operating in a capacity other than as a means of transportation such as when used as an energy or mining facility, a storage facility or a seafood processing facility, a residence, or when secured to a storage facility or a seafood processing facility, or when secured to the bed of the ocean, contiguous zone, or waters of the United States for the purpose of mineral or oil exploration or development.
 - 2. Discharges of dredged or fill material into waters of the United States which are regulated under Section 404 of the Federal Act;
 - 3. Any discharge in compliance with the instructions of an On-Scene Coordinator pursuant to 40 CFR 300 (The National Oil and Hazardous Substances Pollution Plan) or 33 CFR 153.10(e) (Pollution by Oil and Hazardous Substances), and the State Spill Compensation and Control Act, N.J.S.A. 58:10-23.11.
 - 4. Any introduction of pollutants from nonpoint source agricultural and silvicultural activities, including runoff from orchards, cultivated crops,

pastures, range lands, and forest lands. This paragraph does not exempt the point source discharges from concentrated animal feeding operations as defined at N.J.A.C. 7:14A-1.2, from concentrated aquatic animal production facilities as defined at N.J.A.C. 7:14A-1.2, from silvicultural point sources as defined at N.J.A.C. 7:14A-1.2, or to aquaculture projects as defined at N.J.A.C. 7:14A-1.2;

- 5. Return flows from irrigated agriculture;
- 6. Indirect users which do not meet the SIU definition in N.J.A.C. 7:14A-1.2;
- 7. Indirect users which meet the SIU definition in N.J.A.C. 7:14A-1.2 and discharge to a delegated local agency. IPP permits issued by delegated local agencies to indirect users under this chapter are NJPDES permits. An exemption under this section does not limit the authority of a delegated local agency to require a IPP permit;
- 8. Discharges into a privately owned treatment works, except as the Department may otherwise require on a case-by-case basis. In such a case, the Department shall specify in the statement of basis or fact sheet prepared in accordance with N.J.A.C. 7:14A-15.7 and 15.8 the reason for requiring the user to apply for a permit. Such dischargers shall comply with N.J.A.C. 7:14A-4;
- 9. Discharges to ground water at a facility for which a Hazardous Waste Facility permit is issued under the Department's Hazardous Waste Rules at N.J.A.C. 7:26G-12, where that permit includes ground water monitoring and remediation conditions as applicable; and
- 10. Discharges to ground water at a hazardous waste facility, as defined by N.J.A.C. 7:26G-8 and 9, that is undergoing closure and/or post-closure care under the terms of an enforceable document. For the purposes of this paragraph, the terms "closure" and "post-closure" have the meanings set forth at 40 C.F.R. 264 and 265, as incorporated by reference at N.J.A.C. 7:26G-8.1 and 9.1, respectively, and the term "enforceable document" has the meaning set forth at 40 C.F.R. 270.1(c)7, as incorporated by reference at N.J.A.C. 7:26G-12.1.
- (b) (Reserved)
- (c) An exemption afforded under (a) above shall not:
 - 1. Limit the administrative, civil, or criminal liability of any discharger; or
 - 2. Exempt any discharger from approval or permit requirements under any other provision of law.

(d) The Department may require a NJPDES permit for the activities otherwise exempt under (a)4 and/or 5 above, in order to impose appropriate management measures for sources of nonpoint pollution necessary to achieve and maintain applicable water quality standards. Whenever the Department determines that a NJPDES permit is required under this section, the Department shall notify the discharger in writing of the reasons for such a determination and shall include an application form with such notice. The discharger shall apply under N.J.A.C. 7:14A-4 for a permit within 60 days of receipt of such notice. In such a case, comment regarding the appropriateness of the initial determination may be received during the public comment period under N.J.A.C. 7:14A-15.11 and in any subsequent hearing.

7:14A-2.6 CONFLICT OF INTEREST

- (a) Any board or body which approves all or portion of a permit shall not include as a member any person who receives, or has during the previous two years received, a significant portion of direct or indirect income from permit holders or applicants for a permit.
- (b) For the purposes of this section, "direct or indirect income from permit holders or applicants for a permit" is not received when it is derived from mutual fund payments, or from other diversified investments for which the recipient does not know the primary sources of income.
- (c) For the purposes of this section, "permit holders or applicants for a permit" does not include any department or agency of the State government, such as the Division of Fish, Game, and Wildlife within the Natural and Historic Resources Program of the New Jersey Department of Environmental Protection, or the New Jersey Department of Transportation.

7:14A-2.7 PERMIT DURATION AND RENEWAL

- (a) All NJPDES permits shall be issued for fixed terms not to exceed five years. The Department shall issue any permit for a duration that is less than the full allowable term under this section when:
 - 1. A shorter permit duration will facilitate issuance of a discharge permit in accordance with a watershed management plan;
 - 2. The permittee requests a shorter permit duration; or
 - 3. The discharge is anticipated to cease in less than five years.
- (b) Any permittee who wishes to continue the regulated activity after the expiration date of the permit shall file a timely and complete application or request for renewal as provided in N.J.A.C. 7:14A-4.2(e)(3).

- (c) A NJPDES permit may be modified, revoked and reissued, renewed, suspended, or revoked in accordance with N.J.A.C. 7:14A-16.3. The filing of a request for a permit modification, revocation and reissuance, renewal, suspension, or revocation, or a notification of planned changes or anticipated noncompliance, in and of itself, shall not stay any permit condition. A permit condition may be administratively stayed by the Department in accordance with N.J.A.C. 7:14A-17.6.
- (d) A NJPDES permit shall be administratively expired if the regulated activity is not continued beyond the expiration date, or for continuing discharges where the conditions of N.J.A.C. 7:14A-2.8(a) have not been met. A permittee may request that a permit be revoked prior to the scheduled expiration date of the permit. A formal notification shall be made to the permittee if a permit has been administratively_expired, suspended, or revoked.

7:14A-2.8 Administrative Continuation of Permits

- (a) The conditions of an expired NJPDES permit are continued in force pursuant to the "Administrative Procedure Act," N.J.S.A. 52:14B-11, until the effective date of a new permit or of authorization under a general permit, or until the effective date of denial of a permit application, if:
 - 1. The permittee submits a timely and complete application, request for renewal, or request for authorization under a general permit, if required, as provided in N.J.A.C. 7:14A-4.2(e)(3); and
 - 2. The Department, without fault on the part of the permittee, fails to issue a new permit with an effective date on or before the expiration date of the previous permit (for example, when issuance is delayed due to constraints of time or resources).
- (b) Permits continued under this section remain fully effective and enforceable.
- (c) When the permittee is not in compliance with the conditions of the administratively continued permit, the Department will take one or more of the following actions:
 - 1. Initiate enforcement action;
 - 2. Suspend or revoke the permit in accordance with N.J.A.C. 7:14A-16.6. If the permit is suspended or revoked, the permittee shall cease the activities that were previously authorized by the suspended or revoked permit. Otherwise, the permittee shall be considered to be operating without a permit, and be subject to appropriate enforcement action;
 - 3. Issue a notice of intent to deny a permit application for a new permit or permit renewal, in accordance with N.J.A.C. 7:14A-15.6(a)(2) and 15.10;

- 4. Deny a request for authorization for a general permit, in accordance with N.J.A.C. 7:14A-6.13;
- 5. Issue a new permit under N.J.A.C. 7:14A-15 with appropriate conditions, or issue authorization under an appropriate general permit under N.J.A.C. 7:14A-6.13; or
- 6 Take other appropriate actions authorized by this chapter or the State Act.
- (d) In the event that the permittee fails to submit a timely and complete application for renewal or request for authorization under a general permit if required under N.J.A.C. 7:14A-4.2(e)3, or fails to comply with (f) below, all discharges of pollutants from the permittee's facility shall cease and the permit shall be administratively expired in accordance with N.J.A.C. 7:14A-2.7(d), unless the Department determines that termination of the discharge will have widespread social or economic impact.
- (e) A permittee with an administratively expired permit that continues discharging pollutants after the expiration date is operating without a permit from the time of expiration of the old permit to the effective date of any new permit or approval and is subject to enforcement action in accordance with N.J.A.C. 7:14-8. In any new permit or approval, the Department may require the submittal of any additional information, specifying a date for its submittal.
- (f) In the event that the Department denies a timely and complete request for authorization under a general permit submitted under (a)1 above, the Department's written notice of denial under N.J.A.C. 7:14A-6.13(m) may require that permittee to apply for an individual permit or seek authorization under another general permit. A notice that contains such a requirement shall include:
 - 1. A brief statement of the reasons for this decision;
 - 2. An application form or, if applicable, the request for authorization form; and
 - 3. A statement setting a timeframe within which the permittee must file the application or, if applicable, the request for authorization. The Department may grant additional time for filing, upon request by the permittee. If a permittee fails to submit in a timely manner an application form or request for authorization form required by the Department under this subsection, then such permittee is subject to the provisions of (d) above.

7:14A-2.9 ENFORCEMENT ACTION

(a) Any permit noncompliance constitutes a violation of the State and Federal

Acts or other authority of this chapter and is grounds for enforcement action, permit suspension, revocation, revocation and reissuance, modification, or for denial of a permit renewal application.

- (b) The need to halt or reduce activity is not a defense for permit noncompliance in accordance with the following:
 - 1. It shall not be a defense in an enforcement action for a permittee that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
 - 2. Upon the reduced capacity, loss, or failure of the treatment facility, a permittee shall, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided.
- (c) For all discharges to surface water, except toxic effluent standards and prohibitions imposed under Section 307 of the Federal Act or Section 4 or 7 of the State Act and "standards for sewage sludge use or disposal" under Section 405(d) of the Federal Act, compliance with a permit during its term constitutes compliance, for purposes of enforcement, with Subtitle C of RCRA, with Sections 301, 302, 306, 307, 318, 403, and 405 of the CWA.
- (d) Compliance with a permit condition which implements a particular "standard for sewage sludge use or disposal" shall be an affirmative defense in any enforcement action brought for a violation of that "standard for sewage sludge use or disposal" pursuant to Sections 309 and 405 of the CWA.

7:14A-2.10 SUBPOENAS

The Department may issue subpoenas requiring attendance and testimony under oath of witnesses before, or the production of documents or information, in whatever form stored or recorded, to him or her or to a representative designated by the Commissioner. Service of a subpoena shall be by certified mail or personal service. A person receiving a request for information pursuant to a subpoena shall comply with the provisions in N.J.A.C. 7:14A-2.11(d).

7:14A-2.11 DUTY TO PROVIDE INFORMATION

(a) When the Department has reason to believe that a person has, or may have, information relevant to a discharge or potential discharge of a pollutant, that person shall, upon receipt of written notice from the Department, provide information regarding the discharge or potential discharge to the Department. Such persons include, but are not limited to, any persons having generated, treated, transported, stored, or disposed of the pollutant, or any persons having arranged for the transportation, storage, treatment or disposal of such pollutant.

The following information shall be provided to the Department:

- 1. The nature, extent, source, and location of the discharge, or potential discharge;
- 2. Identification of the nature, type, quantity, source, and location of the pollutant or pollutants;
- 3. The identity of, and other relevant information concerning, the generator or transporter of the pollutant, or any other person subject to liability for the discharge or potential discharge; and
- 4. The ability of any person liable, or potentially liable, for the discharge, or potential discharge, to pay for, or perform, the cleanup and removal, including the availability of appropriate insurance coverage.
- (b) (Reserved.)
- (c) Information requested by the Department shall be provided in the form and manner prescribed by the Department, which may include documents or information in whatever form stored or recorded. Any failure to submit information requested by the Department listed in (a) above shall constitute a violation of this chapter.
- (d) A person receiving a request for information made pursuant to (a) above, or pursuant to a subpoena issued pursuant to N.J.A.C. 7:14A-2.10, shall:
 - 1. Be required to conduct a diligent search of all documents in his or her possession, custody, or control, and to make reasonable inquiries of present and past employees who may have knowledge or documents relevant thereto;
 - 2. Have a continuing obligation to supplement the information if additional relevant information is discovered, or if it is determined that the information previously provided was false, inaccurate, or misleading; and
 - 3. Grant the Department access, at reasonable times, to any vessel, facility, property, or location to inspect and copy all relevant documents or, at the Department's request, copy and furnish to the Department all such documents.
- (e) A person shall allow an authorized representative of the Department, upon the presentation of credentials, to:
 - 1. Enter upon a person's premises, for purposes of inspection, sampling, copying or photographing where:

- i. A discharge source or regulated facility or activity is or might be located; or
- ii. In which monitoring equipment or records required by a permit are kept;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of a NJPDES permit;
- 3. Inspect, at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under a NJPDES permit; and
- 4. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Federal or State Acts, any substances or parameters at any location.
- (f) Where a permittee becomes aware that any relevant facts have not been submitted in a permit application, or request for authorization, or that incorrect information has been submitted in a permit application, request for authorization, or in any report to the Department, the permittee shall promptly submit such facts or information within 10 days of the time the permittee becomes aware of the correct information.
- (g) A person providing information pursuant to this section or N.J.A.C. 7:14A-2.10, may assert a claim of confidentiality pursuant to N.J.A.C. 7:14A-18.3.

7:14A-2.12 AMBIENT WATER QUALITY STUDIES

- (a) Ambient water quality studies may be required to develop TMDLs in accordance with N.J.A.C. 7:15-7. Where such studies are necessary, the ambient water quality sampling and data analysis and interpretation may be performed by the Department, affected cities or municipalities, permittees, or other interested parties.
- (b) Ambient studies consist of water quality and/or biological studies and shall be used to supplement the Department's ongoing sampling programs. Where the data necessary to make a determination of effluent limitations have already been collected and analyzed by the Department, or are anticipated to be collected and analyzed prior to the determination of effluent limitations, duplicative studies shall not be required. Where the data do not exist and/or are incomplete, the Department may require the permittee or the applicant to undertake any and all studies that it determines necessary to determine permit limits and conditions. Such studies may include but are not limited to dilution analysis/mixing zone studies (including stream design flows), dissolved oxygen studies, effluent characterizations, studies to demonstrate compliance with the ocean discharge criteria, antidegradation analysis, in-stream water

quality studies to develop water quality based effluent limitations, and biological, nutrient, and toxics impact analysis, along with related quality assurance/quality control project plan requirements in accordance with 40 C.F.R. 30.503.

7:14A-2.13: SPECIFIC CRITERIA FOR CONCENTRATED ANIMAL FEEDING OPERATIONS

- (a) Except for indirect discharges, a permit shall be obtained for any discharge from an animal feeding operation if the animal feeding operation meets the criteria for a concentrated animal feeding operation under (b) or (d) below.
- (b) An animal feeding operation shall be considered concentrated if either (b)1 or 2 are met:
 - 1. More than the numbers of animals specified in any of the following categories are confined:
 - i. 1,000 slaughter and feeder cattle;
 - ii. 700 mature dairy cattle (whether milked or dry cows);
 - iii. 2,500 swine each weighing over 25 kilograms (approximately 55 pounds);
 - iv. 500 horses;
 - v. 10,000 sheep or lambs;
 - vi. 55,000 turkeys;
 - vii. 100,000 laying hens or broilers (if the facility has continuous overflow watering);
 - ix. 30,000 laying hens or broilers (if the facility has a liquid manure handling system);
 - x. 5,000 ducks; or
 - xi. 1,000 animal units; or
 - 2. More than the number and types of animal set forth in (b)2i through x below are confined, and pollutants are discharged into waters of the State, or directly into waters of the State which originate outside of and pass over, across, or through the facility or otherwise come in contact with the animals confined in the operation.
 - i. 300 slaughter or feeder cattle;

- ii. 200 mature dairy cattle (either milked or dry cows);
- iii. 750 swine each weighing over 25 kilograms (approximately 55 pounds);
- iv. 150 horses;
- v. 3,000 sheep or lambs
- vi. 16,500 turkeys;
- vii. 30,000 laying hens or broilers (if the facility has continuous overflow watering);
- viii. 9,000 laying hens or broilers (if the facility has a liquid manure handling system),;
- ix. 1,500 ducks; or
- x. 300 animal units; and either
- xi. Pollutants are discharged into waters of the State; or
- xii. Pollutants are discharged directly into waters of the State which originate outside of and pass over, across, or through the facility or otherwise come in contact with the animals confined in the operation.
- 3. An animal feeding operation shall not be considered a concentrated animal feeding operation as defined above if such animal feeding operation discharges only in the event of a 25 year, 24-hour storm event.
- (c) Any animal feeding operation shall, upon the Department's written request, submit the following information:
 - 1. The number and type of animals confined;
 - 2. A description of the means of discharge; and
 - 3. The name and address of the owner or operator.
- (d) On a case-by-case basis and after conducting an on-site inspection, the Department shall designate, as a concentrated animal feeding operation, any animal feeding operation which does not meet the criteria in (b) above if (d)1 and 2 below are met:
 - 1. The Department determines that the operation is a significant contributor of pollution to the waters of the State. In making this determination the Department shall consider the following factors:

- i. The size of the animal feeding operation and the amount of wastes reaching waters of the State;
- ii. The location of the animal feeding operation relative to waters of the State;
- iii. The means of conveyance of animal wastes and process waste waters into waters of the State;
- iv. The slope, vegetation, rainfall, and other factors affecting the likelihood or frequency of discharge of animal wastes and process wastewaters into waters of the State; and
- v. Other relevant factors; and
- 2. The Department determines that:
- i. Pollutants are discharged into waters of the State through a manmade ditch, flushing system, or other similar manmade device; or

ii. Pollutants are discharged directly into waters of the State which originate outside of the facility and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

7:14A-2.14: SPECIFIC CRITERIA FOR CONCENTRATED AQUATIC ANIMAL PRODUCTION FACILITIES

- (a) Except for indirect discharges, a permit shall be obtained for any discharge from an animal production facility if the animal production facility meets the criteria in (b) below or is required to obtain a permit under (d) below.
- (b) An animal production facility shall be considered a concentrated aquatic animal production facility if it is a hatchery, fish farm, or other facility that contains, grows, or holds aquatic animals in either of the following categories:
 - 1. Cold water fish species, including but not limited to, the Salmonidae family of fish (for example, trout and salmon), or other cold water aquatic animals in ponds, raceways, or other similar structures which discharge at least 30 days per year, but does not include:
 - i. Facilities which produce less than 9,090 harvest weight kilograms (approximately 20,000 pounds) of aquatic animals per year; and
 - ii. Facilities which feed less than 2,272 kilograms (approximately 5,000 pounds) of food during the calendar month of maximum feeding.
 - 2. Warm water fish species, including, but not limited to, the Ameiuride,

Centrarchidae and Cyprinidae families of fish (for example, respectively, catfish, sunfish, and minnows), or other warm water aquatic animals in ponds, raceways, or other similar structures which discharge at least 30 days per year, but does not include:

- i. Closed ponds which discharge only during periods of excess runoff; or
- ii. Facilities which produce less than 45,454 harvest weight kilograms (approximately 100,000 pounds) of aquatic animals per year.
- (c) Any aquatic animal production facility which does not meet the criteria in (b) above, shall submit the following information to the Department to determine if a permit is required:
 - 1. The number and type of animals confined;
 - 2. A description of the means of discharge; and
 - 3. The name and address of the owner or operator.
- (d) The Department shall require on a case-by-case basis any aquatic animal production facility to obtain a permit upon determining that:
 - 1. It is a significant contributor of pollution to the waters of the State. In making this determination the Department shall consider the following factors:
 - i. The location and quality of the receiving waters of the State;
 - ii. The holding, feeding, and production capacities of the facility;
 - iii. The quantity and nature of the pollutants reaching waters of the State; and
 - iv. Other relevant factors.

SUBCHAPTER 3. DETERMINATION OF PERMIT FEES

7:14A-3.1 FEE SCHEDULE FOR NJPDES PERMITTEES AND APPLICANTS

- (a) Except as provided in (j) and (l) below, the general conditions and applicability of the fee schedule for NJPDES permittees and applicants are as follows:
 - 1. Except as provided by (k) below, the Department shall collect an annual fee for the billing year July 1 to June 30 from all persons that are issued a NJPDES permit or authorization to discharge under a NJPDES general permit or submit a NJPDES permit application or request for authorization.
 - 2. The Department shall not assess any fee to public schools or religious or charitable institutions.
 - 3. All NJPDES permittees/applicants that are issued a draft or final NJPDES permit, or that are issued an authorization to discharge under a final NJPDES general permit, shall submit payment within 30 days of assessment of the fee by the Department.
 - i. Upon receipt of a completed application or request for authorization, the Department shall assess the minimum fee as set forth in Table III below.
 - Upon issuance of the final permit or of an authorization to discharge under a final NJPDES general permit, the annual fee shall be calculated and pro-rated for the period of the fee year remaining. The minimum fee already paid shall then be subtracted from the pro-rated assessment. In no case, however, will such payment of a pro-rated fee result in a fee that is less than the minimum fee for the category of discharge. The permittee may request a fee recalculation as provided at (a)6 below, once the first required monitoring report has been completed.
- 4. Payment of all fees shall be made by check or money order, payable to "Treasurer, State of New Jersey" and submitted to:

New Jersey Department of the Treasury

Division of Revenue

PO Box 417

Trenton, New Jersey 08625-0417

- 5. If the permittee/applicant fails to submit payment to the Department of the Treasury within 30 days of assessment of the fee, the Department may, in its discretion, take one or more of the following actions:
 - i. Return the NJPDES permit application or request for authorization to the applicant;
 - ii. Deny issuance of a final permit or authorization under a final general permit;
 - iii. Revoke a final permit (including revocation of a permittee's authorization to discharge under a general permit); and/or
 - iv. Assess penalties pursuant to N.J.S.A. 58:10A-10 and N.J.A.C. 7:14-8.
- 6. If the permittee objects to the assessment, the Department shall recalculate a permit fee upon receipt of a request from the permittee in writing within 30 days of assessment of the fee. The Department shall not recalculate a fee where the permittee has failed to submit information in compliance with its NJPDES permit.
 - i. A permittee may only contest a fee imposed pursuant to (k) below based on the following:
 - (1) The Department has no factual basis to sustain the charges assessed in the fee;
 - (2) The activities for which the fee was imposed did not occur;
 - (3) The charges are false or duplicative; or
 - (4) The charges were not properly incurred because they were not associated with the Department's oversight or remediation of the case.
 - ii. A permittee may not contest a fee imposed pursuant to (k) below if the challenge is based on the following:
 - (1) An employee's hourly salary rate;
 - (2) The Department's salary additive rate, indirect rate, or fringe benefit rate; or
 - (3) Management decisions of the Department, including decisions regarding who to assign to a case, how to oversee the case or how to allocate resources for case review.
 - iii. A permittee objecting to a fee imposed pursuant to (k) below shall

include the following in a request for a fee review:

- (1) A copy of the bill;
- (2) Payment of all uncontested charges, if not previously paid;
- (3) A list of specific fee charges contested;
- (4) The factual questions at issue in each of the contested charges;
- (5) The name, mailing address and telephone number of the person making the request;
- (6) Information supporting the request or other written documents relied upon to support the request.
- 7. The Department, in calculating Environmental Impact, shall use information reported by the permittee on Discharge Monitoring Reports (DMRs) and/or Monitoring Report Forms (MRFs) for the 12 month period for which data is available on the Department's computer. The selected 12 month monitoring period will be documented in the Annual NJPDES Fee Schedule Report. Where this information is not available, the Department shall use permit limitations, information submitted in permit applications, technical reports prepared by the Department or submitted by the permittee, or other permits issued by the Department.
- 8. Except as provided by (k) below, the Department, upon the revocation of a NJPDES permit, or revocation of a NJPDES/SIU permit in accordance with N.J.A.C. 7:14A-21.9, shall upon written request of the permittee prorate the fee for the number of days that the facility was in operation or was discharging under a valid NJPDES/SIU permit during the billing year and return to the permittee the amount that is in excess of the minimum annual fee for the specific category of discharge.
- 9. Except as provided by (k) below, the annual fee for all discharges is calculated by applying the formula:

Fee = (Environmental Impact x Rate) + Minimum Fee, where:

- i. Environmental Impact is the Department's assessment of potential risk of discharge to the environment as derived under (c) through (g) below.
- ii. Rate is the dollar cost for each weighted unit of Environmental Impact. Rate is calculated as follows:

Rate = (Budget-Sum of Minimum Fees)/Total Environmental Impact

- (1) Budget is the total budget for the category of Discharge.
- (2) The Sum of Minimum Fees is the total amount of minimum fees to be paid by all dischargers in the category of discharge.
- (3) Total Environmental Impact is the sum of environmental impact for all dischargers in the category.
- (4) The budget and the total environmental impact shall be adjusted to reflect those facilities, if any, assessed a maximum permit fee.
- iii. The minimum fee is a base cost to which the product of the Environmental Impact and the Rate identified under (a)9i and ii above is added. The minimum fee for any permit category is calculated by using the following formula and rounding to the nearest \$50.00 increment:

Minimum Fee = $\frac{\text{Hours x Cost Per Hour}}{5}$, where:

- Hours = Total hours allocated by the Department on the administration, including permit issuance, inspection and data management, of the permit per facility over a five year period in each category.
- Cost Per Hour = Total personnel cost per hour, including fringe benefits and indirect costs.
- The minimum fees are set forth in Table III below. For any new or revised category of discharge, the Department shall calculate a minimum fee and shall list it in the Annual NJPDES Fee Schedule Report for public comment under (b) below.
- 10. The maximum fee to be assessed for any category of discharge shall be 10 percent of the budget for the category of discharge.
- 11. If a factual dispute involving a fee imposed pursuant to (k) below cannot be resolved informally, a permittee may request an adjudicatory hearing on the matter pursuant to N.J.A.C. 7:14A-17.2.
- (b) The Department shall prepare an Annual NJPDES Fee Schedule Report and provide for a public hearing on the Report.
 - 1. The Annual NJPDES Fee Schedule Report shall include the following:

- i. A detailed financial statement of the actual administrative cost of the NJPDES program by account title;
- ii. A detailed financial statement of the actual revenue collected, including any surplus which can be credited or any deficit to be assessed in determining the fee schedule;
- iii. A detailed financial statement of the anticipated cost of the NJPDES program, including:
 - (1) A breakdown of the program by account title;
 - (2) An estimate of the amount of fees that will be collected; and
 - (3) The current year's fee schedule.
- iv. A report of the NJPDES program activities, including:
 - (1) A list of permits issued;
 - (2) A list of facilities inspected;
 - (3) A list of administrative orders and administrative consent orders issued by the Department (by type of order and discharge involved); and
 - (4) A summary of variance request activities under Section 316 of the Federal Water Pollution Control Act (33 U.S.C. §§1251 et seq.).
- v. A list of all minimum fees calculated in accordance with (a)9iii above, and the basis for any new or revised minimum fee.
- 2. The Department shall provide for a hearing on the Annual NJPDES Fee Schedule Report. The Department shall provide public notice of the hearing at least 30 days prior to the date of the hearing:
 - i. In the New Jersey Register and one newspaper of general circulation; and
 - ii. By mailing a copy of the Report to each NJPDES applicant/permittee the Department identifies as subject to a NJPDES annual fee.
- 3. The Department shall publish a Notice of Adoption of the Annual NJPDES Fee Schedule Report, which shall include a summary of the public comments and Department responses. Upon publication of this Notice of Adoption in the New Jersey Register, any adopted new or revised minimum fee(s) identified in the Notice of Adoption shall be

incorporated into Table III as an administrative change.

- (c) The annual fee for discharges to surface water is calculated by using the following Environmental Impact in the annual fee formula:
 - 1. The Environmental Impact of a discharge to Surface Water from an industrial treatment works (ITW) regulated under an individual NJPDES permit is derived by applying the formula:

Environmental Impact = (Total Pollutant Load + Heat Load) where:

- i. Total Pollutant Load is the sum of all limited pollutants (in kilograms per day) multiplied by their associated risk factors as listed in Table I below.
 - (1) Net loadings will be used if a net limit has been established in the NJPDES permit. If a permittee reports a pollutant load less than zero, a zero will be used to calculate the Total Pollutant Load.
 - (2) Any pollutant listed in Table I will be deleted from the Total Pollutant Load, if reported as non-detectable in all samples for the monitoring period. When any of the pollutants listed in Table I is detected at least once in the monitoring period, the Department shall calculate the Total Pollutant Load using onehalf the reported minimum detection limit for pollutant concentrations.
 - ii. Heat Load is the average mBTU's (million British Thermal Units) per hour of the effluent discharged. Where Heat Load is not reported in mBTU's per hour, the Department shall estimate the Heat Load using the calculated difference between the influent and effluent temperature (in degrees celsius) multiplied by the amount (in million gallons per day) of effluent discharged and a unit conversion factor of 0.6255. The Department shall use an average influent temperature of 5.57 degrees celsius during the period November to April and 18.87 degrees celsius during the period May to October.
- 2. The Department shall assess an additional fee to NJPDES permittees who request a variance under Section 316 of the Federal Water Pollution Control Act (33 U.S.C. §§1251 et seq.). The annual fee shall be assessed on the basis of the administrative cost that is incurred by the Department and the cost of the technical review performed by a consultant hired by the Department.
- 3. The Environmental Impact of a discharge to surface water from a domestic treatment works (DTW) regulated under an individual NJPDES permit is derived by applying the formula:

- Environmental Impact = Average kilograms per day of oxygen demand discharged, as measured by Biochemical Oxygen Demand (BOD5), Carboneous Biochemical Oxygen Demand (CBOD5) or other oxygen demand parameter selected by the Department, as determined in accordance with (a)7 above.
- 4. The Environmental Impact value for any type of discharge to surface water regulated under a general permit shall be zero.
- (d) Except as provided by (k) below, the annual fee for discharges to groundwater, except for residuals and landfills covered in (e) and (f) below, is calculated by using the following Environmental Impact in the annual fee formula:
 - 1. The Environmental Impact of a Discharge to Groundwater regulated by an individual NJPDES permit is derived by applying the formula:

Environmental Impact = (Risk x Quantity x Groundwater Rating Factor) where:

i. Risk is the sum of the rating numbers, based on the degree of hazard, assigned by the Department to each type of waste stored, treated or discharged. The rating numbers are assigned as follows:

<u>Rating</u>	<u>Risk</u>
1	Non-contact cooling water, treated groundwater filter backwash, sanitary wastewater with at least secondary treatment
2	Other treated and untreated sanitary wastewater, food processing waste, stormwater runoff including runoff from non-hazardous waste storage areas, sanitary sludge, discharge from quarry operations including sand and gravel operations
5	Non-hazardous industrial process waste
15	Metal plating waste, hazardous industrial process waste, landfill leachate, or groundwater, wastewater, stormwater runoff or sludge containing hazardous constituents

- Quantity is the average daily volume in millions of gallons discharged by the permittee for the monitoring period selected by the Department in (a)7 above. Where quantity is unavailable or is unknown, the Department shall assign a default quantity of 0.002 million gallons per day for discharges from domestic treatment works and a default quantity of 0.001 million gallons per day for other discharges.
- iii. Groundwater Rating Factor is one tenth of the sum of the Groundwater Monitoring Status Factor, the Aquifer Factor, Groundwater Use Factor and Permeability Rating where:
 - (1) Ground Water Monitoring Status Factor is the rating number, assigned to the facility based on the level of monitoring and/or remediation required at the facility, as set forth in the NJPDES permit, administrative order, administrative consent order or directive letter as follows:

<u>Rating</u>	<u>Status</u>
1	Permittee is not required to conduct groundwater monitoring under the NJPDES permit
2	Permittee is conducting post-closure or post remediation monitoring
2	Permittee is required to conduct detection monitoring
5	Groundwater remediation and/or hydraulic source control is being performed at the site.
5	Alternative concentration limits have been established
10	Compliance monitoring is required as groundwater contamination has been identified in detection monitoring phase and/or groundwater remediation is required

- (2) Aquifer Factor is the rating number, based on ground water yield potential, assigned to each formation listed in Table II below. Where a facility is located on an unlisted formation, the Department shall determine the aquifer factor. Where the facility is located on more than one formation the highest rating number will be assigned.
- (3) Ground water use is the rating number assigned to the municipality where the permitted facility is located based on the

percentage of the municipality that relies on public or private wells for drinking water and the volume of ground water withdrawn in million gallons per day (MGD). The Department, in the Annual NJPDES Fee Schedule Report, prepared pursuant to (b) above, shall set forth the individual ratings assigned to each municipality. Where a municipality's percent use and volume result in different ratings, the highest Ground Water Use rating number derived below shall apply. Ground Water Use rating numbers are assigned as follows:

Rating	Ground Water Use	Percent Use	Volume in MGD
5	А	>50%	>3
3	В	10% - 50%	1 - 3
1	С	<10%	<1

(4) Permeability Rating is the rating number, based on hydraulic conductivity in centimeters per second, of the geological formation immediately beneath the regulated unit or if present, the facility liner material for facilities in detection monitoring. For all other facilities, the permeability rating is based on the hydraulic conductivity of the geological material contaminated. Facilities assigned a Groundwater Monitoring Status factor of 10, that have demonstrated control of the plume of groundwater contamination shall be assigned a permeability rating of 10. Where permeability is unavailable or is unknown, the Department shall assume a permeability rating of 20. The rating numbers are assigned as follows:

Rating	Permeability
10	<10 ⁻⁷
11	10-6
12	10-5
14	10 ⁻⁴
18	10-3
20	10-2
22	>10 ⁻²

2. The Environmental Impact value of any type of discharge to ground water regulated under a general permit shall be zero.

- (e) The Environmental Impact value for facilities which land apply, handle or distribute residuals listed in Table III below shall be zero.
- (f) Except as provided by (k) below, the annual fee for discharges to ground water from sanitary landfills and sites containing wrecked or discarded equipment is calculated by using the following Environmental Impact in the annual fee formula:
 - 1. The Environmental Impact of a Discharge to Ground Water from sanitary landfills and sites containing wrecked or discarded equipment is derived by applying the formula:

Environmental Impact = (W1 + W2) x (Closure Status Factor + Ground Water Rating Factor) where:

i. W1 is the total number of acres filled as of January 1, 1985 multiplied by the sum of the rating numbers, based on the degree of hazard, assigned by the Department to each waste type (as set forth in N.J.A.C. 7:26-2.13) permitted for disposal before January 1, 1985. The rating numbers are assigned as follows:

Rating	Waste Type
1	Types 13, 23
2	Types 10, 12, 27, 72, 73, 74
4	Types 18, 25
8	Types 26, 70 and wrecked or discarded equipment
16	Types 17, 28, 76, 77

- ii. W2 is the total cumulative amount of each waste type received (in cubic yards) since January 1, 1985 divided by 4,840 (the square yards in an acre) and multiplied by the rating number assigned to each waste type as set forth in (f)1i above.
- iii. Closure Status Factor is the rating number, based on the operating status of the landfill, assigned by the Department to each facility. The rating numbers are assigned as follows:

Rating Closure Status

- 1.0 Operating landfill and sites containing wrecked or discarded equipment
- 0.5 Landfill terminated after January 1, 1982 without a Department approved closure plan

- 0.2 Landfill terminated prior to January 1, 1982
- 0.1 Landfill terminated and properly closed in accordance with a Department approved closure plan
- iv. Ground Water Rating Factor is the number derived under (d)1iii above.
- (g) The annual fee for discharges by a significant indirect user to a domestic treatment works is calculated by using the following Environmental Impact in the annual fee formula:
 - 1. The Environmental Impact of a discharge by a significant indirect user (SIU) to a domestic treatment works (DTW) is derived by applying the formula:

Environmental Impact = (Total Pollutant Load)

- i. Total Pollutant Load is the sum of all limited pollutants (in kilograms per day) multiplied by their associated risk factors as listed in Table I below.
 - Any pollutant listed in Table I will be deleted from the Total Pollutant Load, if reported as non-detectable in all samples for the monitoring period. When any of the pollutants listed in Table I is detected at least once in the monitoring period, the Department shall calculate the Total Pollutant Load using onehalf the reported minimum detection limit for pollutant concentrations.
- (h) The fees for exemptions for certain types of residual use or disposal operations shall be assessed as follows:
 - 1. Permit exemptions or Letters of Land Application Management Approvals authorizing the land application of sludge-derived products at specific sites in accordance with a Department-approved distribution program shall be assessed a fee of \$250.00 for the duration of the permit exemption or Letter of Land Application Management Approval. The Department will not consider a request for a permit exemption or Letter of Land Application Management Approval complete unless the request is accompanied by the fee; and
 - 2. General distribution permit exemptions providing Department approval of a sludge derived product distribution program which is not directly regulated for residuals handling through an individual NJPDES permit

shall be assessed a fee of \$2,700 for the duration of the exemption. The Department will not consider a request for a permit exemption complete unless the request is accompanied by the fee.

(i) (Reserved)

S

- (j) For NJPDES Permit No. NJ0088323 (referred to as the category 5G3 "construction activity" stormwater general permit), there is no annual or minimum fee. Instead, a fee of \$300.00 shall be paid by check or money order, payable to "Treasurer, State of New Jersey," and submitted to the applicable soil conservation district along with each request for authorization submitted under that permit, except as provided in (j)1 below. The soil conservation district shall forward all such checks and money orders to the State Soil Conservation Committee in the Department of Agriculture, which shall cause such checks and money orders to be deposited to the credit of the State. The soil conservation district shall not certify any request for authorization that is not accompanied by this fee.
 - 1. For a project that the New Jersey Department of Transportation (NJDOT) is constructing or proposes to construct for which a stormwater discharge is regulated under this general permit, the fee of \$300.00 shall be paid to the Department.
- (k) The fee for discharges to groundwater required for conducting remediation, as defined by N.J.A.C. 7:26E, of contaminated sites, and for any NJPDES discharge to groundwater permits issued by the Site Remediation Program, is calculated and billed through requirements specified in N.J.A.C. 7:26C-9.3.
- (1) The Department shall assess, where applicable, the fee for laboratory certification pursuant to the schedule set forth at N.J.A.C. 7:18.
- (m) Any fee under this section that is subject to N.J.A.C. 7:1L shall be payable in installments in accordance with N.J.A.C. 7:1L.

TABLE I

RISK CATEGORIES

Risk						
<u>Factor</u> <u>10⁰</u>	<u>101</u>	<u>102</u>	<u>103</u>	<u>104</u>		<u>105</u>
			SURFA	ACE WATER		
TDS Chloride	TSS Phosphoru	Tin Aluminum	Styrene Nickel	Arsenic Beryllium	Lead Mercury	

Sulfate Fluoride	Phtahalic Acid	Antimony Barium	Copper Silver	Asbestos Acid fraction compounds	Cadmium Chromium-hex
Iron	Sulfide	Chromium- trivalent	Cobalt	Base-Neutral Compounds	Pesticides
	Molybdenu m	Oil & Grease	Ammonia	Volatile Organics	PCBs
	Bismuth	Surfactants	Cyanide		PBB
	Manganese	N(nitrite, nitrate	Selenium		
	Zinc	Kjeldhal, diss.			
		& Total)			
		Oxidizable			
		Matter			
		Petroleum			
		Hydrocarbons			

Risk <u>Factor 10⁰</u>	10 ¹	10 ²	10 ³	10 ⁴	10 ⁵
Factor 10*	10	10	<u>10⁻</u>	<u>10</u>	<u>10°</u>
BOD	TDS	1,1 Dichloroethylene	Nickel	Beryllium	Carbon
TSS	Iron	Copper	Silver	1,1,1-Trichloroethane	Tetrachloride
COD	Antimony	Zinc	Asbestos	Lead	Mercury
Oil &	Bismuth	Chromium-Trivalent	Cobalt	Arsenic	Cadmium
Grease					
	Tin	Barium	Selenium	Bis(2-ethylhexyl)phthalate	Chromium, hex &
	Manganese	Cyanide	Benzene	Dichlorodifluoromethane	Total
	Inorganic	Dimethyl phthalate	1,2-Dicloroethane	Trichlorofluoromethane	Pesticides
	Sulfur	Surfactants	Chloroform	Total Toxic Organics**	PCBs
	Compounds	Petroleum Hydrocarbons	Ethylbenzene	Volatile Organics*	Dioxin
		5	1,2,4-	TVOS as in N.J.A.C. 7:27-	
			Trichlorobenzene	17.3**	
		Total Toxic Metals**	Naphthalene	Chlorobenzene	
		Nitrogen Compounds/	Vinyl Chloride	Toluene	
		Ammonia	Base Neutral	1,2-Trans-Dichloroethylene	
			Compounds*		
		Phenols	Acid Extractable	Trichloroethylene	
			Compounds		
			1,1,2,2-		
			Tetrachloroethane		
			Bromoethane		
			1,2-Dichloropropane		
			1,1-Dichloroethane		
			1,1,2-Trichloroethane		
			Dichlorobenzene		
			Di-n-butyl Pthalate Anthracene		
			Tetrachloroethylene		
			Pentachlorophenol		
			Butyl Benzyl phthalate		
			Di-n-octyl Phthalate		
			Di n-octyr i ninaiate		
* Unlisted					
** Not Item	ized				

INDIRECT USERS

Table II

FORMATION RATINGS

<u>System</u>	<u>Formation</u>	Potential	Points
Quarternary			
Pleistocene	Glacial drift		
	Mercer, Middlesex	Poor	2
	Other Counties	Mod to Very Good	10
	Cape May	Moderate to Good	8
	Pennsauken	Moderate to Minor	6
	Bridgeton	Moderate to Minor	6
Tertiary			
Pleistocene	Beacon Hill	Poor	2
Pleistocene	Cohansey	Very Good	10
Miocene	Kirkwood	Good to Moderate	8

System	Formation	Potential	Points
Eocene	Piney Point	Minor	4
	Shark River	None	1
	Manasquan	Poor	2
Paleocene	Vincentown	Poor to Good	8
	Hornerstown	None to Poor	2
Cretaceous			
	Tinton	None to Poor	2
	Red Bank	None to Minor	4
	Navesink	None to Poor	2
	Mount Laurel	Moderate	6
	Wenonah	Minor	4
	Marshalltown	None to Poor	2
	Englishtown	Good to Moderate	8
	Woodbury	None	1
	Merchantville	None	1
	Raritan-Magothy	Very Good	10
Triassic			
	Watchung	Minor	4
	Diabase	Minor	4
	Brunswick	Minor to Good	8
	Lockatong	Poor	2
	Stockton	Moderate to Good	8
	Border Conglomerates	Minor	4
Tertiary			
Devonian			
	Skunnemunk	Poor	2
	Bellvale	Poor to Minor	4
	Cornwall/Pequanac	Poor	2
	Kanouse	Poor	2
	Marcellus	Poor	2
	Onondaga	Moderate	6
	Schoharie	Minor	4
	Esopus	Poor	2
	Oriskany (includes Glenerie and Port Ewen	Poor	4
	Becraft (Minisink)	Poor	2
	New Scotland	Minor	4
	Kalkberg (Stormville)	Minor	4
	Coeymans	Minor	4
Silurian			
	Manlius	Minor	4
	Rondout	Minor	4
	Decker	Minor	4
	Bossardville	Minor	4
	Poxono Island	Minor	4
	High Falls	Minor	4
	Longwood	Minor	4
	Shawangunk and Green Pond	Poor	2
Ordovician			
	Jacksonberg	Minor	4
	Ontelaunee	Minor	4
	Epier	Minor	4
	Rickenback	Moderate	6

System	Formation	Potential	Points
Cambrian			
	Allentown Upper	Minor	4
	Allentown Lower	Moderate to Very Good	10
	Leithsville	Very Good	10
	Hardystown	Poor	2
Precambian			
	Franklin	Minor to Moderate	6
	Crystalline Rocks	Minor to Moderate	6

Table III

Minimum Fees

Permit Fee Category ¹	Min Fee Code	Minimum Fee
1. Major DSW Domestic Treatment Works (DTW) – Individual Permit	MMJ	\$11,150
2. Minor DSW Domestic Treatment Works (DTW) – Individual Permit	MMI	\$4,200
3. Combined Sewer Overflow – Individual Permit Component or General Perm		\$9,450
4. Major Industrial DSW – Individual Permit	IMJ	\$9,950
5. Minor Industrial DSW – Individual Permit	IMI	\$4,200
6. General Permit – Industrial DSW, DGW, or both (unless otherwise listed)	IGN	\$2,300
7. Industrial Stormwater - Individual Permit	IST	\$2,300
8. Stormwater - Basic Industrial General Permit (5G2)	SBG	\$800
9. Municipal Stormwater – Tier B General Permit (R10)	STB	\$500
10. Municipal Stormwater – Tier A General Permit (R9)		
(population range 0-1,000)	SA1	\$600
(population range 1,001-5,000)	SA2	\$1,050
(population range 5,001-10,000)	SA3	\$2,000
(population range 10,001-15,000)	SA4	\$3,000
(population range 15,001-20,000)	SA5	\$4,050
(population range 20,001-25,000)	SA6	\$5,250
(population range 25,000+)	SA7	\$9,000
11. Municipal Stormwater – Public Complex General Permit (R11)		
(population range 1,000-2,999)	SP1	\$900
(population range 3,000-5,999)	SP2	\$1,500
(population range 6,000-8,999)	SP3	\$2,600
(population range 9,000+)	SP4	\$3,600
12. Municipal Stormwater – Highway Agency General Permit (R12)		
(mileage range 0-9)	SH1	\$550
(mileage range 10-199)	SH2	\$2,450
(mileage range 200-399)	SH3	\$5,100
(mileage range 400+)	SH4	\$9,800
13. DGW – Initial Individual Permit ²	GWN	\$6,000
14. DGW – Renewed or Continued Individual Permits ²	GWE	\$2,750
15. DGW - General Permit (I1, I2 and LSI)	GGN	\$900
16. DGW - General Permit (T1)	GT1	\$450
17. DGW - Operating Landfill Individual Permit	LND	\$6,900
18. Residuals Use or Disposal Operations (unless otherwise listed)	RES	\$10,600
19. Residuals - Food Processors / WTPs ³ Individual Permit	RFP	\$4,000
20. Residuals - Category Z Individual Permit ⁴	RTZ	\$2,050
21. Residuals - General Permit (ZG and 4G)	RTG	\$500
22. Residuals - Category 04 Individual Permit ⁵	RPH	\$850
23. Residuals – Land Application General Permit (unless otherwise listed)	RSG	\$800

24. Significant Indirect User (SIU) (Pretreatment)	SIU	\$5,450
25. Landfills operating or terminated after January 1, 1982 without an approved	6	\$2,500
closure plan		
26. Terminated Landfills properly closed or closed prior to January 1, 1982	6	\$500.00
27. Emergency Permit issued pursuant to N.J.A.C. 7:14A-6.14		7

¹ For names corresponding to the general permit category see N.J.A.C. 7:14A-6.13(c).

 2 For a domestic or industrial facility issued an individual NJPDES Discharge to Groundwater permit, the minimum fee is \$6,000 for the first five years of that permit, and \$2,750 if the permit is renewed or administratively continued.

All other domestic or industrial facilities issued an individual NJPDES Discharge to Groundwater permit shall be assessed a minimum fee of \$2,750.

³ WTPs refer to potable water treatment plants.

⁴ Refers to a Residuals Transfer Facilities individual permit.

⁵ Refers to a Residuals - Reed Beds individual permit.

⁶ This permit is issued and administered by the Division of Solid and Hazardous Waste.

⁷ Fee based on category for type of discharge.

SUBCHAPTER 4. PERMIT APPLICATION REQUIREMENTS

7:14A-4.1 PURPOSE AND SCOPE

(a) This subchapter sets forth the minimum NJPDES permit application requirements, which apply to all applicants for NJPDES permits, unless otherwise specified.

7:14A-4.2 APPLICATION REQUIREMENTS

- (a) Any person who is engaged in an activity or proposes to commence an activity that requires an individual NJPDES permit pursuant to N.J.A.C. 7:14A-2 shall submit a complete application to the Department in accordance with this subchapter. Any person wishing to be authorized under a general permit shall comply with the application requirements in the applicable general permit.
- (b) Once an applicant has complied with N.J.A.C. 7:14A-4.3(a)13, requiring submittal of the application to the local agency or sewerage entity and municipality, the applicant shall submit two copies of all NJPDES permit applications to:

New Jersey Department of Environmental Protection Bureau of Permit Management Division of Water Quality CN 029 Trenton, NJ 08625 Attn: Administrative Review Unit

- (c) It is the duty of any person who is or will be an operating entity for any part of a facility which includes a discharge or activity regulated pursuant to this chapter to obtain a NJPDES permit. When a facility or activity is owned by one or more persons, but is currently operated by another person, it is the operating entity's duty to obtain a NJPDES_permit. However, the property owner (record owner of fee title interest) shall sign the "Property Owner's Certification" in the NJPDES-1 Form for all DGW permits.
- (d) Whenever pursuant to (c) above, more than one person is required to obtain an individual NJPDES permit for one or more discharges or activities at a specific site, the Department may issue a single permit and may list all of these persons as permittees. Such a permit may identify permit conditions that apply to one or more of those permittees.
- (e) The schedule for submission of applications (or requests for authorization under a general permit) is as follows:
 - 1. Any person proposing a new facility or activity, which requires a NJPDES permit pursuant to N.J.A.C. 7:14A-2.4 and is not exempt pursuant to N.J.A.C. 7:14A-2.5, shall submit an application at least 180 days before

the date on which the activity is proposed to commence, unless an alternative date has been established by the Department. The schedule for submitting an application for certain stormwater discharges is set forth in N.J.A.C. 7:14A-24.4 and 25.4.

- 2. For general permits, alternate dates for submitting requests for authorization may be specified under the terms of the applicable general permits.
- 3. Any person planning to continue discharging after the expiration date of an existing NJPDES permit shall file an application for renewal or a request for authorization under a general permit at least 180 calendar days prior to the expiration of the existing permit, unless:
 - i. Otherwise required under (e)4 below;
 - The existing permit is a general permit that provides for automatic renewal of authorization when that general permit is renewed (see N.J.A.C. 7:14A-6.13(d)9), or that provides for retroactive renewal of authorization after a new request for authorization is submitted or granted under the renewed general permit; or
 - iii. The existing permit is an individual permit where:
 - The permittee has been notified by the Department prior to submitting a renewal application pursuant to N.J.A.C. 7:14A-2.7 that the permit qualifies for expedited permit renewal under N.J.A.C. 7:14A-16.3(h), and elects to participate; or
 - (2) The permittee has a stormwater only permit and is approved by the Department for expedited permit renewal.
- 4. (Reserved.)
- 5. Any existing facility or activity which is required to obtain an individual NJPDES-SIU permit pursuant to N.J.A.C. 7:14A-2.4(b)2 and does not have an individual NJPDES-SIU permit shall apply within 180 days of the effective date of this chapter, or of a determination of the Department, that the discharge requires an individual NJPDES-SIU permit.
- 6. All existing facilities or activities which require an individual NJPDES-SIU permit due to promulgation of new Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subpart N, will be notified of the application date by the Department following submittal of the Baseline Report, as required pursuant to 40 CFR 403.12(b). See also N.J.A.C. 7:14A-21.3(b).

(f) The Department shall not issue a draft permit for an individual NJPDES permit before receiving a complete permit application, in accordance with N.J.A.C. 7:14A-15.4.

7:14A-4.3 APPLICATION INFORMATION REQUIREMENTS

- (a) All applicants for an individual NJPDES permit shall provide the following information to the Department using the application form(s) provided by the Department (except as specified in N.J.A.C. 7:14A-24.7, 25.9 and 25.10 for stormwater discharges):
 - 1. The activities conducted by the applicant which require it to obtain a NJPDES permit including a brief description of the nature of the business, project, facility, or activity;
 - 2. The name, mailing address, and location of the facility for which the application is submitted;
 - 3. Up to four SIC codes which best reflect the principal products or services provided by the facility;
 - 4. The expiration date of the existing permit or proposed start up date for a new source or for a new discharge or activity;
 - 5. Identification of the general type of waste discharged, or expected to be discharged upon commencement of operations, including sanitary wastes, or non-contact cooling water. This information shall include any cooling water additives that are used or expected to be used upon commencement of operations, along with their composition;
 - 6. Identification of facility ownership, and status as Federal, State, private, public or other entity, the name, address, and telephone number of all:
 - i. Operating entities of the treatment works;
 - ii. Owners of the land or property; and
 - iii. Licensed operators of the treatment works;
 - 7. The name, address, and telephone number of any DTW being utilized (if applicable);
 - 8. The name of the applicant's parent corporation;
 - 9. A listing of all permits or construction approvals received or applied for by the applicant or its parent corporation at the site under any of the following programs:

- i. Hazardous Waste Management program under RCRA;
- ii. NJPDES permits or Treatment Works Approvals under the State or Federal Acts;
- iii. UIC program under N.J.A.C. 7:14A-8;
- iv. Prevention of Significant Deterioration (PSD) program under the Clean Air Act;
- v. Nonattainment program under the Clean Air Act;
- vi. National Emission Standards for Hazardous Pollutants (NESHAPS) preconstruction approval under the Clean Air Act;
- vii. Ocean dumping permits under the Marine Protection Research and Sanctuaries Act;
- viii. Dredge or fill permits under Section 404 of the Federal Act; and
- ix. Other relevant environmental permits, including Federal and State permits, such as stream encroachment or wetlands permits;
- Identification of administrative orders, administrative consent orders, judicial consent orders, notices of violations, complaints filed, or other corrective or enforcement action(s) required by any governmental agency(ies) with regard to the operation of the applicant at that site concerning water pollution within the previous five years;
- 11. If the applicant is subject to any present requirements or compliance schedules for construction, upgrading or operation of waste treatment equipment, connection to a DTW, an identification of the abatement requirement, a description of the abatement project, and a listing of the required and projected final compliance dates;
- 12. Evidence that a WQMP Amendment approval, or favorable consistency determination in accordance with N.J.A.C. 7:15-3.4, has been applied for and received, or, if not applied for and received, reasons why not. Renewals or modifications of existing permitted activities that do not propose significant modification, as determined by the Department, do not require a formal consistency determination review, but shall still not conflict with WQM plans;
- 13. Evidence of application submission to the local agency or sewerage entity and municipality as follows. Except for stormwater discharges, all applicants for an individual NJPDES permit proposing a new discharge or activity, increase in permitted flow with or without an associated increase in loading for an existing discharge, or change in the location or method of

discharge shall, prior to the submission of an application to the Department, submit a copy of the application to the affected local agency or sewerage entity and municipality along with a written notice (certified mail return receipt requested or by other means which allow verification of the fact and date of receipt) that the local agency or sewerage entity and municipality must submit to the Department written comments regarding or objections to the proposed discharge or activity within 30 days of receipt of said notice. Any written comments regarding or objections to the proposed discharge or activity submitted to the Department by an affected local agency, or sewerage entity, or municipality shall be considered by the Department in determining whether to issue a draft permit in accordance with N.J.A.C. 7:14A-15.6. The applicant may file a permit application, provided that copies of the signed and dated notices to the respective local agency or sewerage entity and municipality, and dated certified mail return receipts or other verification of delivery receipt are submitted with the application. Under this circumstance, the Department would consider an application administratively complete, provided all other application requirements have been submitted;

- 14. Signature of certifying official as required in N.J.A.C. 7:14A-4.9;
- 15. A topographic map (U.S. Geological Survey Topographic Map, 7.5 minute Quadrangle Series) extending one mile beyond the property boundaries of the source, depicting the facility and each of its intake and discharge structures; each of its residual treatment, storage, or disposal facilities; each well where fluids from the facility are injected underground; and those wells, springs, other surface water bodies and drinking water wells listed in public records or otherwise known to the applicant in the map area;
- 16. The latitude and longitude to the nearest second of the location of each discharge or activity and the name of the receiving waters or formations, including the USEPA reach number for NJPDES-DSW permit applications. This information shall be submitted in a manner or format consistent with N.J.A.C. 7:1, Appendix A, incorporated herein by reference. Where the information has previously been submitted in a GIS compatible format or has been entered into the GIS database, a duplicate submittal in GIS compatible format is not required. Sludge-only facilities do not need to provide the name(s) of the receiving waters or formations;
- 17. A line drawing of the water flow through the facility with a water balance, showing operations contributing wastewater to the effluent and treatment units. Similar processes, operations, or production areas may be indicated as a single unit, labeled to correspond to the more detailed identification under (a)5 above. The water balance shall show approximate average flows at the intake and discharge points and between units, including

treatment units. If a water balance cannot be determined, the applicant may provide a pictorial description instead, which indicates the nature and amount of any sources of water and any collection and/or treatment measures;

- 18. A description of the treatment the wastewater receives or will receive, including the means for ultimate disposal of any solid or fluid wastes other than by discharge. Each applicant for a new individual NJPDES permit must report the existence of any technical evaluation concerning their wastewater treatment, along with the name and location of similar plants of which they have knowledge;
- 19. A listing of any toxic pollutant specified in Appendix A, incorporated by reference herein, which the applicant currently uses or manufactures as an intermediate or final product or byproduct. The Department will waive or modify this requirement if an applicant demonstrates that it would be unduly burdensome to identify each toxic pollutant and the Department has adequate information to issue the permit;
- 20. For NJPDES-DSW permit applications, an identification of any biological toxicity tests, which the applicant knows or has reason to believe have been made within the last three years on any of the applicant's discharges or activities or on a receiving water in relation to a discharge or activity. The biological toxicity tests shall have been conducted in accordance with the laboratory certification regulations for biological testing, N.J.A.C. 7:18. The applicant shall include copies of the laboratory reports for such biological toxicity tests, if the test results were not previously submitted to the Department;
- 21. Average flows for the facility or proposed facility. For all facilities or proposed facilities, a narrative identification of each type of process, operation, or production area which contributes wastewater to the effluent for each outfall, including process wastewater, cooling water, and stormwater runoff; the average flow which each process contributes. Processes, operations or production area(s) may be described in general terms (for example, "dye-making reactor," distillation tower"). For DTWs, this identification shall include the identity of each user of the treatment works, as specified in Section 402(b)8 of the Federal Act. The average flow of sources composed of stormwater may be estimated. The method of estimation and the basis for the total estimated rainfall must be described. If the discharge is partly due to stormwater, for each outfall, the application must either quantify the contributing drainage area and the runoff coefficient(s) applicable, or provide the other data used to estimate the average flow of stormwater. In addition:
 - i. For DTWs, design flow of the facility or proposed facility shall be reported;

- ii. All DGWs shall report the peak daily flow in addition to the average flow; and
- iii. If any of the discharges described above are intermittent or seasonal, a description of the frequency, duration, and flow rate of each discharge occurrence (except for stormwater runoff, and accidental spillage or leaks);
- 22. To the extent practicable, the location of all sites at which solid or liquid waste is stored at the facility for which the NJPDES application is being made and the ultimate disposal sites of solid or liquid waste generated by any facility with a discharge;
- 23. Information in compliance with the Sludge Quality Assurance Regulations, N.J.A.C. 7:14C;
- 24. A description of the applicant's residual use and disposal practices including, where applicable:
 - i. The location of all sites at which residual is stored at the facility for which the NJPDES application is being made and the name and location of the residual use and disposal practices for residual generated by the facility;
 - ii. The location of any sites where the applicant transfers or plans to transfer residuals for treatment and/or disposal;
 - iii. Annual residuals production volume (dry metric tons per year);
 - iv. A written statement from the applicant indicating whether a residual use or disposal practice is consistent with an approved District Sludge Management Plan or District Solid Waste Management Plan, as applicable; and
 - v. Any additional information required to be submitted by a treatment works treating domestic sewage or a sludge-only facility in accordance with 40 CFR 122.21, as amended or supplemented;
- 25. All DTWs with an approved industrial pretreatment program shall complete a written technical evaluation of the need to revise local limits developed under 40 CFR 403.5(c)(1). This technical evaluation shall meet the criteria specified in N.J.A.C. 7:14A-19.7(e); and
- 26. Any other optional information the permittee wishes to have considered.
- (b) A person whose facility is the cause of, or whose activity results in, more than one discharge at a single site, shall separately describe each discharge or activity in the application.

- (c) An applicant which qualifies as a small business under one of the following criteria is exempt from the requirements set forth in N.J.A.C. 7:14A-4.4(b)4 and 5 to submit quantitative data for the pollutants listed in Table II of Appendix A (the organic toxic pollutants), incorporated herein by reference:
 - 1. For coal mines, a probable total annual production of less than 100,000 tons per year; or
 - 2. For all other applicants, gross total annual sales averaging less than \$100,000 per year (in second quarter 1980 dollars).
- (d) If a certified laboratory or consulting firm performed an analysis required by N.J.A.C. 7:14A-4.4, the applicant shall provide the identity of each certified laboratory or firm and the analysis performed.
- (e) In addition to the information reported on the application form, applicants shall provide to the Department, upon request, such other information as the Department may reasonably require, or that the applicant wishes to have considered, to assess the activity or discharge(s) of the facility and to determine whether to issue an NJPDES permit in accordance with this chapter. This additional information may include additional quantitative data and bioassays to assess the relative toxicity of the discharge(s) to aquatic life, requirements to determine the cause of any toxicity, or other such information concerning existing or proposed pollution control programs, such as the technical application requirements listed in N.J.A.C. 7:14A-4.5 through 4.8. In accordance with N.J.A.C. 7:14A-15.4, a technically incomplete application may be inactivated (and the issuance of the draft permit therefore delayed) until the information requested under this subsection is supplied to the Department.

7:14A-4.4 ADDITIONAL APPLICATION REQUIREMENTS FOR DISCHARGES TO SURFACE WATER

- (a) An applicant for an individual NJPDES permit for a process wastewater discharge is required to provide with the application a reasonable estimate or measure of the applicant's actual maximum and average actual production. For new sources or new discharges or activities, the applicant shall provide estimates expressed in terms of production (or other measure of operation). The reported estimate or measure of production must reflect the actual production of the facility as required in N.J.A.C. 7:14A-13.13(a)1ii. If production is likely to vary, alternative estimates may be submitted in consultation with the Department. Production estimates shall be made in accordance with the following (except as specified in N.J.A.C. 7:14A-24.7, 25.9 and 25.10 for stormwater discharges):
 - 1. An effluent guideline promulgated under Section 304 of the Federal Act, reported in the units used in the applicable effluent guideline;

- 2. A new source performance standard promulgated under Section 306 of the Federal Act, reported in the units used in the applicable new source performance standard; or
- 3. A toxic and pretreatment standard promulgated under Section 307 of the Federal Act reported in the units used in the standard.
- (b) All applicants for an individual NJPDES permit shall provide as part of their application, information on the discharge of pollutants in accordance with this subsection (except information on stormwater discharges, which is to be provided as specified in N.J.A.C. 7:14A-24.7, 24.8, 25.9 and 25.10).
 - 1. Where the Department has determined two or more outfalls to have substantially identical effluents, the Department will allow the applicant to report that the quantitative data from testing one outfall also applies to the other substantially identical outfall or outfalls.
 - 2. When quantitative data for a pollutant are required, the applicant shall collect a sample of effluent and analyze it for the pollutant in accordance with analytical methods approved under 40 C.F.R. Part 136 or N.J.A.C. 7:18.
 - i. When no approved analytical method is available, the applicant may propose to use a suitable method. The applicant shall provide a description of the proposed methodology to the Department for approval for the specific pollutant prior to initiation of sampling;
 - ii. Grab samples shall be used for pH, temperature, cyanide, total phenols, residual chlorine, chlorine produced oxidants, oil and grease, petroleum_hydrocarbons, all volatile organics, bacterial indicators, and flash point. For all other pollutants, 24-hour composite samples must be used. However, a minimum of one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period greater than 24 hours. The Department will waive composite sampling for any outfall for which the applicant demonstrates that the use of an automatic sampler is infeasible and that a specific minimum number of samples will be a representative sample of the effluent being discharged; and
 - iii. Where no certification program in accordance with N.J.A.C. 7:18 is available for a specific parameter, the permittee shall utilize a laboratory certified for a similar parameter or analytical procedure.
 - 3. An effluent characterization shall be submitted as follows:
 - i. Every applicant for an individual NJPDES permit shall report quantitative data that contains daily maximum and monthly average

values, for every outfall, for the following pollutants:

- (1) Biochemical oxygen demand (BOD₅);
- (2) Chemical oxygen demand ;
- (3) Total organic carbon;
- (4) Total suspended solids;
- (5) Ammonia (as N);
- (6) Temperature (both winter and summer); and
- (7) pH.
- ii. Every applicant for an individual NJPDES permit shall collect and submit the quantitative data for the analyses listed in (b)3ii(1) and (2) below for every outfall, unless the Department determines that the submission is not necessary to evaluate the effluent characteristics.
 - (1) Results from a minimum of at least once acute and one chronic whole effluent toxicity test performed on the same sample; and
 - (2) Results from a minimum of at least one analysis of the toxic pollutants listed in Appendix A Table II, except for applicants with processes in one or more primary industrial category that are required to obtain quantitative data under (b) below.
- iii. The Department will waive the reporting requirements for discharges of a particular industrial category for one or more of the pollutants in (i) above if the applicant demonstrates that such a waiver is appropriate because adequate information to support issuance of a permit can be obtained with less stringent or different requirements.
- iv. The quantitative data, regardless of when collected, shall remain representative of current operations and include maximum daily value, average daily value, and the number of measurements taken.
- v. For new sources or new discharges, when the applicant is unable to provide sampling data, the applicant must include estimates for the new sources or new discharges of pollutants or parameters listed in (b)3i above with the addition of fecal coliform (if believed present or if sanitary waste is or will be discharged), chlorine produced oxidants (if chlorine is used in the treatment process), oil and grease, and flow, along with the source of each estimate.
- vi. For all sampling data required under this section, all levels must be

reported or estimated as concentration and as total mass, except for flow, pH, acute and chronic whole effluent toxicity, and temperature. The applicant must complete and submit the influent and effluent characteristics found as Item IV of USEPA Form 2E or Items V and VI of USEPA Form 2C (forms provided by the Department) by providing quantitative data on the appropriate USEPA form only for the pollutants listed that the applicant knows or has reason to believe are present no later than two years after commencement of discharge. However, the applicant need not complete those portions of Item IV of Form 2E or Item V of Form 2C requiring tests which the applicant has already performed and reported under the discharge monitoring requirements of an existing NJPDES permit. For POTWs (and DTWs), the applicant shall complete and submit the influent and effluent characteristics required under this section using USEPA Standard Form A (Section II, items 14, 15 and 17).

- 4. Each applicant with processes in one or more primary industrial category contributing to a discharge shall report quantitative data for the following pollutants in each outfall containing process wastewater:
 - i. The organic toxic pollutants in the fractions designated in Table I of Appendix A (i.e. volatile, acid, base/neutral, or pesticide) for the applicant's industrial category or categories unless the applicant qualifies as a small business under N.J.A.C. 7:14A-4.3(c). Table II of N.J.A.C. 7:14A-4 Appendix A lists the organic toxic pollutants in each fraction. The fractions result from the sample preparation required by the analytical procedure which uses gas chromatography/ mass spectrometry. A determination that an applicant falls within a particular industrial category for the purposes of selecting fractions for testing is not conclusive as to the applicant's inclusion in that category for any other purposes; and
 - ii. The pollutants listed in Table III of Appendix A (the toxic metals, cyanide, and total phenols).
- 5. The applicant shall report the presence of pollutants that it knows or has reason to believe are present as follows:
 - i. An applicant shall indicate whether it knows or has reason to believe that any of the pollutants in Table IV of Appendix A (certain conventional and nonconventional pollutants) is discharged from each outfall. If an applicable effluent limitations guideline either directly limits the pollutant or, by its express terms, indirectly limits the pollutant through limitations on an indicator, the applicant shall report quantitative data. For every pollutant discharged which is not so limited in an effluent limitations guideline, the applicant shall either report quantitative data or briefly describe the reasons the pollutant is

expected to be discharged;

- ii. An applicant shall indicate whether it knows or has reason to believe that any of the pollutants listed in Table II or Table III of Appendix A (the toxic pollutants and total phenols) for which quantitative data are not otherwise required under (b)3 above, is discharged from each outfall. For every pollutant expected to be discharged in a concentration of 10 ug/L or greater the applicant shall report quantitative data. Each applicant shall report daily maximum, daily average, and the source of information for each pollutant it knows or has reason to believe to be present or if the application is limited by an effluent limitations guideline or new source performance standard either directly or indirectly through limitations or an indicator pollutant: all pollutants in Table IV of Appendix A (certain conventional and nonconventional pollutants). For acrolein, acrylonitrile, 2,4 - dinitrophenol, and 4,6-dinitro-o-cresol (2-methyl-4,6 dinitrophenol), where any of these pollutants are expected to be discharged in concentrations of 100 ug/L or greater, the applicant shall either submit quantitative data or briefly describe the reasons the pollutants are expected to be discharged. An applicant qualifying as a small business under N.J.A.C. 7:14A-4.3(c) is not required to analyze for pollutants listed in Table II of Appendix A (the organic toxic pollutants); and
- iii. For new discharges, each applicant must report estimated daily maximum, daily average and source of information for the following pollutants if it knows or has reason to believe that they will be present in the discharge from any outfall:
 - (1) The pollutants listed in Table III of Appendix A (the toxic metals, total cyanide, and total phenols); and
 - (2) The organic toxic pollutants in Table II of Appendix A (except bis (2-chloromethyl) ether, dichlorfluoromethane and trichlorofluoromethane). This requirement is waived for applicants who qualify as small businesses under N.J.A.C. 7:14A-4.3(c).
- 6. An applicant shall indicate whether it knows or has reason to believe that any of the pollutants in Table V of Appendix A (certain hazardous substances and asbestos) are discharged from each outfall. For every pollutant expected to be discharged, the applicant shall briefly describe the reasons the pollutant is expected to be discharged, and report any quantitative data it has for any pollutant. For new sources and new dischargers, no quantitative estimates are required at time of application submittal, unless they are already available. However, no later than two years after commencement of discharge from a proposed facility, the

applicant for a permit for a new source or new discharge shall submit the quantitative data; and

- 7. An applicant shall report qualitative data, generated using a screening procedure not calibrated with analytical standards, for 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) if it:
 - i. Uses or manufactures 2,4,5-trichlorophenoxy acetic acid (2,4,5,-T)(CAS #93-76-5); 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5,-TP)(CAS #93-72-1); 2-(2,4,5-trichlorophenoxy) ethyl, 2,2-dichloropropionate (Erbon)(CAS #136-25-4); O,O-dimethly O-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel)(CAS #299-84-3); 2,4,5-trichlorophenol (TCP)(CAS #95-95-4); or hexachlorophene (HCP)(CAS #70-30-4); or
 - ii. Knows or has reason to believe that TCDD is, may be, or will be present in an effluent.

7:14A-4.5 SPECIFIC TECHNICAL APPLICATION REQUIREMENTS FOR DIRECT DISCHARGES TO SURFACE WATER

- (a) N.J.A.C. 7:14A-12-Appendix C includes the effluent standards for new sources, including new or expanded discharges or activities. The effluent standards for new dischargers are effluent limitations developed using water quality assumptions applicable to a pollutant that is known to be in the applicant's effluent. An applicant may request effluent limitations based on the effluent standards for a new discharge in lieu of conducting site specific water quality studies. Applicants for individual NJPDES permits for new sources or new discharges directly discharging to surface water, shall submit one of the following:
 - A complete application in accordance with the requirements of N.J.A.C. 7:14A-4.2 and 4.3, including a request to include one or more of the effluent standards listed in N.J.A.C. 7:14A-12 Appendix C as the effluent limitation(s) for each pollutant present in the applicant's discharge or activity. The applicant shall specify the specific pollutants where imposition of the effluent standards as effluent limitations are requested. By requesting the imposition of effluent standards listed in N.J.A.C. 7:14A-12 Appendix C as effluent limitations, an applicant shall be deemed to have waived its rights to contest the N.J.A.C. 7:14A-12 Appendix C effluent standards for each effluent limitation requested. The Department may determine that imposition of the effluent standards as effluent limitations are appropriate for specific pollutants and in that case shall exempt the applicant from completing detailed water quality studies for those pollutants; or
 - 2. A complete application without a request for use of the effluent standards.

Where the applicant does not request the effluent standards as provided at (a)1 above, the applicant shall submit all water quality studies which the Department determines are appropriate for the specific discharge.

(b) Applicants with an individual NJPDES permit for existing discharges or activities shall submit a complete renewal application in accordance with N.J.A.C. 7:14A-2.7. Where additional water quality information is necessary, the Department shall require water quality studies as provided in N.J.A.C. 7:14A-2.12(a).

7:14A-4.6 Additional Application Requirements for Significant Indirect Users

- (a) In addition to the requirements of N.J.A.C. 7:14A-4.3, the application for an individual NJPDES-SIU permit shall include the information required under:
 - 1. N.J.A.C. 7:14A-4.4(a)1 and 3; and
 - 2. N.J.A.C. 7:14A-4.4(b)1,2,3i(1-2),3i(4-7),3iii, and 4 through 7.
- (b) In addition to the requirements listed in N.J.A.C. 7:14A-4.4, applicants for an individual SIU permit shall submit the following:
 - 1. A list of potential discharges, with a description of the expected levels and the reasons for any discharges of pollutants which the applicant knows or has reason to believe will exceed two times the value required to be reported in accordance with N.J.A.C. 7:14A-4.4(b)1, 2, 3i(1) and (2), 3i(4) through (7), 4 through 7, for a period of five years commencing with the date of the application;
 - 2. For new, expanded, or changed (in nature of pollutants discharged) SIU discharges only, consent from the affected local agency and owner of the applicable wastewater conveyance system(s), certifying that the discharge is acceptable. This consent shall be in the form of a letter or Form WQM-003 (available from the Department). This is the same form required by N.J.A.C. 7:14A-22.6; and
 - 3. An indication of the ultimate discharge point of all building floor drains, including the path through the facility collection system.

7:14A-4.7 ADDITIONAL APPLICATION REQUIREMENTS FOR DISCHARGES TO GROUND WATER

(a) In addition to the requirements of N.J.A.C. 7:14A-4.2 and 4.3, an applicant for a NJPDES-DGW permit shall submit the information required in N.J.A.C. 7:14A-7, 8, 9 and 10.

7:14A-4.8 ADDITIONAL APPLICATION REQUIREMENTS FOR SPECIFIC DSW DISCHARGES

- (a) For new or existing concentrated animal feeding operations, in addition to the application information requirements contained in N.J.A.C. 7:14A-4.2 and 4.3, an application shall include the following information:
 - 1. The type and number of animals in open confinement and housed under roof;
 - 2. The number of acres used for confinement feeding; and
 - 3. The design basis for the runoff diversion and control system, if one exists, including the number of acres of contributing drainage, the storage capacity, and the design safety factor.
- (b) For new or existing concentrated aquatic animal production facilities, in addition to the application requirements contained in N.J.A.C. 7:14A-4.2 and 4.3, applications shall include the following information:
 - 1. The maximum daily and average monthly flow from each outfall;
 - 2. The number of ponds, raceways, and similar structures;
 - 3. The name of the receiving water and the source of intake water;
 - 4. For each species of aquatic animals, the total yearly and maximum harvestable weight; and
 - 5. The calendar month of maximum feeding and the total mass of food fed during that month.

7:14A-4.9 SIGNATORY REQUIREMENTS FOR PERMIT APPLICATIONS AND REPORTS

- (a) All permit applications, requests for authorization, reports required by permits other than DMRs, and other information requested by the Department, shall be signed by a person described in (a)1 through 4 below. DMRs shall be signed in accordance with the DMR reporting requirements of N.J.A.C. 7:14A-6.9.
 - 1. For a corporation, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - i. A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
 - ii. The manager of one or more manufacturing, production, or operating

facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

- 2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- 3. For a municipality, State, Federal, or other public agency, by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - i. The chief executive officer of the agency; or
 - ii. A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator); or
- 4. By a duly authorized representative as described in (b) below.
- (b) A person is a duly authorized representative only if:
 - 1. The authorization is made in writing by a person described in (a)1 through 3 above;
 - 2. The authorization specifies either an individual or a position whose occupant has responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position whose occupant has overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and,
 - 3. The written authorization is submitted to the Department.
- (c) If an authorization under (b) above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility or overall responsibility for environmental matters for the company, a new authorization satisfying the requirements of (b) above must be submitted to the Department prior to or together with any reports, information, or applications signed by an authorized representative.
- (d) Any person signing a document under (a) above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system

designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for purposely, knowingly, recklessly, or negligently submitting false information."

7:14A-4.10: TECHNICAL REQUIREMENTS FOR NJPDES-DSW APPLICATIONS.

(Reserved)

N.J.A.C. 7:14A-4 APPENDIX A UNOFFICIAL VERSION. THE OFFICIAL VERSION CAN BE OBTAINED FROM WEST PUBLISHING, 1-800-808-WEST

7:14A-4-APPENDIX A:

PERMIT APPLICATION TESTING REQUIREMENTS/POLLUTANT LISTINGS

GC/MS Fraction 1 Industrial Category Volatile Pesticide Acid **Base/Neutral** Adhesives and Sealants * * * * * Aluminum Forming Auto and Other * * * * Laundries Battery Manufacturing * * * * * Coal Mining * Coil Coating * * * Copper Forming * * * Electric and Electronic Components * * * * * * * Electroplating Explosives Manufacturing * * * Foundries * * Gum and Wood * * * * Chemicals Inorganic Chemicals * * Manufacturing * Iron and Steel Manufacturing * * * Leather Tanning and * * * * Finishing Mechanical Products * * * Manufacturing Nonferrous Metals * * * * Manufacturing * * * * Ore Mining **Organics Chemicals** Manufacturing * * * * Paint and Ink * * * * Formulation Pesticides * * * * * * * * Petroleum Refining Pharmaceutical * * * Preparations. Photographic Equipment and * * * * Supplies. Plastic and Synthetic

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Materials Manufacturing

Plastic Processing...

TABLE I: TESTING REQUIREMENTS FOR ORGANIC TOXIC POLLUTANTS BY INDUSTRIAL CATEGORY

Porcelain Enameling	*		*	*
Printing and Publishing	*	*	*	*
Pulp and Paper Mills	*	*	*	*
Rubber Processing	*	*	*	
Soap and Detergent				
Manufacturing	*	*	*	
Steam Electric Power				
Plants	*	*	*	
Textile Mills	*	*	*	*
Timber Product				
Processing.	*	*	*	*

Note 1: The Environmental Protection Agency has suspended the requirements of 122.21(g)(7)(ii)(A) and Table I of Appendix D as they apply to certain industrial categories. The suspensions are as follows:

(a) At 46 FR 2046, January 8, 1981, the Environmental Protection Agency suspended until further notice 122.21(g)(7)(ii)(A) as it applies to coal mines.

(b) At 46 FR 22585, April 20, 1981, the Environmental Protection Agency suspended until further notice 122.21(g)(7)(ii)(A) and the corresponding portions of Item V-C of the NPDES application Form 2 as they apply to:

- 1. Testing and reporting for all four organic fractions in the Greige Mills Subcategory of the Textile Mills industry (Subpart C—Low water use processing of 40 C.F.R. part 410), and testing and reporting for the pesticide fraction in all other subcategories of this industrial category.
- 2. Testing and reporting for the volatile, base/neutral and pesticide fractions in the Base and Precious Metals Subcategory of the Ore Mining and Dressing industry (subpart B of 40 C.F.R. part 440), and testing and reporting for all four fractions in all other subcategories of this industrial category.
- 3. Testing and reporting of all four GC/MS fractions in the Porcelain Enameling industry.

(c) At 46 FR 35090, July 1, 1981, the Environmental Protection Agency suspended until further notice 122.21(g)(7)(ii)(A) and the corresponding portions of Item V-C of the NPDES application Form 2c as they apply to:

- Testing and reporting for the pesticide fraction in the Tall Oil Rosin Subcategory (subpart D) and Rosin-Based Derivatives Subcategory (subpart F) of the Gum and Wood Chemicals industry (40 CFR part 454), and testing and reporting for the pesticide and base/neutral fractions in all other subcategories of this industrial category.
- 2. Testing and reporting for the pesticide fraction in the Leather Tanning and Finishing, Paint and Ink Formulation, and Photographic Supplies industrial categories.
- 3. Testing and reporting for the acid, base/neutral and pesticide fractions in the Petroleum Refining industrial category.
- 4. Testing and reporting for the pesticide fraction in the Papergrade Sulfite subcategories (subparts J and U) of the Pulp and Paper industry (40 C.F.R. part 430); testing and reporting for the base/neutral and pesticide fractions in the following subcategories: Deink (subpart Q), Dissolving Kraft (subpart F), and Paperboard from Waste Paper (subpart E); testing and reporting for the volatile, base/neutral and pesticide fractions in the following subcategories: BCT Bleached Kraft (subpart H), Semi-Chemical (subparts B and C), and Nonintegrated-Fine Papers (subpart R); and testing and reporting for the acid, base/neutral, and pesticide fractions in the following subcategories: Fine Bleached Kraft (subpart I), Dissolving Sulfite Pulp (subpart K), Groundwood-Fine Papers (subpart O), Market Bleached Kraft (subpart G), Tissue from Wastepaper (subpart T), and Nonintegrated-Tissue Papers (subpart S).

5. Testing and reporting for the base/neutral fraction in the Once-Through Cooling Water, Fly Ash and Bottom Ash Transport Water process wastestreams of the Steam Electric Power Plant industrial category.

This revision continues these suspensions.

For the duration of the suspensions, therefore, Table I effectively reads:

PERMIT APPLICATION TESTING REQUIREMENTS/POLLUTANT LISTINGS Table I Testing Requirements for Organic Toxic Pollutants by Industrial Category

Industrial Category

<u>GC/MS Fraction¹</u>

	Volatile	Acid	Base/Neutral	Pesticide
	volatile	Aciu	Dase/meutral	1 esticide
Adhesives and Sealants	*	*	*	
Aluminum forming	*	*	*	
Auto and other laundries	*	*	*	*
Battery manufacturing	*		*	
Coal mining				
Coil coating	*	*	*	
Copper forming	*	*	*	
Electric and electronic				
compounds	*	*	*	*
Electroplating	*	*	*	
Explosives manufacturing		*	*	
Foundries	*	*	*	
Gum and wood (all subparts				
except D and F)	*	*		
Subpart D-tall oil rosin	*	*	*	
Subpart F-rosin-based				
derivatives	*	*	*	
Inorganic chemicals				
manufacturing	*	*	*	
Iron and steel manufacturing	*	*	*	
Leather tanning and				
finishing	*	*	*	
Mechanical products				
manufacturing	*	*	*	
Nonferrous metals				
manufacturing	*	*	*	*
Ore mining (applies to the base				
and precious metals/Subpart				
B)		*		
Organic chemicals				
manufacturing	*	*	*	*
Paint and ink formulation	*	*	*	
Pesticides	*	*	*	*
Petroleum refining	*			

Pharmaceutical preparations	*	*	*	
Photographic equipment and				
supplies	*	*	*	
Plastic and synthetic materials				
manufacturing	*	*	*	*
Plastic processing	*			
Porcelain enameling				
Printing and publishing	*	*	*	*
Pulp and paperboard mills-see				
footnote ³				
Rubber processing	*	*	*	
Soap and detergent				
manufacturing	*	*	*	
Steam electric power plants	*	*		
Textile mills (Subpart C-Greige				
Mills are exempt from this				
table)	*	*	*	
Timber products processing	*	*	*	*

1. The pollutants in each fraction are listed in Item V-C of the USEPA Form *C.

- * Testing required
- 3. Pulp and Paperboard Mills: <u>Subpart³</u>

GC/MS Fraction¹

	Volatile	Acid	Base/Neutral	Pesticide
A	*	1	*	1
В	*	1	*	*
 C	*	1	*	*
D	*	1	*	*
E	1	1	*	1
F	1	1	*	*
G	1	1	*	*
Н	1	1	*	*
I	1	1	*	*
J	1	1	1	*
K	1	1	*	*
L	1	1	*	*
M	1	1	*	*
N	1	1	*	*
0	1	1	*	*
Р	1	1	*	*
Q	1	1	*	1
R	*	1	*	*
S	1	1	*	1
Т	1	1	*	1
U	1	1	1	*

1. Must test.

- * Do not test unless 'reason to believe' it is discharged.
- 3. Subparts are defined in 40 CFR Part 430.*

TABLE II: ORGANIC TOXIC POLLUTANTS IN EACH OF FOUR FRACTIONS IN ANALYSIS BY GAS CHROMATOGRAPHY/MASS SPECTROSCOPY (GC/MS)

Volatiles

Acrolein	1,2-Dichloropropane
Acrylonitrile	1,3-Dichloropropylene
Benzene	Ethylbenzene
Bromoform	Methyl Bromide
Carbon Tetrachloride	Methyl Chloride
Chlorobenzene	Methylene Chloride
Chlorodibromomethane	1,1,2,2-Tetrachloroethane
Chloroethane	Tetrachloroethylene
2-Chloroethylvinyl Ether	Toluene
Chloroform	1,2-trans-Dichloroethylene
Dichlorobromomethane	1,1,1-Trichloroethane
1,1-Dichloroethane	1,1,2-Trichloroethane
1,2-Dichloroethane	Trichloroethylene
1,1-Dichloroethylene	Vinyl Chloride

Acid Compounds

2-Chlorophenol 2,4-Dichlorophenol 2,4-Dimethylphenol 4,6-Dinitro-O-Cresol 2,4-Dinitrophenol 2-Nitrophenol 4-Nitrophenol P-Chloro-M-Cresol Pentachlorophenol Phenol 2,4,6-Trichlorophenol

Base/Neutral

Acenaphthene Acenaphthylene Anthracene Benzidine Benzo(a)Anthracene Benzo(a)Pyrene 3,4-Benzofluoranthene Benzo(ghi)Perylene Benzo(k)Fluoranthene Bis (2-Chloroethoxy) Methane Bis (2-Chloroethyl) Ether Bis (2-Chloroisopropyl) Ether Bis (2-Ethylhexyl) Phthalate 4-Bromophenyl Phenyl Ether Butyl Benzyl Phthalate 2-Chloronaphthalene

4-Chlorophenyl Phenyl Ether Chrysene Dibenzo (a,h) Anthracene 1,2-Dichlorobenzene 1.3-Dichlorobenzene 1,4-Dichlorobenzene 3,3'-Dichlorobenzidine **Diethyl Phthalate Dimethyl Phthalate Di-N-Butyl** Phthalate 2.4-Dinitrotoluene 2.6-Dinitrotoluene **Di-N-Octyl** Phthalate 1,2-Diphenylhydrazine(as Azobenzene) Fluoranthene Fluorene

Hexachlorobenzene	Nitrobenzene
Hexachlorobutadiene	N-Nitrosodimethylamine
Hexachlorocyclopentadiene	N-Nitrosodi-N-Propylamine
Hexachloroethane	N-Nitrosodiphenylamine
Indeno (1,2,3-cd) Pyrene	Phenanthrene
Isophorone	Pyrene
Naphthalene	1,2,4-Trichlorobenzene
Hexachlorobutadiene Hexachlorocyclopentadiene Hexachloroethane Indeno (1,2,3-cd) Pyrene Isophorone	N-Nitrosodimethylamine N-Nitrosodi-N-Propylamine N-Nitrosodiphenylamine Phenanthrene Pyrene

Pesticides

Aldrin Alpha-BHC Beta-BHC Gamma-BHC (Lindane) Delta-BHC Chlordane 4,4'-DDT 4,4'-DDT 4,4'-DDE 4,4'-DDD Dieldrin Alpha-Endosulfan Beta-Endosulfan Endosulfan Sulfate Endrin Endrin Aldehyde Heptachlor Heptachlor Epoxide PCB-1242 PCB-1254 PCB-1221 PCB-1232 PCB-1232 PCB-1248 PCB-1260 PCB-1016 Toxaphene

TABLE III: OTHER TOXIC POLLUTANTS (METALS AND CYANIDE) AND TOTAL PHENOLS

Antimony,Total	Mercury, Total
Arsenic, Total	Nickel, Total
Beryllium, Total	Selenium, Total
Cadmium, Total	Silver, Total
Chromium, Total	Thallium, Total
Copper, Total	Zinc, Total
Lead, Total	Cyanide, Total
	Phenols, Total

TABLE IV:CONVENTIONAL AND NONCONVENTIONAL POLLUTANTS REQUIRED TO BE
TESTED IF EXPECTED TO BE PRESENT

Bromide Chlorine, Total Residual Color Fecal Coliform Fluoride Nitrate-Nitrite Nitrogen, Total Organic Oil and Grease Phosphorus, Total Radioactivity Sulfate Sulfide

Sulfite Surfactants Aluminum, Total Barium, Total Boron, Total Cobalt, Total Iron, Total Magnesium, Total Malybdenum, Total Manganese, Total Tin, Total Titanium, Total

TABLE V:TOXIC POLLUTANTS AND HAZARDOUS SUBSTANCES REQUIRED TO BE
IDENTIFIED BY EXISTING DISCHARGERS IF EXPECTED TO BE PRESENT

Toxic Pollutants

Asbestos

Hazardous Substances

Acetaldehyde Allyl alcohol Allyl chloride Amyl acetate Aniline Benzonitrile Benzyl chloride Butyl acetate Butylamine Captan Carbaryl Carbofuran Carbon disulfide Chlorpyrifos Coumaphos Cresol Crotonaldehyde Cyclohexane 2,4-D (2,4-diichlorophenoxy acetic acid) Diazinon Dicamba Dichlobenil Dichlone 2,2-Dichloropropionic acid Dichlorvos Diethyl amine Dimethyl amine Dintrobenzene Diquat Disulfoton Diuron Epichlorohydrin Ethion Ethylene diamine Ethylene dibromide Formaldehyde

Furfural Guthion Isoprene Isopropanolamine dodecylbenzenesulfonate Kelthane Kepone Malathion Mercaptodimethur Methoxychlor Methyl mercaptan Methyl methacrylate Methyl parathion Mevinphos Mexacarbate Monoethyl amine Monomethyl amine Naled Napthenic acid Nitrotoluene Parathion Phenolsulfanate Phosgene Propargite Propylene oxide Pyrethrins Quinoline Resorcinol Strontium Strychnine Styrene 2,4,5-T (2,4,5-Trichlorophenoxy acetic acid) TDE (Tetrachlorodiphenyylethane) 2,4,5-TP [2-(2,4,5-Trichlorophenoxy) propanoic acid] Trichlorofan Triethanolamine dodecylbenzenesulfonate Triethylamine Trimethylamine Uranium Vanadium Vinyl acetate Xylene Xylenol Zirconium

THIS IS A COURTESY COPY OF THIS RULE. ALL OF THE DEPARTMENT'S RULES ARE COMPILED IN TITLE 7 OF THE NEW JERSEY ADMINISTRATIVE CODE.

SUBCHAPTER 5 WASTEWATER DISCHARGE REQUIREMENTS

7:14A-5.1 Scope of rules

- (a) Unless otherwise provided by rule or statute, this subchapter shall constitute the rules of the Department of Environmental Protection with respect to the protection and enhancement of surface waters of the State pursuant to the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq. and the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq.
- (b) This subchapter shall apply to effluent limitations and other requirements applicable to discharges into the surface waters of the State.

7:14A-5.2. Definitions

The terms "discharge," "discharger," "LC₅₀," EC₅₀," and "lake, pond or reservoir" as used in this subchapter are defined in N.J.A.C. 7:14A-1.

7:14A-5.3. Effluent standards

- (a) The effluent standard for toxic discharges is that, at a minimum, no effluent shall be more toxic than an LC_{50} , or an EC_{50} (based on daphnid immobilization) of 50 percent (by volume), as determined by acute definitive bioassay(s) conducted in conformance with N.J.A.C. 7:18, using the approved representative species considered to be the most sensitive to the discharge, as designated by the Department.
- (b) The effluent standard for phosphorus discharged to a freshwater lake, pond, or reservoir, or tributaries to these waterbodies is that, at a minimum, no effluent shall contain more than 1.0 mg/l total phosphorus (as P), as a monthly average, unless the discharger(s) to such a waterbody can demonstrate that a less stringent requirement will not result in a violation of the Surface Water Quality Standards (N.J.A.C. 7:9B) or that the control of point sources alone, in the absence of effective nonpoint source controls, will not result in a significant reduction of phosphorus loadings to the waterbody.

SUBCHAPTER 6. CONDITIONS APPLICABLE TO ALL NJPDES PERMITS

7:14A-6.1 PURPOSE AND SCOPE

- (a) This subchapter sets forth the minimal conditions which apply to all NJPDES permits unless the permit or fact sheet as described in N.J.A.C. 7:14A-15.8 specifically includes an exemption from one or more of these required conditions.
- (b) The Department shall incorporate all permit conditions either expressly or by reference in the permit. A permit that incorporates conditions by reference shall contain citations to the specific applicable rule section(s).

7:14A-6.2 GENERAL CONDITIONS APPLICABLE TO ALL PERMITTEES

- (a) The following conditions apply to all NJPDES permits issued by the Department unless specifically exempted in the permit:
 - 1. A permittee shall comply with all the conditions of the NJPDES permit.
 - 2. The discharge of any pollutant not specifically regulated in the NJPDES permit or listed and quantified in the NJPDES application or request for authorization shall constitute a violation of the permit, unless the permittee can prove by clear and convincing evidence that the discharge of the unauthorized pollutant did not result from any of the permittee's activities which contribute to the generation of its wastewater;
 - 3. A permittee shall not attain any concentration limitation by dilution. (For example, no permittee shall increase the use of process water or cooling water or otherwise attempt to dilute a discharge as a partial or complete substitute for adequate treatment to attain permit limitations or water quality standards);
 - 4. Even if the permit has not yet been modified to incorporate the requirement, a permittee shall comply with the following within the time provided in the specified regulations that establish the following:
 - i. Applicable effluent standards or prohibitions established under Section 307(a) and (c) of the Federal Act for toxic pollutants; and
 - Standards for sewage sludge use or disposal established under Section 405(d) of the Federal Act and N.J.A.C. 7:14A-20;
 - 5. A permittee shall take all reasonable steps to minimize or prevent any activity in violation of its permit which has a reasonable likelihood of adversely affecting human health or the environment;

- 6. A permit shall not convey any property rights of any sort or any exclusive privilege;
- 7. A permit shall not authorize any injury to persons or property or invasion of other private rights, or any infringement of Federal, State or local law or regulations.
- 8. A permit is not transferable to any person except after written notice in accordance with N.J.A.C. 7:14A-16.2;
- 9. All permittees with discharges that flow through an outfall pipe, unless such outfall pipe is completely and continuously submerged, or is not assigned a Discharge Serial Number (DSN), shall notify the Department that a tag to mark the location of the pipe has been or will be installed on the pipe by the effective date of the permit, or by May 5, 1998, whichever is sooner.
 - i. The outfall tag shall be:
 - (1) Legible;
 - (2) Located as near to the end of the outfall pipe as possible;
 - (3) Made of a durable material such as metal; and
 - (4) Maintained on a regular basis, such as cleaned and inspected to ensure that the tag is properly attached.
 - ii. The outfall tag shall display, at a minimum, the following information:
 - (1) The name of the facility where the discharge originates;
 - (2) The NJPDES permit number;
 - (3) The NJDEP Hotline phone number; and
 - (4) The Discharge Serial Number for that particular outfall;
- 10. When the Department reopens the permit by modification or revocation and reissuance, it shall do so, at a minimum, for the following:
 - Any discharger within a primary industrial category, as listed in N.J.A.C. 7:14A-4 Appendix A, Table 1, if an applicable standard or limitation is promulgated under Sections 301(b)(2) (C) and (D), 302, 304(b)(2), or 307(a), (b),(c) and (d)of the Federal Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant or pollutant parameter

not limited in the permit;

- ii. Any permit issued to a treatment works treating domestic sewage or residual-only facilities, to incorporate any applicable standard for residual use or disposal promulgated under section 405 (d) of the Federal Act or N.J.A.C. 7:14A-20, and the standard for residual use or disposal is more stringent than any requirements for residual use or disposal in the permit, or controls a pollutant or practice not limited in the permit; or
- iii. All dischargers, to incorporate any applicable effluent standard or any effluent limitation, including any effluent standards or effluent limitations to control the discharge of any toxic pollutants or pollutant parameters such as acute or chronic whole effluent toxicity, or chemical specific toxic parameters, requirements related to toxicity reduction or to implement a TMDL or watershed management plan adopted in accordance with N.J.A.C. 7:15-7, when the effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant or pollutant parameter not limited in the permit;
- iv. DTWs, to incorporate the applicable pretreatment program conditions as approved by the Department.
- 11. The permittee shall take such corrective actions as required under the Federal and State Acts, and other relevant provisions of law, including, at a minimum, accelerated and/or additional types of monitoring, temporary repairs, ceasing discharge, or where ceasing discharge is not possible, other measures to mitigate the effects of violating its NJPDES permit.
- 12. If a permittee wishes to continue an activity regulated by a NJPDES permit after the expiration date of the permit, the permittee must comply with the reapplication procedures listed in N.J.A.C. 7:14A-4.
- 13. All permittees must comply with the noncompliance reporting requirements of N.J.A.C. 7:14A-6.10 for any noncomplying discharge listed in N.J.A.C. 7:14A-6.10(a); and
- 14. A permittee shall furnish to the Department, within a reasonable timeframe specified by the Department, any information which the Department may request to determine whether cause exists for issuing, modifying, revoking and reissuing, or revoking a discharge permit, or to determine compliance with a NJPDES permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by the permit.
- (b) When applicable, NJPDES-DSW permits shall include the following

conditions:

- 1. Implementation of Best Management Practices to control or abate the discharge of pollutants, when:
 - i. Authorized under Section 304(e) of the Federal Act (33 U.S.C. § 1314(e)) for the control of toxic pollutants and hazardous substances from ancillary industrial activities;
 - ii. Authorized under Section 402(p) of the Federal Act (33 U.S.C. § 1342(p)) or under the State Act for the control of stormwater discharges;
 - iii. Numeric effluent limitations are infeasible; or
 - iv. The practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the State and Federal Acts;
- 2. For existing manufacturing, commercial, mining, and silvicultural discharges and research facilities, a notification level different from the notification level of N.J.A.C. 7:14A-11.3(a)1, upon a petition from the permittee or on the Department's initiative. A notification level established pursuant to this paragraph will not exceed the level which can be achieved by the technology-based treatment requirements appropriate to the permittee under 40 CFR 125.3(c); and
- 3. Any conditions imposed in grants or loans made to DTWs by the Administrator under Sections 201 and 204 of the Federal Act or by the Department which are reasonably necessary for the achievement of any conditions of the permit.

7:14A-6.3 ESTABLISHING PERMIT CONDITIONS

- (a) In addition to conditions required in all permits for all programs pursuant to N.J.A.C. 7:14A-6.2, the Department shall establish conditions in permits for the individual programs, as required on a case-by-case basis.
- (b) All NJPDES permits shall include any applicable Federal or State statutory or regulatory requirements which take effect prior to final permit issuance. N.J.A.C. 7:14A-15.14, Reopening of the public comment period, provides a means for reopening NJPDES permit proceedings at the discretion of the Department where new requirements become effective during the permitting process and are of sufficient magnitude to make additional proceedings desirable. An applicable requirement is also any requirement which takes effect prior to the modification or revocation and reissuance of a permit, to the extent allowed in N.J.A.C. 7:14A-16.4.

7:14A-6.4 SCHEDULES OF COMPLIANCE

- (a) The Department shall, when appropriate, specify in the permit a schedule of compliance, including interim deadlines for progress or reports of progress towards compliance with the State and Federal Acts and all other applicable authority for this chapter.
 - 1. The first NJPDES permit issued to a new source or a new discharger shall contain a schedule of compliance only when necessary to allow a reasonable opportunity to attain compliance with requirements issued or revised after commencement of construction but less than three years before commencement of the relevant discharge. For dischargers with a discharge that has been suspended for an extended period during which the submittal of DMRs has also been suspended, a schedule of compliance shall be included as part of the permit or conditions for recommencement only when necessary to allow a reasonable opportunity to attain compliance with requirements issued or revised less than three years before recommencement of the discharge.
 - 2. Except as provided in (b)1(ii) below, if a permit establishes a schedule of compliance which exceeds one year from the date of permit issuance, the schedule shall set forth interim requirements and the dates for their achievement.
 - i. The time between interim dates shall not exceed one year except that in the case of a schedule for compliance with standards for sewage sludge use or disposal, the time between interim dates shall not exceed six months.
 - ii. If the time necessary for completion of any interim requirement (such as the construction of a control facility) is more than one year and is not readily divisible into stages for completion, the permit shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date.
 - 3. No later than 14 days following each interim date or final date of compliance, the permittee shall provide written notice to the Department of its compliance or noncompliance with interim or final requirements, or submit progress reports if (a)2ii above is applicable.
- (b) A permittee may cease conducting regulated activities rather than continue to operate and meet permit requirements as follows:
 - 1. If the permittee decides to cease conducting regulated activities at a given time within the term of a permit which has already been issued:

- i. The permit may be modified pursuant to N.J.A.C. 7:14A-16.4, to contain a new or additional schedule leading to timely cessation of activities; or
- ii. The permittee shall cease conducting permitted activities before noncompliance with any interim or final compliance requirement already specified in the permit.
- 2. If the decision to cease conducting regulated activities is made before issuance of a permit whose term shall include the expiration date, the permit shall contain a schedule leading to expiration which shall ensure compliance no later than any applicable statutory deadline.
- 3. If the permittee is undecided as to whether it will cease conducting regulated activities, the Department shall either issue or modify a permit to contain two schedules:
 - i. One schedule shall lead to timely compliance with all applicable requirements, no later than the statutory deadline;
 - ii. The second schedule shall lead to cessation of regulated activities by a date which shall ensure timely compliance with all applicable requirements;
 - iii. Both schedules shall contain an identical interim deadline requiring a final decision as to whether the permittee will cease conducting regulated activities. A decision by the permittee to continue conducting regulated activities shall be made by a date which ensures sufficient time to comply in a timely manner with all applicable requirements;
 - iv. Each permit containing two schedules shall include a requirement that the permittee, after making a final decision under (b)3iii above, shall follow the schedule leading to compliance if the decision is to continue conducting regulated activities, and shall follow the schedule leading to expiration if the decision is to cease conducting regulated activities.
- 4. The permittee's decision to cease conducting regulated activities shall be evidenced by a firm public commitment satisfactory to the Department, such as a resolution of the board of directors of a corporation.
- (c) A POTW required to develop a pretreatment program shall have a pretreatment program compliance schedule based on the dates established in a written notification from the Department. This compliance schedule shall be incorporated into the NJPDES permit at the time of issuance, reissuance or modification of the permit. The compliance schedule shall require the

development and submission of a pretreatment program developed in accordance with N.J.A.C. 7:14A-19 as soon as possible, but in no case later than one year after the receipt of written notification from the Department.

- (d) Any schedules of compliance under this section shall require compliance as soon as possible, but no later than any applicable statutory deadline.
- (e) The permittee shall meet schedules for compliance with the terms of the permit and interim deadlines for progress or reports of progress towards compliance. Reports of compliance or noncompliance with, or any progress reports on, the interim and final requirements contained in any compliance schedule of a permit shall be submitted no later than 14 days following each scheduled date, and may be submitted with the DMRs in accordance with N.J.A.C. 7:14A-6.8(a).

7:14A-6.5 MONITORING

- (a) Monitoring requirements are as follows:
 - 1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - 2. The permittee shall perform all analyses in accordance with the analytical test procedures specified in 40 C.F.R. 136 or, in the case of residual use or disposal, in 40 C.F.R. 136 unless otherwise specified in 40 C.F.R. 503, or unless other test procedures have been specified in the permit. Where no approved test procedure is available, the permittee shall indicate a suitable analytical procedure and shall provide the Department with literature references or a detailed description of the procedure. The Department shall determine the appropriate procedure and require that procedure in the NJPDES permit. The laboratory performing the analyses shall be certified by the Department for the analysis of those specific parameters in accordance with N.J.A.C. 7:18. Information concerning laboratory approval and/or certification may be obtained from:

New Jersey Department of Environmental Protection Office of Quality Assurance PO Box 424 Trenton, New Jersey 08625-0424 (609) 292-3950

- (b) All permittees shall:
 - 1. Properly install, use, and maintain monitoring equipment and use proper monitoring methods (including biological monitoring methods when appropriate);
 - 2. Properly monitor the discharge in accordance with the monitoring type,

interval, and frequency as specified in the permit;

- i. Certain discharges of non-contact cooling water shall be exempt from monitoring, unless specifically required by the Department, where the applicant's activities do not affect the following constituents: COD, BOD, TSS, pH, and/or settleable solids.
- Bacterial monitoring shall not be required for facilities which do not receive wastewater containing pathogenic organisms, including fecal coliform or enterococci organisms, unless otherwise required by the Department. Discharge permits shall contain a monitoring-only requirement for enterococci organisms, unless the Department determines that it is appropriate to require enterococci effluent limitations and publishes a public notice in the New Jersey Register with supporting reasons to this effect;
- 3. Comply with the reporting requirements specified in the permit; and
- 4. Monitor in accordance with the edition of the Department's "Field Sampling Procedures Manual" applicable at the time of sampling or an alternate method approved by the Department.
- (b) If the Department has reason to believe that the accuracy and/or precision of one or more analyses is inadequate to provide a reasonable estimate of effluent quality, the Department shall, upon written notification, require any facility that analyzes its effluent samples at a laboratory it directly or indirectly owns, operates or manages to annually have one of its permit-required periodic sampling analyses performed by a certified laboratory which is not owned operated or managed by the permittee. This shall be broadly construed to include all the sample analyses that are to be performed during the course of routine hourly, daily, monthly, quarterly, semi-annual, or annual sampling.
- (d) Requirements for automatically adjusting effluent monitoring frequency are as follows:
 - 1. Any permittee shall automatically adjust its effluent monitoring and reporting frequency to monthly when the permittee:
 - Reports effluent values that would make the permittee a serious violator for one or more parameters for which the permittee is required to report less frequently than monthly. Monthly reporting is only required for parameters with serious violations. (However, NJPDES-SIU permittees shall resample within 30 days of becoming aware of any violation if required by 40 C.F.R. Part 403); or
 - ii. Fails to submit a completed Discharge Monitoring Report (DMR).

- 2. The monthly reporting required by (d)1 above shall begin the first month after the submission of the DMR or the month in which the permittee was required to submit the completed DMR or the Baseline Report (BR) to the Department which results in the permittee becoming a serious violator. If the Department grants an affirmative defense pursuant to N.J.A.C. 7:14-8.3(i) for an effluent violation, the violation shall not be considered a serious violation and shall not be subject to monthly reporting under (d)1 above.
- 3. Any permittee required to adjust its monitoring and reporting pursuant to (d)1 above shall continue this monthly schedule until the permittee has submitted six consecutive monthly Discharge Monitoring Reports which show compliance with the particular serious violation parameter at the particular discharge point, at which time the permittee may resume the original schedule in its permit.

7:14A-6.6 RECORDKEEPING

- (a) A person shall retain records of all monitoring information including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by a NJPDES permit, records of all data used to complete the application for a NJPDES permit, and records of monitoring information required by the permit related to the permittee's residual use and/or disposal practices for a period of at least five years, or longer as required by N.J.A.C. 7:14A-20, from the date of the sample, measurement, report, application, or record. The Department may at any time, extend this period through a written notice, and require that a person retain all records listed above for a period longer than five years for, at a minimum, any of the following reasons:
 - 1. Enforcement action;
 - 2. Litigation; and
 - 3. Water quality studies.
- (b) Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The individual(s) who performed the sampling or measurements;
 - 3. The date(s) analyses were performed;
 - 4. The individual(s) who performed the analyses;
 - 5. The analytical techniques or methods used; and

6. The results of such analyses.

7:14A-6.7 NOTICE REQUIREMENTS FOR FACILITY ALTERATIONS AND ADDITIONS

- (a) All permittees shall give written notice to the Department of any planned physical alterations or additions to the permitted facility which meet the criteria in (b) below, or as soon as possible.
- (b) Notice is required only when:
 - 1. The alteration or addition to a permitted facility meets one of the criteria for determining whether a facility is a new source as defined in N.J.A.C. 7:14A-1.2;
 - 2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged;
 - 3. The alteration or addition is expected to result in a significant change in the permittee's residual use or disposal practices, and such alterations, additions, or changes may justify the application of permit conditions that are different from or absent in the existing permit. This includes notification of additional use or disposal sites not reported during the permit application process; or
 - 4. The planned alterations or changes in the permitted facility or activity may result in noncompliance with permit requirements.
- (c) Fulfillment of these notice requirements does not relieve the applicant of the responsibility to obtain any applicable approvals or permits.

7:14A-6.8 **Reporting Monitoring Results**

- (a) The permittee shall report monitoring results on the Discharge Monitoring Reports (DMR) and/or the Baseline Reports (BR) or other monitoring report forms required by the permit or the Department at the intervals specified in the permit.
- (b) All permittees with effluent limits expressed as daily maxima or minima without a monthly average for a particular parameter shall report, in addition to all other applicable reporting requirements, the average value obtained during the reporting month. However, for pH and WET, the reporting requirements of the permit shall govern.
- (c) Any permittee required to adjust its effluent monitoring to monthly under N.J.A.C. 7:14A-6.5(d) shall also automatically adjust its reporting frequency to monthly.
- (d) Upon written notice from the Department, monitoring results may be

submitted to the Department electronically, provided the data is submitted in accordance with the standards for information exchange detailed in the Department's Manual for Information Management, "Guidance Document for Electronic Reporting of Environmental Data," August 1995 (see data dictionary and file format), as may be amended and supplemented. However, the permittee shall continue to submit signed transmittal forms.

- (e) All monitoring requirements of the permit are minimum requirements. However, if a permittee monitors any pollutant more frequently than required by the permit in accordance with the permit requirements for sample type, location, and analysis and using test procedures approved under 40 C.F.R. 136 or, in the case of residual use or disposal, approved under 40 C.F.R. 136, unless otherwise specified in 40 C.F.R. 503 or as specified in the permit, the results of this monitoring shall be included in the calculation and reported on the form specified by the Department.
- (f) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in the permit by the Department.
- (g) When subject to limitations based on a measure of production, the permittee shall submit with the report the level of production that actually occurred during the reporting month and the limitations, standards, or prohibitions applicable to that level of production.
- (h) The permittee shall report all instances of noncompliance not reported under N.J.A.C. 7:14A-6.10 at the time DMRs are submitted. The reports shall contain the information required in the written submission listed in N.J.A.C. 7:14A-6.10(e) if not already submitted to the Department.
- (i) All SIUs, DSW major industrial facilities, DGWs, and DSW local agencies, other than those discharging only stormwater or non-contact cooling water, required to submit DMRs to the Department shall submit the required reporting forms to the Department on a monthly basis when sampling is required on a monthly basis for one or more parameters. Reporting is required on a monthly basis for all those parameters that are required to be monitored during that particular month.

7:14A-6.9 SIGNATORY REQUIREMENTS FOR DMR AND BR

- (a) All DMRs and the BRs shall be signed by the highest ranking official having day-to-day managerial and operational responsibilities for the discharging facility, whose responsibilities usually include authorizing capital expenditures and/or hiring personnel.
 - 1. For private entities this will usually be a person identified in N.J.A.C. 7:14A-4.9(a)1; and
 - 2. For public entities it will usually be a plant manager or plant operator, an

executive director of a public authority, or a ranking elected official.

(b) The following certification shall be made by the above described official and shall accompany the report:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and/or imprisonment."

- (c) The above described official may authorize another responsible high ranking official to sign the DMR in his or her absence. Authorizations for other individuals to sign in accordance with this subsection shall be made in accordance with N.J.A.C. 7:14A-4.9(b).
- (d) The highest ranking official shall be liable in all instances for the accuracy of all of the information provided in the report. However, the highest ranking official may file within seven days of his or her return, amendments to the report to which he or she was not a signatory. The filing of amendments to a monitoring report in accordance with this subsection shall not be considered a late filing of a report for the purposes of N.J.A.C. 7:14A-6.8, or for the purposes of determining a significant noncomplier.

7:14A-6.10 NONCOMPLIANCE REPORTING.

- (a) All permittees shall report to the Department (and receiving DTW, if applicable) any noncompliance including, but not limited to:
 - 1. Any exceedance of effluent limitation that:
 - i. Causes injury to persons;
 - ii. Poses a threat to human health;
 - iii. Causes damage to the environment;
 - iv. Poses a threat to the environment; or
 - v. Violates a daily maximum effluent limitation for a toxic pollutant listed in N.J.A.C. 7:14A-4 Appendix A;
 - 2. Any discharge of any toxic or hazardous pollutant listed in N.J.A.C. 7:14A-4 Appendix A, which is not covered under a permit;
 - 3. Any upset or an unanticipated bypass not otherwise covered in (a)1 or 2

above; or

- 4. Any anticipated bypass.
- (b) Any permittee discharging pollutants under the conditions identified in (a) above shall comply with the reporting requirements in this section. Any permittee with a discharge not otherwise covered in (a) above shall comply with the reporting requirements relating to that type of discharge as listed below.
- (c) For the situations listed in (a)1i through iv and 2, above, the permittee shall communicate the information in (c)1 through 3 below by telephone to the DEP Hotline at 1-877-927-6337 or 1-877-WARN-DEP (and to the receiving DTW, if applicable) within two hours of the commencement of the discharge or of the permittee's becoming aware of the discharge. Any revision to this information for situations listed in (a)1i through iv and 2 above shall be reported to the DEP Hotline within 24 hours after the permittee's becoming aware of the need to revise the information.
 - 1. A description of the discharge, including the time of the discharge, the location of discharge, the volume of the discharge, the concentration of pollutants discharged, and the receiving water of the discharge;
 - 2. Steps being taken to determine the cause of the permit noncompliance; and
 - 3. Steps being taken to reduce, remediate, and eliminate the noncomplying discharge and any damage to the environment, and the anticipated time frame to initiate and complete the steps to be taken.
- (d) For the situations listed in (a)1v and 3 above, the permittee shall communicate the following information by telephone to the DEP Hotline at 1-877-927-6337 or 1-877-WARN-DEP within 24 hours after the commencement of the discharge or of the permittee's becoming aware of the discharge:
 - 1. A description of the discharge, including the time of the discharge, the location of discharge, the volume of the discharge, the concentration of pollutants discharged, and the receiving water of the discharge;
 - 2. Steps being taken to determine the cause of the permit noncompliance;
 - 3. Steps being taken to reduce, remediate, and eliminate the noncomplying discharge and any damage to the environment, and the anticipated time frame to initiate and complete the steps to be taken;
 - 4. The duration of the discharge, including the dates and times of the commencement and, for an unanticipated bypass, the dates and times of

the end or anticipated end of the discharge, and if the discharge has not been corrected, the anticipated time when the permittee will correct the situation and return the discharge to compliance;

- 5. The cause of the noncompliance;
- 6. Steps being taken to reduce, eliminate, and prevent reoccurrence of the noncomplying discharge;
- 7. An estimate of the threat to human health or the environment posed by the discharge;
- 8. The measures the permittee has taken or is taking to remediate the problem and any damage or injury to human health or the environment, and to avoid a repetition of the problem.
- (e) For the situations identified in (a)1 through 3 above, a written submission containing the information listed in (d) above shall be submitted to the Department, if the permittee had not previously submitted the information. The written submission shall be sent to the person identified in (h) below.
 - 1. The permittee shall ensure that the written submission required pursuant to this subsection is submitted to the Department within five days of the commencement of the discharge or of the permittee becoming aware of the discharge.
 - 2. If the permittee becomes aware that it has failed to submit any relevant facts or submitted incorrect information required in (c) or (d) above, the permittee shall immediately submit such facts or information to the Department.
- (f) For the situations identified in (a)3 above, the permittee shall ensure that the person identified in (h) below receives the information listed at (f)4 below as part of the written submission required pursuant to (e) above, if not previously submitted, as follows:
 - 1. For an unanticipated bypass, the information listed at (f)4i through ii and iv through ix below.
 - 2. For an upset, the information listed at (f)4i and iii through vi below as applicable, is submitted to the Department, within the five-day period.
 - 3. If the permittee becomes aware that it has failed to submit any relevant facts or has submitted incorrect information pursuant to (d) above, the permittee shall immediately submit such facts or information to the Department.
 - 4. The following information shall be submitted as required under this

subsection:

- i. All properly signed, contemporaneous operating logs, or other relevant evidence, on the circumstances of the noncompliance;
- ii. For an unanticipated bypass, the reasons that the unanticipated bypass occurred, including the circumstances leading to the unanticipated bypass;
- iii. For an upset, the reasons that the upset occurred, including the cause of the upset and the identity of the person causing the upset, as necessary, except that, in the case of a treatment works, the local agency may certify that despite a good faith effort it was unable to identify the cause of the upset or the person causing the upset;
- iv. Evidence that the permittee was properly operating the facility at the time;
- v. Evidence that the permittee submitted notice of the unanticipated bypass as required pursuant to (a)(3) above, or, in the case of an upset resulting from the performance by the permittee of maintenance operations, the permittee provided prior notice and received prior written approval from the Department, including the name, title, address and telephone number of the individual who satisfied this requirement, the date and specific time the individual notified the Department for the permittee, the specific method that the individual used to notify the Department, and the name and title of the individual within the Department to whom the permittee gave such notice;
- vi. Evidence that the permittee complied with all remedial measures the Department required;
- vii. For an unanticipated bypass, the permittee's rationale for and all supporting documentation that the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage, including the name, title, address and telephone number of the individual that made the determination for the permittee, the data and information upon which that individual made the determination and any other information the Department requests;
- viii. For an unanticipated bypass, evidence that there was no feasible alternative to the unanticipated bypass, including but not limited to the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of downtime; and
- ix. For an unanticipated bypass, evidence that the unanticipated bypass did not occur during normal periods of equipment downtime or

preventive maintenance when back-up equipment should have been installed to avoid the unanticipated bypass.

- (g) For the situations identified in (a) above, the permittee shall submit the information below to the person identified in (h) below at least 10 days, if possible, prior to the date of the anticipated bypass.
 - 1. The exact dates and times of the anticipated commencement and the end of the anticipated bypass;
 - 2. The permittee's rationale as to why the anticipated bypass is necessary;
 - 3. A statement certifying that the permittee will properly operate the facility at the time of the anticipated bypass;
 - 4. A statement certifying that the anticipated bypass is unavoidable to prevent loss of life, personal injury, or severe property damage, including the name, title, address and telephone number of the individual that made this determination for the permittee, the data and information upon which that individual made the determination, and any other information the Department requests;
 - 5. A statement certifying that there is no feasible alternative to the anticipated bypass, including but not limited to the use of auxiliary treatment facilities retention of untreated wastes, or maintenance during normal periods of equipment downtime; and
 - 6. A statement certifying that the anticipated bypass will not occur during normal periods of equipment downtime or preventive maintenance when backup equipment can be installed to avoid the anticipated bypass.
- (h) The permittee shall submit all written notifications and/or reports required pursuant to this section to:

Administrator of Water Compliance and Enforcement Element New Jersey Department of Environmental Protection 401 East State Street, 4th Floor East PO Box 422 Trenton, New Jersey 08625-0422

- (i) For a serious violation, as defined in N.J.A.C. 7:14A-1.2, a person shall, within 30 days of the violation, submit a written report to the person listed in (h) above or the appropriate control authority. The report shall include the following:
 - 1. All the information required in (d) above, if not already submitted; and
 - 2. A written statement that:

- i. Indicates the person understands the civil and administrative penalties required to be assessed for serious violations; and
- ii. Explains the nature of the serious violation
- (j) The permittee shall report all instances of noncompliance not reported under this section at the time DMRs are regularly submitted. The reports shall contain the information required pursuant to (d) above.

7:14A-6.11 AFFIRMATIVE DEFENSES

Permittees may request an affirmative defense for effluent violations resulting from an upset, bypass, or laboratory error in accordance with the procedures at N.J.A.C. 7:14-8.3(i).

7:14A-6.12 OPERATION, MAINTENANCE, AND EMERGENCY CONDITIONS.

- (a) A permittee shall, at all times, maintain in good working order and operate the treatment works and facilities which are installed or used by the permittee to achieve compliance with the terms and conditions of the discharge permit.
 Proper operation and maintenance, includes, at a minimum:
 - 1. Effective performance based upon treatment levels for which the treatment works was designed;
 - 2. Adequate funding;
 - 3. Effective management;
 - 4. Adequate operator staffing and training;
 - 5. Regularly scheduled inspection and maintenance programs; and
 - 6. Adequate laboratory and process controls including appropriate quality assurance procedures as described in 40 CFR Part 136 and applicable State laws and rules.
- (b) Any permittee who operates a treatment works shall satisfy the licensing requirements of the "Water Supply and Wastewater Operators Licensing Act," N.J.S.A. 58:11-64 <u>et seq</u>., and promulgated pursuant thereto. This subsection requires the operation of back-up or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the NJPDES permit or where required by applicable law or regulation.
- (c) All permittees shall submit written verification to the Department that an operation and maintenance manual for the treatment works, including related appurtenances and collection system, has been or will be completed by the effective date or a compliance date included in a new or renewed NJPDES

permit issued subsequent to May 5, 1997. A permittee does not need to submit the operation and maintenance manual to the Department, unless specifically directed to do so. When the Department directs a permittee to submit the operation and maintenance manual, the Department shall state the reasons for requiring the submittal in a letter requesting the submittal. In the case of a NJPDES permit for stormwater discharges or separate storm sewers which expressly exempts permittees from this provision, the exemption shall apply only to the discharge authorized by the permit. Any affected permittee shall comply with the following operation and maintenance manual requirements:

- 1. The operation and maintenance manual shall be made available for inspection upon request by an authorized representative of the Department.
- 2. The operation and maintenance manual shall be amended whenever there is a change in the treatment works design, construction, operations or maintenance which substantially changes the treatment works operations and maintenance procedures.
- 3. An operation and maintenance manual shall describe, at a minimum, the following:
 - i. Operator and staff responsibilities;
 - ii. Staff guidance for emergency situations;
 - iii. Identification of NJPDES permit requirements and the obligation to meet these requirements;
 - iv. Operating procedures including a detailed description of each major treatment unit/process with relationship to related units, safe operating procedure for normal operation, including common operating problems, safe operating procedures for operating during emergency conditions, and any fail-safe features;
 - v. A program of regularly scheduled inspection and maintenance; and
 - vi. An emergency plan in accordance with (d) below.
- (d) An emergency plan shall be included as part of the operation and maintenance manual, except for those operations issued permits under N.J.A.C. 7:14A-20.
 - 1. When a person has prepared an emergency plan required by regulations other than this chapter, such plans or plan and any amendments necessary to meet the requirements of this section will satisfy the requirements of this section provided the plan is labeled to identify the requirements listed in this section.

- 2. An emergency plan shall be amended whenever:
 - i. There is a modification, including expansion, of the treatment works; or
 - ii. Any other conditions related to the plan have changed.
- 3. The emergency plan shall be designed to ensure effective operation of the treatment works under emergency conditions, and shall consist, at a minimum, of the following elements:
 - i. A vulnerability analysis which shall estimate the degree to which the treatment works would be adversely affected by each type of emergency situation which could reasonably be expected to occur, including but not limited to those emergencies caused by natural disaster, civil disorder, strike, sabotage, faulty maintenance, negligent operation or accident;
 - ii. The vulnerability analysis shall include, but is not limited to, an estimate of the effects of such an emergency upon the following:
 - (1) Power supply;
 - (2) Communication;
 - (3) Equipment;
 - (4) Supplies;
 - (5) Personnel;
 - (6) Security; and
 - (7) Emergency procedures to be followed.
 - iii. An evaluation of the possible adverse effects on public health and the environment due to such an emergency; and
 - iv. An emergency operation plan for ensuring, to the maximum extent possible, uninterrupted treatment works operation and a manual of procedures for the implementation of such plan, including procedures for the notification of any appropriate regulatory agency, affected water supply purveyors, and any other municipal authority or agency. The plan and manual shall address each of the emergency situations described in the vulnerability analysis.
- 4. The Department shall not individually review and approve an emergency plan as part of the permit issuance process. The Department's decision not

to review and approve an emergency plan shall not exempt a person from liability for violations arising from an emergency situation. A person shall take all necessary actions to mitigate the damage to the waters of the State arising from an emergency situation. Such actions shall not be limited by the emergency operating plan and the operation and maintenance manual.

- 5. Failure to have on file any part of the operation and maintenance manual in compliance with (c) above and failure to implement the emergency plan pursuant to this subsection shall each constitute a violation of this chapter.
- 6. In emergency situations, a permittee shall implement the requirements of the emergency plan to the fullest extent possible. In addition, any conditions of the emergency plan that the permittee can implement prior to an emergency situation to reduce the potential for an emergency situation, shall be implemented.
- (e) A municipality or sewerage authority who is not a permittee (for example, does not have a direct surface or groundwater discharge) but who owns and operates a treatment works used only for the collection or transportation of domestic sewage is not required to prepare an operations and maintenance manual. However, the municipality or sewerage authority shall be responsible for the proper operation and maintenance of that treatment works. The criteria for proper operations and maintenance and an emergency plan pursuant to (a) and (d) above, may be used as a guideline and implemented as applicable.

7:14A-6.13 GENERAL PERMITS.

- (a) The Department shall issue a general permit to authorize a category of surface water, ground water, or indirect discharges, residual use or disposal practices, or facilities within a geographic area, described in (b) below, except those otherwise eligible for authorization but which are authorized pursuant to individual permits or other general permits. The area shall correspond to existing geographic or political boundaries, such as:
 - Designated planning areas under Sections 208 and 303 of the Federal Act and Section 5 of the "New Jersey Water Quality Planning Act", N.J.S.A. 58:11A-1 et seq.;
 - 2. Sewer districts or sewerage agencies;
 - 3. City, county, or State political boundaries;
 - 4. State highway systems;
 - 5. Standard metropolitan statistical areas as defined by the Office of Management and Budget;

- 6. Urbanized areas as designated by the Bureau of Census according to criteria in 39 FR 15202 (May 1, 1974); or
- 7. Any other appropriate division or combination of boundaries.
- (b) A general permit may be written to regulate within the area described in (a) above, either:
 - 1. Stormwater discharges;
 - 2. Non-contact cooling water discharges;
 - 3. Combined sewer overflows; or
 - 4. A category of discharges other than those listed in (b)1 through 3 above, if they all:
 - i. Involve the same or substantially similar types of operations;
 - ii. Discharge the same type of wastes or engage in similar residual use or disposal practices;
 - iii. Require the same or similar effluent limitations, operating conditions, or standards for residual use or disposal;
 - iv. Require the same or similar monitoring; and
 - v. In the opinion of the Department, are more appropriately controlled under a general permit than under individual permits.
- (c) General permits may be issued, modified, revoked and reissued, suspended, or revoked in accordance with applicable requirements of N.J.A.C. 7:14A-15, 16 and 17. The Department shall publish in the New Jersey Register a notice of administrative change revising the list of general permits in the table below to reflect any of these general permit actions. The list in this table is for informational purposes only. The Department advises prospective applicants to obtain a copy of the most recent general permit list from the Department's Division of Water Quality at PO Box 029, Trenton, New Jersey 08625, or from the Division's website (http://www.state.nj.us/dep/dwq). A copy of any general permit on the list may be obtained from the same address.

NJPDES <u>Permit No.</u>	Category	Name of General Permit	Discharge <u>Type¹</u>	Year Issued
NJ0108308	I1	Stormwater Basins at Sanitary Landfills	DGW	2001
NJ0108642	I2	Filter Backwash Water from Potable Water Treatment Plants	DGW	2003

NJ0130281	T1	Existing Sanitary Septic Systems	DGW	2003
NJ0142051	LSI	Lined Surface Impoundment	DGW	2004
NJ0138631	R8	Concentrated Animal Feeding	DGW/DSW	2003
		Operation (CAFO)		
NJ0107671	SM	Scrap Metal Stormwater	DGW/DSW	2005
NJ0088315	5G2	Basic Industrial Stormwater	DGW/DSW	2002
NJ0141852	R9	Tier A Municipal Stormwater	DGW/DSW	2004
NJ0141861	R10	Tier B Municipal Stormwater	DGW/DSW	2004
NJ0141879	R11	Public Complex Stormwater	DGW/DSW	2004
NJ0141887	R12	Highway Agency Stormwater	DGW/DSW	2004
NJ0141950	R13	Mining and Quarrying Stormwater	DGW/DSW	2005
NJ0088323	5G3	Construction Activity Stormwater	DSW	2002,
				modified
				in 2004
NJ0108456	CPM	Concrete Products Manufacturing	DGW/DSW	2003
		Stormwater		
NJ0134791	R5	Newark Airport Complex Stormwater	DSW	2005
NJ0132721	R4	Hot Mix Asphalt Producers	DGW/DSW	2004
		Stormwater		
NJ0070203	CG	Non-contact Cooling Water	DSW	2006
NJ0102709	B4B	Groundwater Petroleum Product	DSW	2003
		Clean-up		
NJ0142581	ABR	Wastewater Beneficial Reuse	DSW	2006
NJ0155438	BGR	Groundwater Remediation Cleanup	DSW	2005
NJ0105023	CSO	Combined Sewer Overflow	DSW	2004
NJ0128589	B6	Swimming Pool Discharges	DSW	1998
NJ0132993	BG	Hydrostatic Test Water	DSW	2005
NJ0134511	B7	Construction Dewatering	DSW	2005
NJ0105767	EG	Land Application Food Processing	RES	2003
		Residuals		
NJ0132519	ZG	Residuals Transfer Facilities	RES	2004
NJ0132501	4G	Residuals - Reed Beds	RES	2002

1 Acronyms identifying "Discharge Type" have the following meanings:

- DGW Discharge to Groundwater
- DSW Discharge to Surface Water
- RES Residual Use or Disposal
- (d) An authorization under a general permit shall be obtained as follows:
 - 1. Except as provided in (d)7 and 8 below, persons seeking authorization under a general permit shall submit to the Department a written request for authorization. A person who fails to submit a request for authorization in accordance with the terms of the permit is not authorized to discharge under the terms of the general permit unless:

- i. The general permit, in accordance with (d)7 below, contains a provision that a request for authorization is not required; or
- ii. The Department notifies a person that the discharge is authorized by a general permit in accordance with (d)8 below.
- 2. The contents of the request for authorization shall be specified in the general permit and shall require the submission of information necessary for adequate program implementation, including, at a minimum, the legal name and address of the owner and operating entity, the facility name and address, type of facility or discharges, the receiving surface or ground water(s) or DTW, and the certification required under (d)3 below. Unless the general permit specifies otherwise, the request for authorization shall include all of the forms, information, signatures, and certification(s) that this chapter requires to be included in an application for a NJPDES permit. The request for authorization shall also include any other certification specified in the general permit.
- 3. In addition to the information required under (d)2 above, the request for authorization shall include, when specified in the general permit, a certification that arrangements have been made for publication, in a daily or weekly newspaper within the area affected by the facility, of a notice which states that a request for authorization under a general permit has been submitted pursuant to N.J.A.C. 7:14A-6.13(d). This notice shall also identify the general permit under which authorization is sought, the legal name and address of the owner and operating entity or, the facility name and address, type of facility or discharges, and the receiving surface or ground water(s) or DTW. Each general permit shall set forth the form of notice appropriate to that general permit.
- 4. General permits shall specify the deadlines for submitting requests for authorization and the date(s) when a person is authorized to discharge under the permit.
- 5. General permits shall specify whether a person that has submitted a complete and timely request for authorization in accordance with the general permit, and that is eligible for authorization under the permit, is authorized to discharge in accordance with the permit either upon:
 - i. Receipt of the request for authorization by the Department, after a waiting period specified in the general permit, where applicable;
 - ii. On a date specified in the general permit; or
 - iii. Upon the person's receipt of notification of authorization by the Department.

- 6. Authorization may be suspended, revoked, or denied in accordance with (j) through (m) below. The Department shall publish in the DEP Bulletin, or other similar DEP publication, a quarterly report of each authorization issued under a general permit.
- 7. Discharges from DTWs, combined sewer overflows, municipal separate storm sewer systems, primary industrial facilities, and stormwater discharges associated with industrial activity shall submit a request for authorization to the Department. Other discharges may, at the discretion of the Department, be authorized under a general permit without submission of a request for authorization where the Department finds that a request for authorization requirement is inappropriate. The Department shall provide in the public notice of the general permit the reasons for not requiring a request for authorization. In making such a finding, the Department shall consider:
 - i. The type of discharges;
 - ii. The expected nature of the discharges;
 - iii. The potential for toxic and conventional pollutants in the discharges;
 - iv. The expected volume of the discharges;
 - v. Other means of identifying discharges authorized by the permit; and
 - vi. The estimated number of discharges to be authorized by the permit.
- 8. The Department may notify a person that the discharge is authorized by a general permit, even if the person has not submitted a request for authorization. A person so notified may nonetheless request an individual permit under (i) below.
- 9. A general permit may provide for automatic renewal of authorization when that general permit is reissued, provided the discharge authorized under the general permit continues to be eligible. If such a general permit requires a request for authorization under (d)1 above, the most recently submitted request for authorization is also a timely and complete request for authorization under the reissued permit (for any permittee who had authorization under the permit immediately prior to the effective date of the reissued permit), and the Department shall issue a notice of renewed authorization to the permittee.
 - i. If the permittee is aware that any information in that most recently submitted request for authorization is no longer true, accurate, and/or complete, the permittee shall provide the correct information to the Department within 90 days after that effective date, if the permittee

has not done so already.

- ii. A permittee whose authorization is renewed under this paragraph may request to be excluded from the reissued general permit in accordance with (g) below, and may also request a stay of the application to that permittee of any conditions of the reissued permit in accordance with N.J.A.C. 7:14A-17.6.
- (e) The Department may require any permittee authorized by a general permit to apply for and obtain an individual NJPDES permit or seek and obtain authorization under another general permit. Also, any person may, in accordance with the procedures set forth at (l) below, petition the Department to take action under this subsection. An individual NJPDES permit or another general permit may be required when:
 - 1. There is evidence that the permittee may be a significant contributor of pollutants. In making this determination, the Department may consider the location of the discharge, facility, or activity, the size of the discharge or activity, the quantity and nature of pollutants, the quality of the receiving waters, and other relevant factors;
 - 2. The permittee is not in compliance with the conditions of the general permit;
 - 3. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants;
 - 4. Effluent limitation guidelines are promulgated for the activity authorized by the general permit;
 - 5. A Water Quality Management Plan containing different requirements applicable to the permittee is adopted;
 - 6. Circumstances have changed since the time of authorization or the request for authorization such that the discharge is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized activity is necessary;
 - 7. The Department acquires new information indicating that the permittee otherwise is not eligible for the general permit according to terms specified in the general permit; or
 - 8. New standards for residual use or disposal are promulgated for the residual use and disposal practice covered by the general permit.
- (f) To require any permittee authorized by a general permit to apply for an individual NJPDES permit or seek authorization under another general permit

as provided in (e) above, the Department shall notify the permittee in writing, as follows:

- 1. The notice shall include:
 - i. A brief statement of the reasons for the determination that an individual permit or authorization under a different general permit is necessary;
 - ii. An application form or the applicable request for authorization form;
 - iii. A statement setting a time for the permittee to file the application or the applicable request for authorization; and
 - iv. A statement that on the effective date of the individual NJPDES permit or on the date of the permittee's authorization under another general permit, the individual permittee's authorization under the general permit shall automatically terminate.
- 2. The Department may grant additional time for application for an individual permit or request for authorization, upon request by the permittee. If a permittee fails to submit in a timely manner an application form or request for authorization form required by the Department under this subsection, the permittee's authorization under the general permit will be automatically revoked at the end of the day specified for submitting the application form or request for authorization form.
- (g) Any permittee authorized by a general permit may request to be excluded from authorization under the general permit by applying for an individual NJPDES permit or for another general permit. The permittee shall submit an application under N.J.A.C. 7:14A-4.1, or a request for authorization for the other general permit (if required under (d) above), with reasons supporting the request. A request for an individual permit shall be processed under N.J.A.C. 7:14A-15, 16, and 17. A request for another general permit. The request shall be granted by the issuing of any individual permit, or by the issuing of authorization under the other general permit, if the reasons cited by the permittee are determined to be adequate to support the request.
- (h) When a permittee authorized by a general NJPDES permit is issued an individual NJPDES permit for the authorized discharge, or obtains authorization for that discharge under another general permit, the permittee's authorization under the general permit is automatically revoked on the effective date of the individual permit or on the date of the permittee's authorization under another general permit, whichever the case may be. When an individual NJPDES permit is denied to a permittee authorized by a general permit, or the permittee is denied authorization under another general permit,

the permittee's authorization under the general permit is automatically revoked on the date of such denial, unless otherwise specified by the Department.

- (i) If a permittee's discharge is excluded from a general permit solely because that discharge already is authorized by an individual permit or authorization under another general permit, the permittee may request that the individual permit or authorization be revoked or modified, as appropriate, and that the discharge be authorized by a general permit identified in that request. The permittee shall submit a request for revocation or modification, with reasons supporting the request, to the Department. The permittee shall submit any request for revocation or modification of an individual permit under N.J.A.C. 7:14A-16, and that request shall be processed under N.J.A.C. 7:14A-15, 16 and 17. If the Department revokes or modifies the individual permit or authorization, and if authorization under a general permit is issued, after the permittee shall be authorized under the general permit. In reviewing such requests, the Department may consider:
 - 1. The location of the discharge;
 - 2. The size of the discharge or activity;
 - 3. The quantity and nature of pollutants reaching the surface or ground waters of the State;
 - 4. The quality of the receiving waters;
 - 5. Antibacksliding requirements in N.J.A.C. 7:14A-13.19, if applicable; and
 - 6. Any other factors the Department considers relevant to determining whether the discharge is best regulated under one permit or the other.
- (j) The Department may suspend or revoke a permittee's authorization under a general permit for causes specified in N.J.A.C. 7:14A-16.6. Such suspension or revocation of authorization is a type of permit suspension or revocation under N.J.A.C. 7:14A-16.6. A requirement pursuant to (f) above that a permittee apply for an individual permit or seek authorization under another general permit is not a revocation within the meaning of N.J.A.C. 7:14A-16.6, even if the permittee's authorization is eventually revoked in favor of an individual permit or another general permit, or is automatically revoked under (f)2 above, as a result of the permittee's failure to submit in a timely manner an application form or request for authorization form.
- (k) If the Department directs the permittee to apply for an individual permit or seek authorization under another general permit, the permittee may ask the Department to reconsider its decision by sending a letter to the Commissioner within 30 days of the issuance of the initial decision. The letter shall be sent

to:

Office of Legal Affairs Department of Environmental Protection 401 East State Street CN-402 Trenton, NJ 08625

Both the envelope and the letter shall clearly indicate that it is a "REQUEST FOR RECONSIDERATION OF GENERAL PERMIT DETERMINATION." The Commissioner may act on the request with 60 days; if the Commissioner fails to take any action the request shall be deemed denied. In no event shall an order from the Department directing a permittee to apply for an individual permit or seek authorization under another general permit (or a denial of a request to reconsider that order) be deemed final agency action.

- (l) The following requirements apply to petitions filed under (e) above:
 - 1. Any petition shall state clearly and concisely:
 - i. The name, address, and telephone number of the petitioner;
 - ii. The petitioner's interest in the petition (including any organizational affiliations and any economic interest);
 - iii. The name and address of the permittee whose authorization could be affected by the petition;
 - iv. The number of the permit under which that permittee is authorized; and
 - v. The reasons why the petition should be granted (including any citations to any relevant legal authority).
 - 2. The petitioner shall serve the petition on both the Department and the permittees whose authorization could be affected by the petition.
 - 3. The permittees whose authorization could be affected shall have 30 days from the date the petition was served to respond to the petition. Any response shall be served on both the Department and the petitioner. The Department thereafter may in its discretion seek further information relevant to the petition.
 - 4. The Department shall determine whether to grant the petition based upon materials submitted in accordance with this subsection and based upon the criteria set forth in (e) above. The Department shall notify both the petitioner and the permittees whose authorization is affected by the petition of the Department's determination.

- 5. Either party may ask the Department to reconsider its decision regarding a petition by sending a letter to the Commissioner within 30 days of the issuance of the initial decision. The letter shall be sent to the Department's Office of Legal Affairs, at the address listed above, and both the envelope and the letter shall clearly indicate that it is a "REQUEST FOR RECONSIDERATION OF PETITION DETERMINATION." The Commissioner may act on the request within 60 days; if the Commissioner fails to take any action the request shall be deemed denied. It shall be considered final agency action where the ultimate outcome of the agency proceedings is that the petition is denied by the Commissioner.
- (m) The following requirements apply to denial of requests for authorization:
 - 1. The Department shall deny a request for authorization if it determines that the subject discharge is not eligible for the general permit for which the person has requested authorization.
 - 2. The Department may deny a request for authorization if it determines that the discharge is not appropriately regulated under the relevant general permit because of:
 - i. Its location;
 - ii. The size of the discharge or activity;
 - iii. The quantity and nature of pollutants reaching the waters of the State;
 - iv. The quality of the receiving waters; or
 - v. Other relevant factors.
 - 3. If the Department denies a request for authorization, it shall notify the person of that denial in writing. A person whose request for authorization has been denied may ask the Department to reconsider its decision by sending a letter to the Commissioner within 30 days of the issuance of the initial denial. The letter shall be sent to the Department's Office of Legal Affairs, at the address listed above, and both the envelope and the letter shall clearly indicate that it is a "REQUEST FOR RECONSIDERATION OF GENERAL PERMIT DETERMINATION." The Commissioner may act on the request within 60 days; if the Commissioner fails to take any action the request shall be deemed denied. In no event shall a denial of a request for authorization, or a request to reconsider that denial, be deemed final agency action.
- (n) An authorization may be transferred to a new permittee in accordance with the requirements for an automatic transfer at N.J.A.C. 7:14A-16.2(d).

(o) With the consent of the permittee, the Department shall revoke an authorization to discharge under a general permit without following the procedures set forth in N.J.A.C. 7:14A-15.6, if the discharge has ceased.

7:14A-6.14 EMERGENCY PERMITS

- (a) Under the specified circumstances listed in (b) below, the Department may issue an emergency permit, except for a DSW, to allow the discharge of pollutants, where such discharge is unpermitted or the discharge consists of pollutants not covered by an effective permit.
- (b) The Department may issue an emergency permit to allow the activities listed in(a) above only after making a finding that:
 - 1. An imminent and substantial endangerment to human health or the environment will result unless an emergency permit is granted;
 - 2. A substantial and irretrievable loss of oil or gas resources will occur unless an emergency permit is granted to a Class II well under UIC program; and
 - i. Timely application for a regular permit could not practicably have been made; and
 - ii. The injection will not result in the movement of fluids into underground sources of drinking water; or
 - 3. A substantial delay in production of oil or gas resources will occur unless an emergency permit is granted to a new Class II well under the UIC program, and the authorization will not result in the movement of fluids into an underground source of drinking water.
- (c) The requirements for issuance of any emergency permit are as follows:
 - 1. The Department may issue an emergency permit by either oral or written permission from the Director. Oral permission shall be followed within five days by a written emergency permit.
 - 2. The Department may issue an emergency permit for any duration not to exceed 180 days, except:
 - i. That underground injections temporarily permitted in order to prevent an imminent and substantial endangerment to the health of persons shall be for a term no longer than required to prevent the hazard, or 90 days, whichever is less.
 - ii. That land application of municipal or nonhazardous sludge temporarily permitted in order to prevent an imminent and substantial

endangerment to public health shall be for a term no longer than that required to prevent the hazard, or 180 days, whichever is less.

- iii. That storage of municipal or non-hazardous sludge temporarily permitted in order to prevent an imminent and substantial endangerment to public health shall be for a term no longer than that required to prevent the hazard, or one year, whichever is less.
- 3. The Department shall clearly specify in the emergency permit the following:
 - i. The wastes to be received and disposed of under the emergency permit;
 - ii. The manner and location of the treatment, storage, disposal, or injection of wastes;
 - iii. The rate, quantity, and quality of pollutants to be discharged; and
 - iv. The monitoring and applicable reporting requirements which is required.
- 4. The Department may immediately suspend or revoke the emergency permit at any time following a determination that such action is appropriate to protect human health and the environment.
- 5. The Department shall publish, along with the emergency permit, a public notice of the emergency permit pursuant to N.J.A.C. 7:14A-15.10, including:
 - i. The name and address of the office granting the emergency authorization;
 - ii. The name and location of the permitted facility;
 - iii. A brief description of the wastes involved;
 - iv. A brief description of the action authorized and reasons for authorizing it; and
 - v. The duration of the emergency permit.
- 6. The Department shall issue an emergency permit regarding injections only after a complete NJPDES permit application has been submitted. The emergency permit shall only be effective until final action is taken on the NJPDES permit application.
- 7. The Department shall condition the emergency permit regarding injection

under the UIC program in any manner that the Department determines is necessary to ensure that the injection shall not result in the movement of fluids into an underground source of drinking water.

8. The Department shall incorporate in the emergency permit, to the extent possible and not inconsistent with the emergency situation, all applicable requirements of this chapter and 40 CFR Parts 264 and 266.

7:14A-6.15 RESIDUALS MANAGEMENT

- (a) Where applicable, the permittee shall comply with land-based sludge management criteria and shall conform with the requirements for the management of residuals and grit and screenings under:
 - 1. Section 405 of the Federal Act governing the disposal of sludge from treatment works treating domestic sewage;
 - 2. The Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., and the Solid Waste Management Rules, N.J.A.C. 7:26;
 - 3. The Sludge Quality Assurance Regulations, N.J.A.C. 7:14C;
 - 4. The Statewide Sludge Management Plan promulgated pursuant to the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., and the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq.; and
 - 5. The provisions concerning disposal of sewage sludge and septage in sanitary landfills set forth at N.J.S.A. 13:1E-42 and the Statewide Sludge Management Plan.
- (b) The NJPDES permit shall specify standards for residual use or disposal, under Section 405(d) of the Federal Act and N.J.A.C. 7:14A-20, unless those standards have been included in a permit issued under the appropriate provisions of subtitle C of the Solid Waste Disposal Act, Part C of the Safe Drinking Water Act, the Marine Protection, Research, and Sanctuaries Act of 1972, or the Clean Air Act, or under State permit programs approved by the Department.
- (c) When there are no applicable standards for residual use or disposal, the permit may include requirements developed on a case-by-case basis to protect public health and the environment from any adverse effects which may occur from toxic pollutants in residual. If any applicable standard for residual use or disposal is promulgated under section 405(d) of the Federal Act and Sections 4 and 6 of the State Act and that standard is more stringent than any limitation on the pollutant or practice in the permit, the Department may initiate proceedings under these rules to modify or revoke and reissue the permit to conform to the standard for residual use or disposal.

7:14A-6.16 PRETREATMENT REQUIREMENTS FOR LOCAL AGENCIES.

- (a) Pretreatment program requirements for local agencies included, where applicable, in a NJPDES permit shall meet the requirements of 40 CFR Part 403 and N.J.A.C. 7:14A-19. In addition, a permit for a delegated local agency shall include effluent limits for all pollutants listed under the USEPA Categorical Pretreatment Standards, adopted pursuant to 33 U.S.C. §1317, and such other pollutants for which effluent limits have been established for a permittee discharging into the municipal treatment works of the delegated local agency, except those categorical or other pollutants that the delegated local agency demonstrates to the Department are not discharged above detectable levels by the local agency. The NJPDES permit may authorize the use by a delegated local agency of surrogate parameters in accordance to N.J.A.C. 7:14A-13.10, for categorical and other pollutants discharged from the local agency, except that if a surrogate parameter is exceeded, the permit shall include effluent limits for each categorical or other pollutant for which the surrogate parameter was used, for such period of time as may be specified in the permit.
- (b) Sewage sludge use or disposal practices shall be required as a condition of the permit to a local agency, to monitor and report results with a frequency dependent on the nature and effect of the sewage sludge use or disposal practice. This frequency of monitoring and reporting shall be specified in N.J.A.C. 7:14A-20, but in no case shall be less than once per year.

7:14A-6.17 ADJUSTMENT OF DSW LIMITATIONS FOR ALTERNATIVE DISPOSAL OF POLLUTANTS

- (a) When part of a discharger's process wastewater is not being directly discharged into surface waters of the State or contiguous zone because it is disposed into a well, into a DTW, or by land application thereby reducing the flow or level of pollutants being discharged into surface waters of the State, applicable effluent standards or limitations for the discharge in a NJPDES permit shall be adjusted to reflect the reduced raw waste resulting from such disposal.
- (b) Effluent limitations and standards in the permit shall be calculated by one of the following methods:
 - 1. If none of the waste from a particular process is discharged into waters of the State, and effluent limitation guidelines provide separate allocations for waste from that process, all allocations for the process shall be eliminated from calculation of permit effluent limitations or standards;
 - 2. In all cases other than those described in (b)1 above, effluent limitations shall be adjusted by multiplying the effluent limitation guidelines to the total waste stream by the amount of wastewater flow to be treated and discharged into surface waters of the State and dividing the result by the

total wastewater flow. Effluent limitations and standards so calculated may be further adjusted under 40 CFR Part 125, Subpart D, to make them more stringent if discharges to wells, DTWs, or by land application change the character or treatability of the pollutants being discharged to receiving waters.

i. This method may be algebraically expressed as:

(1) $\mathbf{P} = \mathbf{E} \mathbf{x} \mathbf{N}/\mathbf{T}$	
(where:	P is the permit effluent limitation,
	E is the limitation derived by applying effluent
	guidelines to the total waste stream,
	N is the wastewater flow to be treated and
	discharged to surface waters of the State, and
	T is the total wastewater flow).

- (b) Subsection (a) above shall not apply to the extent that promulgated effluent limitation guidelines:
 - 1. Control concentrations of pollutants discharged but not mass; or
 - 2. Specify a different specific technique for adjusting effluent limitations to account for well injection, land application, or disposal into DTWs.
- (c) Subsection (a) above does not alter a discharger's obligation to meet any more stringent requirements established under this chapter.

SUBCHAPTER 7. REQUIREMENTS FOR DISCHARGES TO GROUND WATER (DGW)

7:14A-7.1 Purpose

This subchapter establishes NJPDES permit requirements for persons who discharge pollutants to ground waters of the State. The purpose of the NJPDES discharge to ground water permit is to restore, enhance, and maintain the ground water quality of the State, in accordance with N.J.S.A. 58:10A-1 et seq. and the Ground Water Quality Standards (GWQS) in N.J.A.C. 7:9C.

7:14A-7.2 Requirement to discharge in compliance with a valid NJPDES permit

- (a) Persons responsible for discharges to ground water shall comply with all applicable NJPDES regulations.
- (b) Except as otherwise provided in N.J.A.C. 7:14A-7.4 and 7.5, no person shall discharge to ground water prior to obtaining a discharge to ground water permit.
- (c) All discharges to ground water permits existing on May 5, 1997 shall continue in full force and effect until renewed or terminated in accordance with the provisions of this chapter.

7:14A-7.3 Scope and applicability

- (a) Persons responsible for discharges to ground water shall comply with all the requirements of this subchapter, except those persons listed under (c), (d), and (e) below, and in N.J.A.C. 7:14A-7.4.
- (b) Persons responsible for the activities, pollution sources, or regulated units listed at (b)1 through 7 below shall comply with the requirements of this subchapter. Persons responsible for discharges not listed below are not exempt from the requirement to obtain a discharge to ground water permit. The list is intended only to be illustrative and is not exhaustive:
 - 1. Surface impoundments;
 - 2. Spray irrigation;
 - 3. Overland flow;
 - 4. Infiltration/percolation lagoons;
 - 5. Residuals surface impoundments;
 - 6. Injection wells; and

- 7. Land disposal of dredged spoil.
- (c) Persons responsible for discharges to ground water from sanitary landfills as provided for in N.J.A.C. 7:26 shall conduct ground water monitoring in accordance with N.J.A.C. 7:14A-9.
- (d) Persons responsible for discharges to ground water from hazardous waste facilities as defined in N.J.A.C. 7:26G, shall conduct ground water monitoring in accordance with N.J.A.C. 7:14A-10.
- (e) Persons responsible for discharges to ground water associated with land application of residual shall comply with N.J.A.C. 7:14A-20.

7:14A-7.4 Exemptions

- (a) Persons responsible for the following discharges are exempt from the requirement to obtain a discharge to groundwater permit:
 - Discharges from single family residential subsurface sewage disposal systems that are designed, constructed, installed and operated in compliance with the Realty Improvement Sewerage and Facilities Act, N.J.S.A. 58:11-23 et seq., and Standards for Individual Subsurface Sewage Disposal Systems, N.J.A.C. 7:9A;
 - 2. Return flows from irrigated agriculture;
 - 3. Discharges that occurred prior to May 5, 1997, except existing permitted discharges identified in N.J.A.C. 7:14A-7.2(c);
 - 4. Any discharge not to exceed 60 calendar days and in compliance with the instructions of a Department on-scene coordinator or remedial project manager pursuant to 40 CFR 300 (the National Oil and Hazardous Substances Contingency Plan) or 33 CFR 153.10(e) (Pollution by Oil and Hazardous Substances), and the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11; and
 - 5. The following stormwater discharges, if such discharges are not through underground injection regulated under N.J.A.C. 7:14A-8, and do not require a permit under N.J.A.C. 7:14A-24.2(a)9:
 - i. Stormwater discharges from municipal separate storm sewers that are not identified under N.J.A.C. 7:14A-25.2(a) or (b);
 - ii. Stormwater discharges from residential areas (including residential streets, parking lots, easements, and open space), or from commercial areas (other than areas of high pollutant loading), unless N.J.A.C. 7:14A-25.2(a) or (b) requires the operating entity to apply for a NJPDES permit for the discharge. For purposes of this subparagraph and N.J.A.C. 7:14A-8.5(b)9 and 24.2(c)3, high pollutant loading areas

are commercial areas where solvents and/or petroleum products are loaded/unloaded, stored, or applied; commercial areas where pesticides are loaded and/or unloaded or stored; commercial areas where hazardous materials are expected to be present in greater than "reportable quantities" as defined by the USEPA at 40 C.F.R. 302.4; commercial areas where recharge would be inconsistent with a Department approved remedial action work plan or landfill closure plan; and commercial areas where the risk for spills of toxic material is high, such as gas stations and vehicle maintenance facilities; and

iii Stormwater discharges from animal feeding operations that do not require NJPDES permits under N.J.A.C. 7:14A-2.5(d) or 2.13.

7:14A-7.5 Authorization of discharges to ground water by permit-by- rule

- (a) Any person responsible for any of the following discharges to ground water is deemed to have a permit-by-rule:
 - 1. Discharges to ground water from underground injection activities that are eligible for a permit-by-rule under N.J.A.C. 7:14A-8.5;
 - 2. Discharges to ground water from activities associated with the flushing or cleaning of potable water mains and fire water systems, including hydrants and sprinklers;
 - 3. Discharges to ground water from activities associated with the development of potable water wells;
 - 4. Discharges to ground water from activities associated with the installation, development and sampling of monitoring wells in accordance with a NJPDES permit or, for activities not included in a NJPDES permit, in accordance with the Technical Requirements for Site Remediation, including, but not limited to, the requirements of N.J.A.C. 7:26E-3.7(c)2 and 6.4(d)3; and
 - 5. Discharges to ground water from wells, other than discharges that occur during the course of a remediation pursuant to (b)3 below, that occur during aquifer tests for the purpose of obtaining hydrogeologic data, provided that such discharges do not exceed 30 calendar days in duration..
- (b) Any person responsible for the discharges to ground water listed in (b)3i through vii below is deemed to have a permit-by-rule if the discharge occurs when:
 - 1. A contaminated site, as defined in N.J.A.C. 7:26C-1.3, is being remediated pursuant to the rules at N.J.A.C. 7:14B implementing the Underground Storage of Hazardous Substances Act (N.J.S.A. 13:1K-6 et seq.), the requirements of the Industrial Site Recovery Act (N.J.S.A. 13:1K-6 et seq.), the requirements of the Spill Compensation and Control Act

(N.J.S.A. 58:10-23.11), or the Procedures for Department Oversight of the Remediation of Contaminated Sites at N.J.A.C. 7:26C; and

- 2. The person is in receipt of written approval of the discharge from the Department.
- 3. The following ground water discharges are authorized by permit-by-rule under this subsection:
 - i. Discharges to ground water, not to exceed 180 calendar days, from pilot treatment plants to obtain engineering design data;
 - ii. Discharges to ground water related to biotreatability studies where the discharge will not exceed 180 calendar days;
 - iii. Discharges to ground water, not to exceed 30 calendar days, from wells to test aquifers for the purpose of obtaining engineering and hydrogeologic design data;
 - iv. Discharges to ground water not to exceed 180 calendar days, from any other facility or equipment associated with engineering studies, remedial action selection, or design studies and associated monitoring;
 - v. Discharges to ground water to remediate contamination from discharges of heating oil as defined at N.J.A.C. 7:14A-1.2, at a residential building of four units or less;
 - vi. Discharges to ground water, not to exceed 180 calendar days, related to dewatering at a contaminated site or regulated underground storage tank facility; and
 - vii. Discharges to ground water, other than those listed in (b)3i through vi above, that occur during the course of a site remediation that is being conducted in accordance with the Technical Requirements for Site Remediation, N.J.A.C. 7:26E, including the requirements of N.J.A.C. 7:26E-6.1 and 6.3(c).
- (c) The Department shall invalidate any permit-by-rule under this section and require any person responsible for the discharge for which the permit-by-rule had been approved to apply for and obtain an individual discharge to ground water permit if:
 - 1. The discharge is likely to contravene the ground water quality standards at N.J.A.C. 7:9C;
 - 2. The discharge may result in violation of the Surface Water Quality Standards at N.J.A.C. 7:9B.

7:14A-7.6 Ground Water Protection Program (GWPP)

- (a) Each discharge to ground water permit, except those identified in N.J.A.C. 7:14A-7.3(c), (d) and (e), and those permitted by rule pursuant to N.J.A.C. 7:14A-7.5, shall include an approved Ground Water Protection Program to ensure that the discharge does not contravene the ground water quality standards at N.J.A.C. 7:9C and meets the monitoring requirements of this section and N.J.A.C. 7:14A-7.7.
- (b) Unless an alternate program is approved in advance as indicated in (f) below, each Ground Water Protection Program shall include the following components:
 - 1. A monitoring well system, consisting of monitoring wells located in each aquifer that may be impacted by the discharge. Unless the permittee demonstrates otherwise to the satisfaction of the Department, the monitoring well system shall consist of a minimum of one hydraulically upgradient well, and at least three hydraulically downgradient wells. The permittee shall demonstrate the adequacy of the monitoring well system by:
 - i. Submission of results of a physical or mathematical ground water flow and/or contaminant transport model demonstrating that the monitoring well system is capable of intercepting contaminant plumes emanating from each pollutant source;
 - ii. Submission of results of geophysical methods of analysis such as resistivity/conductivity methods that confirm wells are placed such that they are capable of intercepting contaminant plumes emanating from each pollution source; or
 - iii. Submission of results of an alternative method of adequacy testing, approved by the Department in writing;
 - 2. Effluent quality monitoring;
 - 3. A schedule of mechanical and structural testing to determine that the berms, dikes, liners, and wells, and any other engineered devices used as part of a treatment works will function as designed;
 - 4. A list of ground water contaminants for which to monitor, analyze, and report, including the contaminants identified during the pollutant characterization performed in accordance with N.J.A.C. 7:14A-7.9(d)2; and
 - 5. A schedule, including procedures and techniques for:

- i. Sample collection;
- ii. Sample preservation and shipment;
- iii. Analytical procedures; and
- iv. Chain of custody control.
- (c) In addition to the requirements of (b) above, a Ground Water Protection Program shall contain additional treatment works, materials management, best management plans, discharge sampling, flow limitations, effluent limitations, monitoring wells, lysimeters, piezometers, alarms, hydraulic control devices and inspections as required to prevent contravention of the ground water quality standards in N.J.A.C. 7:9C.
- (d) In each Ground Water Protection Program, the Department shall require one or more of the following monitoring programs:
 - 1. A leak detection monitoring program, capable of detecting all discharges from any pollution source not designed to discharge pollutants but from which a discharge could occur as a result of a leak or other structural failure. The leak detection monitoring program shall include:
 - A monitoring well system that includes the components described at (b)1 above or leak detection devices such as piezometers, alarms, electrical leak detection or leak location systems, or leachate collection systems; and
 - A statistical analysis of the monitoring well data collected in accordance with N.J.A.C. 7:14A-7.7, in order to determine whether or not there is statistically significant evidence of a leak from the pollutant source when monitoring is conducted pursuant to (b)1 above.
 - 2. An attenuation monitoring program if any pollution source is known or expected to discharge pollutants. The attenuation monitoring program shall include:
 - i. The components described at (b) above; and
 - ii. A statistical analysis of the monitoring well data collected in accordance with N.J.A.C. 7:14A-7.7, in order to determine whether or not there is statistically significant evidence of a contravention of the ground water quality standards in N.J.A.C. 7:9C.
 - 3. A non-point source monitoring program if there are an indeterminate number of pollution sources, or more than one discharge source. The non-point source monitoring program shall consist of:

- i. The components described at (b) above; and
- ii. A monitoring approach capable of evaluating whether ground water quality standards are contravened at the property boundary, or at another point of compliance as identified in the permit.
- (e) When comparing data from monitoring wells, the data collected shall be subjected to the appropriate statistical analyses as described in N.J.A.C. 7:14A-7.7.
- (f) If approved by the Department in writing, a permittee may implement an alternate Ground Water Protection Program that ensures compliance with the ground water quality standards of N.J.A.C. 7:9C and that meets the monitoring requirements of this section and N.J.A.C. 7:14A-7.7.

7:14A-7.7 Ground water sampling procedures and statistical analysis requirements

- (a) The person responsible for conducting the Ground Water Protection Program established pursuant to N.J.A.C. 7:14A-7.6 shall conduct ground water sampling in accordance with the edition of the Department's Field Sampling Procedures Manual applicable at the time of sampling, an alternate method approved by the Department, or as set forth in the NJPDES-DGW permit.
- (b) When statistical data evaluations are specified by the Department to implement the Ground Water Protection Program, the statistical test chosen shall be conducted separately for each specified constituent in each well, and one of the following statistical methods shall be used to evaluate ground-water monitoring data for each specified constituent:
 - 1. A parametric analysis of variance (ANOVA) followed by multiple comparison procedures to identify statistically significant evidence of contamination. The method shall include estimation and testing of the contrasts between each compliance well's mean and the background water quality mean levels for each constituent;
 - 2. An analysis of variance (ANOVA) based on ranks followed by multiple comparison procedures to identify statistically significant evidence of contamination. The method shall include estimation and testing of the contrasts between each compliance well's median and the background water quality median levels for each constituent;
 - 3. A tolerance or prediction interval procedure in which an interval for each constituent is established from the distribution of the background water quality data, and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit;

- 4. A control chart approach that gives control limits for each constituent; or
- 5. Another statistical test method that meets the performance standards of (c) below, and has been approved by the Department in writing.
- (c) Any statistical method chosen under this section shall comply with the following performance standards, as appropriate:
 - 1. The statistical method used to evaluate ground-water monitoring data shall be appropriate for the distribution of parameters. If the distribution of the parameters is shown by the permittee to be inappropriate for a normal theory test, then the data must be transformed or a distribution free theory test used. If the distributions for the constituents differ, more than one statistical method may be needed.
 - 2. If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background water quality constituent concentrations or a ground-water protection standard, the test shall be done at a type I error level no less than 0.01 for each testing period. If a multiple comparisons procedure is used, the type I experiment wise error rate for each testing period shall be no less than 0.05; however, the type I error of no less than 0.01 for individual well comparison shall be maintained. The performance standard does not apply to tolerance intervals, prediction intervals or control charts.
 - 3. If a control chart approach is used to evaluate ground-water monitoring data, the specific type of control chart and its associated parameter values shall be protective of human health and the environment. The parameters shall be determined after considering the number of samples in the background water quality data base, the date distribution, and the range of the concentration values for each constituent of concern.
 - 4. If a tolerance interval or a prediction interval is used to evaluate groundwater monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval shall contain shall be protective of human health and the environment. These parameters shall be determined after considering the number of samples in the background water quality data base, the data distribution, and the range of the concentration values for each constituent of concern.
 - 5. The statistical method shall account for data below the limit of detection with one or more statistical procedures that are protective of human health and the environment. Any practical quantitation level (PQL) as defined in N.J.A.C. 7:9C that is used in the statistical method shall be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.

- 6. If necessary, the statistical method shall include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.
- (d) When conducting a leak detection monitoring program, the permittee shall determine whether or not there is a statistically significant increase over background water quality values for each parameter or constituent required in the permit.
 - 1. In determining whether a statistically significant increase has occurred, the permittee shall compare the ground water quality of each parameter or constituent at each compliance point monitoring well designated pursuant to the permit to the background water quality value of that constituent, according to the statistical procedures and performance standards specified under this section.
 - 2. Within the period of time specified in the NJPDES discharge to ground water permit, and after completing sampling and analysis, the permittee shall determine whether there has been a statistically significant increase over background water quality at each monitoring well.
- (e) When conducting an attenuation monitoring program, the permittee shall determine whether the discharge complies with the ground water constituent standards for the classification area established pursuant to N.J.A.C. 7:9-6.
 - 1. In determining whether the discharge complies with the ground water constituent standards for the classification area, the permittee shall compare the ground water quality of each parameter or constituent at each compliance point monitoring well designated pursuant to the permit to the background water quality value of that constituent, according to the statistical procedures and performance standards specified under this section.
 - 2. Within the period of time specified in the NJPDES discharge to ground water permit, and after completing sampling and analysis, the permittee shall determine whether there has been a statistically significant contravention of the ground water quality standards.

7:14A-7.8 Required response to contravention of ground water quality standards

- (a) To address any contravention of the ground water quality standards that occurs while a discharge to ground water permit is in effect, each permit shall specify the following measures for the permittee to undertake as appropriate:
 - 1. That the permittee shall notify the Department as provided in the permit, including the nature and extent of the contravention, followed by

confirmation in writing, by certified mail within a time frame set forth in the permit, after the Department receives information obtained according to N.J.A.C. 7:14A-7.6(b)4;

- 2. That the permittee shall install additional wells at additional locations to determine the extent of the ground water contamination attributable to the regulated discharge;
- 3. That the permittee shall provide additional pretreatment of the discharge to improve its quality by decreasing pollutant concentration;
- 4. That the permittee shall expand disposal areas onto additional land areas to reduce or minimize the impact of the discharge;
- 5. That the permittee shall take any other action necessary to comply with the ground water quality standards;
- 6. That the permittee shall reduce or cease the discharge; and
- 7. That the permittee shall implement the responses within the time frame required by the permit.
- (b) In addition to the requirements of (a) above, any person responsible for a discharge that contravenes the Ground Water Quality Standards as specified in the discharge to ground water permit may be subject to the requirements of N.J.A.C. 7:26C.

7:14A-7.9 General requirements for applications for discharge to groundwater permit

- (a) In addition to the information required pursuant to N.J.A.C. 7:14A-4.3, an applicant for a NJPDES Discharge to Groundwater permit shall submit information to the Department as follows:
 - 1. All dischargers shall submit the information required pursuant to (d) below, except as provided in N.J.A.C. 7:14A-25.9(d)1 for certain stormwater discharges, or when, after consultation with the Department during pre-application conferences, it is determined that the information is not necessary to develop permit conditions for the facility.
- (b) Submission of information as required under this section shall not exempt the applicant from compliance with any other permit application requirements which apply to the discharge to ground water site, to any treatment system of which the discharge to ground water site is a component, or to any other existing or proposed discharges at the facility.
- (c) Pre-application conferences with the Department concerning the information required pursuant to (d) below are recommended.

- (d) The following information shall be submitted in the application for the Discharge to Ground Water permit pursuant to (a) above:
 - 1. Project related information as follows:
 - i. A description of the facility;
 - ii. The nature of the establishment; and
 - iii. The total floor area of all structures on site and their maximum occupancy where necessary to determine the daily volume of discharge;
 - 2. Pollutant characteristics as follows:
 - i. The origin and daily volume of discharge;
 - ii. Degree of pretreatment of the discharge;
 - iii. Characteristics of the quality of the discharge.
 - (1) Unless otherwise approved by the Department, all analyses or estimates shall include the following parameters at a minimum:
 - (A) Ammonia nitrogen (NH₃-N);
 - (B) Nitrate nitrogen (NO₃-N);
 - (C) Total Kjeldahl nitrogen (TKN);
 - (D) Biochemical oxygen demand (BOD);
 - (E) Chemical oxygen demand (COD);
 - (F) Total dissolved solids (TDS);
 - (G) Suspended solids (SS);
 - (H) pH;
 - (I) Calcium (Ca);
 - (J) Magnesium (Mg);
 - (K) Sodium (Na);
 - (L) Phosphorus (P);
 - (M) Fecal coliform bacteria;

- (N) Grease and oil;
- (O) Metals;
- (P) Base/neutral compounds;
- (Q) Acid extractable compounds;
- (R) Volatile organics; and
- (S) Pesticides.
- (2) Dependent on the nature of the facility as described in accordance with (d)1 above, base/neutral compounds, acid extractable compounds, volatile organics and pesticides shall be analyzed for as required pursuant to N.J.A.C. 7:14A-4 -Appendix A; and
- iv. The compatibility of the wastewater with onsite soil conditions and vegetation (if any) shall be substantiated by the applicant;
- 3. Site related information as follows:
 - i. Present tax lot and block, municipality and county in which the facility is located or is proposed to be located;
 - ii. A general plan to scale showing at a minimum the location of the discharge to ground water with respect to the following within one half mile of the boundaries of discharge to ground water site:
 - (1) Property boundaries;
 - (2) Roadways;
 - (3) Existing and proposed land use of discharge to ground water site and surrounding areas;
 - (4) Adjacent property ownership and all dwellings and buildings of human use or occupancy;
 - (5) Surface waters, including but not limited to, perennial and intermittent streams, lakes, ponds and reservoirs; and
 - (6) Mines (surface and subsurface) and quarries;
 - iii. Topographic (two foot contour intervals), geologic and soils (USDA) maps of the discharge to ground water site and surrounding area sufficient to define conditions and evaluate probable impacts of the

discharge to ground water.

- iv. A plot plan to scale showing:
 - (1) The discharge to ground water area;
 - (2) Property boundaries;
 - (3) Roadways;
 - (4) Pre-treatment facilities;
 - (5) Storage facilities;
 - (6) All conveyance and distribution piping;
 - (7) Any sinkholes, gullies or soil erosional features (natural or manmade) within the discharge to ground water site which divert drainage from or through the facility property;
 - (8) Existing monitor and piezometer wells;
 - (9) Water supply wells including the depth of the screened interval and yield;
 - (10) A wellhead protection area certified by the Department;
 - (11) Soil borings, test pits and hydraulic conductivity tests;
 - (12) All wetlands and buffer zones; and
 - (13) All areas subject to flooding within the five-, 10- and 25-year storm events; and
 - v. A well inventory of the area within one half mile of the boundaries of the discharge to ground water indicating the depth of all existing domestic, municipal and industrial supplies. Yields of all wells exceeding 100,000 gallons per day or 70 gallons per minute shall be indicated on a location map or key map;
- 4. Soils and geologic evaluation as follows:
 - i. A sufficient number of borings shall be made of the disposal site to characterize and verify the subsurface conditions beneath the site with respect to the types of material, uniformity, depth to bedrock, and ground water elevations. When, in the judgment of the Department, the number of borings is not sufficient to adequately describe the geologic formations and ground water flow patterns below the

disposal site, in regard to potential contaminant migration paths, supplemental borings or geophysical methods will be required;

- ii. Data obtained from borings shall be collected by standard undisturbed soil sampling techniques for engineering properties, and split spoon sampling or standard penetration tests for classification. Samples shall be collected and classified continuously for the first 20 feet of boring and at five foot intervals thereafter;
- iii. All borings shall extend to a minimum depth of 20 feet unless specified by the Department. The Department shall require deeper borings in areas in which 20 feet is not sufficient to describe the geologic formations and ground water flow patterns in regard to the potential contaminant migration paths;
- iv. Logs shall be submitted for each boring, regarding rock and soil conditions encountered. Each log shall include a soil or rock description in accordance with recognized standard methods (USDA, Unified or Burmeister Soil Classification System; Rock Quality Description System), depth of individual soil or rock strata, water levels encountered, blow counts, depth of soil tests and dates. All depths described within the boring logs shall be correlated to New Jersey Geodetic Control Survey Datum;
- v. A sufficient number of test pits necessary to characterize all soil series within the discharge to ground water site shall be excavated. Each test pit log shall describe each recognizable soil horizon or substratum for depth and thickness, soil color using the Munsell System of Classification (including abundance, size and contrast of mottling where present), soil texture using the USDA Soil Textural Classification System, an estimation of the volume of coarse fragment (where present), soil structural class and soil consistency;
- vi. A determination of depths to seasonal high water table specifying the methodology used to make the determination; and
- vii. A description of the physiographic region and geologic formation(s) into which pollutants are discharged. Site specific geology including, but not limited to, bedrock outcrop, strike and dip of sedimentary formations and foliation trend and dip angles of igneous and metamorphic rocks, faults, joint and fracture trends in bedrock including dip angles, trend direction of solution channels in karst topography, saprolite development, clay lenses or fragipans, perched water tables or any other geologic features which may impede the treatment and/or disposal of pollutants shall be described;
- 5. Hydrogeologic evaluation as follows:

- A determination of ambient or background ground water quality shall be required for the parameters listed in (d)2iii(1) above. The well used to characterize background water quality shall be located where unaffected, or if not possible where least impacted, by the discharge. Data shall be provided to show that background water quality wells are located in the same hydrologic units as the wells subsequently used to monitor the impact of the discharge;
- ii. A representative determination of background ground water quality shall be made for all parameters specified in (d)2iii(1) above. A minimum of five samples shall be collected over a time period which is representative of spatial or seasonal variations in quality. The arithmetic mean and variance shall be determined for each respective parameter concentration by pooling the measurements in samples;
- iii. Ground water samples shall be collected within 18 months before the date of receipt by the Department of the application for a permit under this section from well(s) located hydraulically upgradient from the discharge to ground water;
- iv. A sufficient number of tests shall be performed in order to characterize onsite hydrogeologic characteristics, including, but not limited to, horizontal hydraulic conductivity, ground water flow velocity and hydraulic gradient. Where, in the judgment of the Department, the information submitted is insufficient to adequately evaluate the hydrogeologic characteristics of the site, supplemental tests or methods may be required; and
- v. Ground water contour maps shall be submitted depicting both initial piezometric conditions and ground water flow conditions resulting from the growth and/or decay of ground water mound(s) induced by the discharge to ground water. For facilities which have surface impoundments, the ground water contour map for the facility would not need to depict ground water recharge characteristics associated with surface impoundments. Ground water elevations shall be based upon synoptic well data collected within 18 months of the date of receipt by the Department of an application for a permit under this section; and
- 6. Engineering information as follows:
 - i. Engineering plans and specifications for the entire project, describing the proposed treatment process(es) and facilities, storage facilities (if necessary), conveyance systems, disposal facilities, equipment specifications, capacities and all related engineering and operational data;

- ii. Description of the method by which compliance with Ground Water Quality Standards are to be achieved; and
- iii. A calculation of the surface run-off across the discharge to ground water site prepared using a 25-year storm, with estimates of the effect of such run-off on wastewater treatment, storage, disposal, and on erosion, flooding and related details.

7:14A-7.10 Additional requirements for applications for NJPDES-DGW permits for surface impoundments

- (a) In addition to the general requirements for applications for discharge to ground water permits in N.J.A.C. 7:14A-7.9, an applicant for a NJPDES Discharge to Ground Water permit for a surface impoundment shall submit to the Department the information as required in this section.
- (b) Surface impoundments with both a primary liner and a secondary liner, as defined in N.J.A.C. 7:14A-1.2, which cover all surrounding earth likely to be in contact with the waste or leachate and which incorporate the use of a leachate collection system located between the liners designed to monitor for any failure of the primary liner and collect all leachate that may pass through as a result of primary liner failure, may pursue the monitoring style in N.J.A.C. 7:14A-7.6(d)1.
- (c) Surface impoundments which treat, store, or dispose of hazardous waste shall comply with the requirements of N.J.A.C. 7:26G. Any surface impoundment that is not a solid waste facility pursuant to N.J.A.C. 7:26, shall comply with the provisions of this subchapter.
- (d) Information shall be submitted concerning the resistance to oxidation and sunlight exposure of the wastewater to be impounded. Information shall also be submitted as to the physical and chemical compatibility of the liner material with on-site soils and the wastewater constituents.

7:14A-7.11 Additional requirements for applications for NJPDES-DGW permits for spray irrigation

- (a) In addition to the general requirements for applications for discharge to ground water permits in N.J.A.C. 7:14A-7.9, an applicant for a NJPDES Discharge to Ground Water permit for spray irrigation systems shall submit to the Department the information as required in this section.
- (b) In addition to the soils evaluation requirements in N.J.A.C. 7:14A-7.9(d)4, soil pH, cation exchange capacity, percent base saturation, exchangeable sodium percentage and electrical conductivity shall be analyzed for each horizon within the soil column for each soil series within the discharge to ground water area.

- (c) Climate related information, reported on a monthly basis, including, but not limited to, total precipitation, total snowfall, mean number of days with precipitation exceeding 0.10 and 0.50 inches, mean temperature, mean daily maximum and minimum temperatures and mean number of days with mean temperature less than 32 degrees Fahrenheit. All data shall be collected from the nearest National Weather Service weather station, for the 10 year period preceding the date of receipt by the Department of the application for a permit under this section.
- (d) A description of the proposed cover crop and natural vegetation, including, but not limited to, nutrient requirements, length of growing season, water tolerance and sensitivity to wastewater constituents being land applied as well as a detailed long term vegetation or crop management program, including use or disposal of the crop.

7:14A-7.12 Additional requirements for applications for NJPDES-DGW permits for overland flow

- (a) In addition to the general requirements for applications for discharge to ground water permits in N.J.A.C. 7:14A-7.9, an applicant for a NJPDES Discharge to Ground Water permit by overland flow shall submit to the Department the information as required in this section.
- (b) In addition to the soils evaluation requirements in N.J.A.C. 7:14A-7.9(d)4, soil pH, cation exchange capacity, percent base saturation, exchangeable sodium percentage and electrical conductivity shall be analyzed for each horizon within the soil column for each soil series within the discharge to ground water area.
- (c) Climate related information, reported on a monthly basis including but not limited to total precipitation, total snowfall, mean number of days with precipitation exceeding 0.10 and 0.50 inches, mean temperature, mean daily maximum and minimum temperatures and mean number of days with mean temperature less than 32 degrees Fahrenheit. All data shall be collected from the nearest National Weather Service weather station, for the 10 year period preceding the date of receipt by the Department of the application for a permit under this section.
- (d) A description of the proposed cover crop and natural vegetation, including, but not limited to, nutrient requirements, length of growing season, water tolerance and sensitivity to wastewater constituents being land applied, as well as a detailed long term vegetation or crop management program, including use or disposal of the crop.

7:14A-7.13 Additional requirements for applications for NJPDES-DGW permits for infiltration/percolation lagoons

- (a) In addition to the general requirements for applications for discharge to ground water permits in N.J.A.C. 7:14A-7.9, an applicant for a NJPDES Discharge to Ground Water permit by infiltration/percolation lagoons shall submit to the Department the information as required in this section.
- (b) Climate related information, reported on a monthly basis including but not limited to total precipitation, total snowfall, mean number of days with precipitation exceeding 0.10 and 0.50 inches, mean temperature, mean daily maximum and minimum temperatures and mean number of days with mean temperature less than 32 degrees Fahrenheit. All data shall be collected from the nearest National Weather Service weather station, for the 10 year period preceding the date of receipt by the Department of the application for a permit under this section.
- (c) A description of the proposed cover crop or natural vegetation within the lagoon area and a detailed long term vegetation or crop management program, including use or disposal of the crop.

7:14A-7.14 Additional requirements for applications for NJPDES-DGW permits for residual surface impoundments

- (a) In addition to the general requirements for applications for discharge to ground water permits in N.J.A.C. 7:14A-7.9, an applicant for a NJPDES Discharge to Ground Water permit for a residual surface impoundment or residual infiltration/percolation lagoon shall submit to the Department the information as required in this section.
 - 1. A description of residual characteristics as follows:
 - i. The origin and volume of residual;
 - ii. Dated analysis of the residual on a mg/kg dry weight basis, including all constituents required to be analyzed in accordance with the Sludge Quality Assurance Regulations (SQAR), N.J.A.C. 7:14C; and
 - iii. Additional quality analyses as deemed necessary by the Department based on its evaluation of past SQAR reports or other related information, such as information on industrial discharges which may contribute constituents not normally evaluated under the SQAR program or which may contribute constituents identified in USEPA's <u>Technical Support Document for Surface Disposal of Sewage Sludge</u>.
 - iv. Any additional residual monitoring data the applicant compiled prior to applying for a permit, including available ground water monitoring

data, with descriptions of well locations and depth to ground water;

- 2. Operational and procedural information as follows:
 - i. Procedures to fill the residual surface impoundment or residual infiltration/percolation lagoon which provide for uniform distribution;
 - ii. Application or loading rates as well as procedures for periodic evacuation for cleaning and inspection or to provide the resting phases;
 - iii. A schedule for periodic removal of residual and designation of ultimate management sites;
 - iv. The frequency of inspection of containment structures for routine maintenance and leakage, wall or liner failures or imperfections and general site management;
 - v. A spill control plan (for example, overflow prevention devices and/or high level alarms and automatic shut-off valves on influent lines) and emergency response procedures; and
 - vi. Facility operations, including volumes of residual to be handled, methods of handling, facility layout and use or disposal methods; and
- 3. Surface impoundments which treat, store, or dispose of hazardous waste shall comply with the requirements of N.J.A.C. 7:26G. Any surface impoundment that is not a solid waste facility pursuant to N.J.A.C. 7:26 shall comply with the provisions of N.J.A.C. 7:14A-7.10.

7:14A-7.15 Additional requirements for applications for NJPDES-DGW permits for disposal of dredged spoil

- (a) In addition to the general requirements for discharge to ground water permits in N.J.A.C. 7:14A-7.9, an applicant for a NJPDES Discharge to Ground Water permit for land application of dredged spoil shall submit to the Department the information as required in this section.
- (b) The applicant shall provide a proposed dredged spoil disposal plan containing the following components:
 - 1. An engineering design and construction plan, including at a minimum;
 - i. A description of proposed pre-construction site work, grading, and foundation preparation;
 - ii. A description of characteristics of liners or other foundation materials;

- iii. Results of stability analyses of dikes and berms with respect to operational stresses; and
- iv. A description of the onsite and offsite transportation system, including transportation of dredged spoil to the site, routing, loading/unloading, and construction and maintenance of roads;
- 2. An operation/maintenance plan that includes:
 - i. A plan that details the filling sequence;
 - ii. A plan detailing staging, and interim storage of materials prior to disposal into the confined upland site;
 - iii. Provisions for dust control, and control of fugitive dust emissions; and
 - iv. Use of intermediate and final cover;
- A Ground Water Protection Program demonstrating that the disposal of dredged spoil will not contravene the Ground Water Quality Standards of N.J.A.C. 7:9C. The Ground Water Protection Program shall identify and discuss the monitoring system to be employed pursuant to N.J.A.C. 7:14A-7.6(b) in consideration of the following:
 - i. With the exception of facilities which qualify for the monitoring style in N.J.A.C. 7:14A-7.6(d)1, the maximum leachate concentration of the dredged spoil shall be determined by subjecting an adequate number of samples to leaching tests. The determination of what constitutes an adequate number of samples shall be in accordance with a statistical method, as described in N.J.A.C. 7:14A-7.7 above. Leaching tests shall be performed according to the methods described by the U.S. Army Corps of Engineers, Waterways Experiment Station (WES), or other test approved by the Department.
 - With the exception of facilities which qualify for the monitoring style in N.J.A.C. 7:14A-7.6(d)1, the leachate volume shall be estimated using the Hydrologic Evaluation of Landfill Performance (HELP) Model, EPA/600/9-94/xxx, U.S. Environmental Protection Agency Risk Reduction Engineering Laboratory, Cincinnati, OH.
 - iii. When the results of (b)3i and ii above indicate that the quality of the leachate shall exceed the ground water quality standards, the plan shall include a ground water flow and solute transport model that can demonstrate that the annual discharge of contaminants in the leachate will not result in contravention of the ground water quality standards; and

- 4. A closure/post closure care plan, that describes in detail:
 - i. The final cover to be used;
 - ii. A program to maintain the berms and dikes;
 - iii. Plans to maintain or control vegetation; and
 - iv. Plans to limit access using fences, and gates, etc.; and
 - v. A financial plan that describes in detail how the closure improvements shall be maintained for 30 years.

SUBCHAPTER 8. ADDITIONAL REQUIREMENTS FOR UNDERGROUND INJECTION CONTROL (UIC) PROGRAM

7:14A-8.1 Purpose and scope

- (a) This subchapter establishes a system of controls to ensure that underground injection practices do not endanger underground sources of drinking water (USDWs). The goal of this subchapter is preventive. The Department's policy is to liberally interpret and enforce this subchapter to prevent the contamination of the State's ground water resources.
- (b) This subchapter regulates the disposal of wastes by well injection as well as the underground storage of fluids (including gases) which have been emplaced by means of an injection well and the injection of water. Paragraph (b)1 below sets forth examples of the underground injection activities regulated under this subchapter. All injection wells are divided into five classifications, which are set forth at N.J.A.C. 7:14A-8.2.
 - 1. The following injection wells are among the injection activities regulated under this subchapter:
 - i. Any injection well located on a drilling platform within the State's territorial waters;
 - ii. Any well, including any dug hole, that is deeper than its largest surface dimension, where the principal function of the well is emplacement of fluids;
 - iii. Any septic system, disposal bed, seepage pit, or cesspool used by a generator of hazardous waste, or by an owner or operator of a hazardous waste management facility to dispose of fluids containing hazardous waste;
 - iv. Any one subsurface disposal system or multiple subsurface disposal systems, on a single property, for which the aggregate sanitary wastewater design flow is in excess of 2000 gpd, calculated in accordance with the minimum standards for average facilities listed in the Department's Standards for Individual Subsurface Sewage Disposal Systems, at N.J.A.C. 7:9A-7.4; and
 - v. Any injection well used to inject industrial wastes, including but not limited to drywells, leaching fields, septic systems, and seepage pits.
 - 2. The following injection activities are not regulated under this subchapter;
 - i. Any injection well located on a drilling platform or other site that is beyond the State's territorial waters;

- ii. Any single family residential subsurface sewage disposal system that is designed, constructed, installed and operated in compliance with the Realty Improvement Sewerage and Facilities Act, N.J.S.A. 58:11-23 et seq., and the Department's Standards for Individual Subsurface Sewage Disposal Systems, N.J.A.C. 7:9A, where applicable;
- iii. Any hole which is not used for emplacement of fluids underground;
- iv. Any injection into a pre-constructed tank for the purpose of storage of fluids. Owners or operators of these injection wells may be subject to the Underground Storage Tank rules at N.J.A.C. 7:14B; and
- v. Injection wells used for injection of hydrocarbons which are pipeline quality and are gases at standard temperature and pressure for the purpose of storage.

7:14A-8.2 Classification of injection wells

- (a) Injection wells are classified as Class I, II, II, IV or V, as follows:
 - 1. Class I wells are:
 - i. Wells used by generators of hazardous wastes or owners or operators of hazardous waste management facilities, or by any other person, to inject hazardous waste beneath the lowermost formation containing an underground source of drinking water; and
 - ii. Other industrial or municipal disposal wells which inject fluids beneath the lowermost formation containing an underground source of drinking water.
 - 2. Class II wells inject fluids:
 - i. Which are brought to the surface in connection with conventional oil or natural gas production;
 - ii. For enhanced recovery of oil or natural gas; or
 - iii. For storage of hydrocarbons which are liquid at standard temperature and pressure.
 - 3. Class III injection wells are used in processes to extract minerals or energy, including:

- i. Mining of sulfur by the Frasch process;
- ii. Solution mining of minerals, including sodium chloride, potash, phosphate, copper, uranium and any other minerals which can be mined by this process;
- iii. In-situ combustion of fossil fuel, with the term "fossil fuel" including coal, tar sands, oil shale and any other fossil fuel which can be mined by this process; and
- iv. Wells used in the recovery of geothermal energy to produce electric power, but not including wells used in heating or aquaculture, which fall under Class V.
- 4. Class IV injection wells are used by generators of hazardous wastes or of radioactive wastes, by owners or operators of hazardous waste management facilities, by owners or operators of radioactive waste disposal sites, or by any other person to dispose of hazardous wastes or radioactive wastes into or above a formation which, within two miles of the well bore, contains an underground source of drinking water (USDW).
- 5. Class V injection wells are injection wells not included in Class I, II, III or IV. Examples of Class V wells include:
 - i. Air conditioning return flow wells used to return the water used for heating or cooling in a heat pump;
 - ii. Cooling water return flow wells used to inject water previously used for cooling;
 - iii. Drainage wells used to drain storm runoff into a subsurface formation, except as regulated under Class IV;
 - iv. Recharge wells used to replenish the water in an aquifer;
 - v. Salt water intrusion barrier wells used to inject water into a fresh water aquifer to prevent the intrusion of salt water into the fresh water;
 - vi. Sand backfill wells used to inject a mixture of water and sand, mill tailings or other solids into mined-out portions of subsurface mines;
 - vii. All septic systems or other subsurface sewage disposal systems other than those excluded under N.J.A.C. 7:14A-8.1(b)2ii;
 - viii. Subsidence control wells (not used for the purpose of oil or natural gas production) used to inject fluids into a non-oil or gas producing zone to reduce or eliminate subsidence associated with the overdraft

of fresh water; and

ix. Geothermal wells and ground water heat pumps used in heating and aquaculture.

7:14A-8.3 Prohibition of unauthorized injection

Any underground injection is prohibited, except pursuant to a permit-by-rule under N.J.A.C. 7:14A-8.5, or pursuant to a UIC permit under N.J.A.C. 7:14A-8.8. The construction of any well required to have a permit (including, where applicable, a well permit) under this subchapter is prohibited, except pursuant to such permit-by-rule or UIC permit.

7:14A-8.4 Prohibition of movement of fluid into underground sources of drinking water

- (a) No UIC permit or approval under a permit-by-rule shall be issued or provided under this subchapter in the following circumstances:
 - 1. Where a Class I, II or III well may cause or allow movement of any contaminant into underground sources of drinking water;
 - 2. Where a Class IV or V well may cause or allow movement of fluid containing any contaminant into underground sources of drinking water, and the presence of that contaminant may adversely affect the health of persons; or
 - 3. Where a Class V well is:
 - i. A large-capacity cesspool (design flow greater than 2,000 gallons per day). All large-capacity cesspools authorized by this subchapter shall be closed by April 5, 2005. Large-capacity cesspools shall be closed in accordance with N.J.A.C. 7:14A-8.16(d)2. The owner or operator shall notify the Department of intent to close at least 30 days prior to closure; or
 - ii. Except as provided at (a)3ii(1) below, a motor vehicle waste disposal well. A motor vehicle waste disposal well is an injection well that receives or has received fluids from motor vehicle repair or maintenance activities, such as an auto body repair shop, automotive repair shop, car dealership, specialty repair shop (for example, transmission and/or muffler repair shop), or any facility that does any motor vehicle repair work.
 - Motor vehicle waste disposal wells constructed prior to April 5, 2000 shall be authorized under a permit in accordance with N.J.A.C. 7:14A-8.8, closed in accordance with N.J.A.C. 7:14A-8.16(d)2, or converted to another type of Class V well in accordance with N.J.A.C. 7:14A-8.16(g).

- (2) Motor vehicle waste disposal wells that continue to operate in accordance with a permit shall meet Ground Water Quality Standards, N.J.A.C. 7:9C, at the last accessible sampling point prior to waste fluids being released into the subsurface environment. The owner or operator shall notify the Department of intent to close at least 30 days prior to closure.
- (b) For Class I, II and III wells, and any Class IV well allowed under N.J.A.C. 7:14A-8.7(b), if any monitoring indicates the movement of injection or formation fluids into underground sources of drinking water, the Department shall prescribe such additional requirements for construction, corrective action, operation, monitoring, or reporting (including closure of the injection well) as are necessary to control or prevent such movement. These additional requirements shall be imposed by modifying the permit in accordance with N.J.A.C. 7:14A-2.12, or the permit shall be terminated under N.J.A.C. 7:14A-2.13 if cause exists, or appropriate enforcement action shall be taken if the permit has been violated.
- (c) For Class V wells, if at any time the Department learns that a Class V well may cause a violation of the State primary drinking water rules under N.J.A.C. 7:10, or any Groundwater Quality Standards under N.J.A.C. 7:9C, the Department shall:
 - 1. Require the owner or operator of the injection well to obtain a UIC permit pursuant to N.J.A.C. 7:14A-8.8; and
 - 2. Order the owner or operator of the injection well to take such actions (including, where required, closure of the injection well) as may be necessary to prevent the violation and/or take enforcement action.
- (d) Whenever the Department finds that a Class V well may otherwise be adversely affecting the health of persons, the Department may prescribe such actions as may be necessary to prevent the adverse effect, including any action authorized under (c) above.
- (e) Notwithstanding any other provision of this section, the Department shall take emergency action upon receipt of information that a contaminant is present in or is likely to enter an underground source of drinking water that presents an imminent and substantial endangerment to the health of persons.

7:14A-8.5 Authorization of injection into Class V wells by permit-by-rule

- (a) Any owner or operator of a Class V underground injection well who has submitted the inventory information, pursuant to (c) below, prior to May 5, 1997 shall be deemed to have a permit-by-rule.
- (b) An owner or operator of any of the Class V injection wells described in (b)1 through 11 below is deemed to have a permit-by-rule under this subsection if the owner or operator complies with the applicable requirements specified in this subsection.

- 1. Subsurface sewage disposal systems, other than those excluded under N.J.A.C. 7:14A-8.1(b)2, that are designed, constructed, installed and operated in compliance with the Realty Improvement Sewerage and Facilities Act, N.J.S.A. 58:11-23 et seq., and the Department's Standards for Individual Subsurface Sewage Disposal Systems, N.J.A.C. 7:9A, where applicable;
- 2. Injection wells used as a component of closed loop heat pump systems constructed according to any well permit condition(s)/ standards adopted pursuant to N.J.S.A. 58:4A-4.1 et seq. All closed loop systems shall contain only fluids that are allowable under conditions of such well permit, and are leak proof such that the only discharge is heat content;
- 3. Injection wells used as components of an open loop heat pump system constructed in accordance with all applicable well construction requirements of N.J.A.C. 7:9D. Any such injection well shall discharge water into the same aquifer from which the water was drawn and with a quality that is the same as the ambient ground water, except for heat content;
- 4. Air conditioning or cooling water return flow injection wells that are constructed in accordance with all applicable well construction requirements of N.J.A.C. 7:9D that discharge water into the same aquifer from which the water was drawn and with a quality that is the same as the ambient ground water, except for heat content;
- 5. Underground injection of swimming pool filter backwash water and water softener backwash water into seepage pits, when the activity is conducted in accordance with N.J.A.C. 7:14A-8.18;
- 6. Underground injection wells associated with the feasibility or engineering design studies necessary to obtain or comply with a water supply allocation permit pursuant to N.J.A.C. 7:19 or NJPDES permit pursuant to this chapter;
- 7. Underground injection of stormwater runoff from the roofs of buildings, so long as the roofs are devoid of pollutant sources and devices (for example, motors, tanks, drums) that contain pollutants;
- 8. Underground injection of stormwater discharges from municipal separate storm sewers that are not identified under N.J.A.C. 7:14A-25.2(a) or (b);
- 9. Underground injection of stormwater discharges from residential areas (including residential streets, parking lots, easements, and open space), or from commercial areas other than areas of high pollutant loading as described under N.J.A.C. 7:14A-7.4(b)5ii, unless N.J.A.C. 7:14A-25.2(a) or (b) requires the operating entity to apply for a NJPDES permit for the discharge;

- 10. Underground injection of stormwater discharges from animal feeding operations that do not require a NJPDES permit under N.J.A.C. 7:14A-2.13; and
- 11. Underground injection wells used during the remediation of a contaminated site where the person conducting the remediation meets the conditions set forth at N.J.A.C. 7:14A-7.5(b).
- (c) The owner or operator of a Class V injection well shall submit inventory information to the Department at the address indicated in (i) below within 90 days of a notification by the Department. Notification shall be a public notice in a local newspaper or in the New Jersey Register, or a written request. The inventory information shall consist, at a minimum, of the following information:
 - 1. The well drilling permit number, where applicable;
 - 2. The facility name and location;
 - 3. The name and address of the legal contact;
 - 4. The ownership of the facility;
 - 5. The nature and type of injection well(s);
 - 6. The operating status of injection well(s); and
 - 7. The type, quantity and quality of discharge.
- (d) The Department will notify pursuant to (e) below any owner or operator of any Class V injection well authorized by rule pursuant to this section to apply for and obtain a UIC permit pursuant to N.J.A.C. 7:14A-8.8, if:
 - 1. The injection well is no longer a Class V well;
 - 2. The protection of underground sources of drinking water (USDW) requires that the injection shall be subject to requirements such as corrective action, monitoring and reporting, or operation not required by the permit-by-rule;
 - 3. The injection well is likely to adversely affect the existing or potential use of the aquifer; or
 - 4. The discharge is presumed to contravene the Ground Water Quality Standards in N.J.A.C. 7:9C.
- (e) The Department shall notify in writing the owner or operator of a Class V injection well required pursuant to (d) above to apply for and obtain a UIC permit pursuant to N.J.A.C. 7:14A-8.8. The notice shall include a brief statement of the reasons for the decision, instructions on how to apply for the UIC permit, a statement setting a time by which the owner or operator must

apply for the permit, and a statement that upon the effective date of the UIC permit authorization the permit-by-rule under which the activity had been approved shall no longer apply.

- (f) Any owner or operator of a Class V injection well approved under a permit-byrule pursuant to this section may request to be excluded from the authorization by applying for a UIC permit pursuant to N.J.A.C. 7:14A-8.8. The owner or operator shall provide reasons supporting the request to the Department. The Department shall not issue a permit for an injection well which is in violation of any other applicable statutes or regulations.
- (g) Any approval for a Class V injection well under a permit-by-rule pursuant to this section shall expire upon the effective date of a UIC permit authorization issued pursuant to N.J.A.C. 7:14A-8.8 for such injection well.
- (h) The owner or operator of a Class V injection well approved under a permit-byrule pursuant to this section is prohibited from injecting into the well:
 - 1. Upon the effective date of denial of an application;
 - 2. Upon failure to submit inventory or other information in a timely manner pursuant to this section;
 - 3. Upon failure to comply with the provisions of an enforcement action; and
 - 4. Upon notification by the Department to cease injection.
- (i) Inventory information required pursuant to (c) above shall be submitted to:

Department of Environmental Protection

Underground Injection Control Coordinator

PO Box 029

Trenton, New Jersey 08625-0029

7:14A-8.6 Identification of underground sources of drinking water

The Department may identify (by narrative description, illustrations, maps, or other means) and shall protect as an underground source of drinking water, all aquifers or parts of aquifers which meet the definition of an "underground source of drinking water" in N.J.A.C. 7:14A-1.2. Even if an aquifer has not been specifically identified by the Department as such, it is an underground source of drinking water if it meets the definition in N.J.A.C. 7:14A-1.2.

7:14A-8.7 Prohibition and elimination of underground injection of hazardous and radioactive wastes

(a) Except as provided at (b) below, any underground injection of hazardous wastes or radioactive wastes is prohibited. This specifically prohibits the operation of Class IV injection wells, and prohibits hazardous and radioactive wastes from being injected into Class I injection wells.

- (b) The Department may, at its discretion, authorize the construction and/or operation of a Class IV or Class I well to inject ground water that has been treated and is being reinjected into the same formation from which it was drawn. The Department's implementation of this injection activity shall be pursuant to provisions for cleanup of releases under CERCLA, or RCRA, as described in 40 C.F.R. 144.13(c), or when conducted under Department oversight pursuant to the Underground Storage Tanks rules at N.J.A.C. 7:14B, the Industrial Site Recovery Act (N.J.S.A. 13:1K 6 et seq., as amended), or the Procedures for Department Oversight of the Remediation of Contaminated Sites at N.J.A.C. 7:26C. These injection activities shall generally be conducted to alleviate a situation posing a substantial danger to public health or safety or when necessitated by public health or environmental considerations (for example, when injection wells are used as a component of a ground water remediation program).
- (c) Abandonment and closure of any injection well that is injecting, or has ever injected, hazardous wastes (including Class IV and Class I injection wells) shall be performed in compliance with all applicable Department regulations for remediation of contaminated sites including the Procedures for Department Oversight of the Remediation of Contaminated Sites (N.J.A.C. 7:26C).

7:14A-8.8 Authorization by permit

- (a) Any underground injection well not authorized by a permit-by-rule in accordance with N.J.A.C. 7:14A-8.5 requires a UIC permit in accordance with this section .
- (b) The owner or operator shall apply for a UIC permit in accordance with N.J.A.C. 7:14A-4. An application for a well-drilling permit, if applicable, shall be submitted concurrently in accordance with N.J.S.A. 58:4A-4.1.
- (c) The information required by the Department for a UIC permit application for a Class I, II, III or V injection well is listed in N.J.A.C. 7:14A-8.17.

7:14A-8.9 Additional conditions applicable to Class I, II, III and V UIC permits

- (a) The following conditions, in addition to those set forth in N.J.A.C. 7:14A-2.5, apply to all UIC permits for Class I, II, III and V injection wells, and shall be incorporated into these UIC permits either expressly or by reference. If incorporated by reference, a specific citation to this subchapter shall be given in the permit.
 - The permittee does not need to comply with certain provisions of N.J.A.C. 7:14A-6.10 when such noncompliance is authorized by a temporary emergency permit under N.J.A.C. 7:14A-6.14.
 - 2. The permittee shall maintain records concerning the nature and composition of injected fluids in accordance with the requirements of N.J.A.C. 7:14A-6.6.

- 3. In addition to N.J.A.C. 7:14A-6.7, Notice requirements for facility alterations and additions, a new injection well shall not commence injection until construction is complete, the permittee has submitted the well report as required under N.J.S.A. 58:4A-4.1, where applicable, or has submitted notice of completion of construction to the Department; and
 - i. The Department has inspected or otherwise reviewed the new injection well and determined that it is in compliance with the conditions of the permit; or
 - ii. The permittee has not received notice from the Department of its intent to inspect or otherwise review the new injection well within 20 days of the date of the well report or the notice of completion of construction submitted to the Department pursuant to (a)3 above, in which case prior inspection or review is waived and the permittee may commence injection.
- 4. The following shall be included as information which shall be reported within two hours under N.J.A.C. 7:14A-6.10:
 - i. Any monitoring or other information which indicates that any contaminant may cause an endangerment to a potable supply well; and
 - ii. Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into a potable supply well.
- 5. The following information shall be reported within 24 hours under N.J.A.C. 7:14A-6.10:
 - i. Any monitoring or other information which indicates that any contaminant may cause an endangerment to a USDW other than as described at (a)4i above; and
 - ii. Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between USDWs other than as described at (a)4ii above.
- 6. The permittee shall submit written notice to the Department at least 180 days before conversion or abandonment of the well. With the notice, the permittee shall submit a revised plugging and abandonment plan updated as appropriate in compliance with N.J.A.C. 7:14A-8.10(a)5 and 8.12(d).

7:14A-8.10 Establishing UIC permit conditions

- (a) In addition to the conditions established under N.J.A.C. 7:14A-6.3, each UIC permit is to include conditions meeting the following requirements, when applicable:
 - Construction requirements as set forth in N.J.A.C. 7:14A-8.13, 8.14 or 8.15. Existing wells shall achieve compliance with such requirements according to a compliance schedule established as a permit condition. The owner or operator of a proposed new injection well shall submit plans for testing, drilling, and construction when applying for the permit. Construction shall not commence until a permit has been issued containing construction requirements (see N.J.A.C. 7:14A-8.3 and N.J.S.A. 58:4A-4.1). New wells shall be in compliance with these requirements prior to commencing injection operations. Changes in construction plans during construction shall be approved by the Department as minor modifications pursuant to N.J.A.C. 7:14A-16.5(a). No such changes shall be physically incorporated into construction of the well prior to receipt of written approval of the modification from the Department;
 - 2. Corrective or preventive action as set forth in N.J.A.C. 7:14A-8.11 and 8.12(b);
 - 3. Operating requirements as set forth in N.J.A.C. 7:14A-8.13, 8.14 or 8.15. The permit shall establish any maximum injection volumes and/or pressures necessary to ensure that fractures are not initiated in the confining zone, that injected fluids do not migrate into any underground source of drinking water, that formation fluids are not displaced into any underground source of drinking water, and to ensure compliance with the operating requirements in N.J.A.C. 7:14A-8.13, 8.14 or 8.15;
 - 4. Monitoring and reporting requirements as set forth in N.J.A.C. 7:14A-8.13, 8.14 or 8.15. The permittee shall be required to identify types of tests and methods used to generate the monitoring data;
 - 5. A permit for any Class I, II, III or V well, or any Class IV well allowed under N.J.A.C. 7:14A-8.7, shall include conditions to ensure that plugging and abandonment of the well will not allow the movement of fluids either into an underground source of drinking water or from one underground source of drinking water to another. Each applicant for a UIC permit shall submit a plan for plugging and abandonment, taking into account the requirements of N.J.A.C. 7:14A-8.17(a). The plan shall meet, at a minimum, the requirements of N.J.A.C. 7:9D, where applicable. Where the plan meets the requirements of this section, the Department shall incorporate the plan into the permit as a condition. Where the Department determines that the permittee's plan is inadequate, the Department shall

require the applicant to revise the plan, prescribe conditions meeting the requirements of this section, or deny permit authorization. For purposes of this section, temporary intermittent cessation of injection operations is not abandonment. Cessation of injection operations for a period of two years or more constitutes abandonment. The improper maintenance of a well may constitute abandonment of that well in accordance with N.J.S.A. 58:4A-4.1;

- 6. For Class I hazardous waste injection wells, the Department shall require the permittee to maintain financial responsibility and resources, in the form of a performance bond or other equivalent form of financial assurance in accordance with 40 C.F.R. Subpart F, 144.60 through 144.70, to guarantee the closing, plugging, and abandonment of the underground injection operation in a manner prescribed by the Department. In lieu of an individual performance bond, a permittee may furnish a bond or other equivalent form of financial guarantee approved by the Department covering all of the permittee's injection wells in the State;
- 7. A permit for any Class I, II or III well, or for any Class IV well allowed under N.J.A.C. 7:14A-8.7, or injection project which lacks mechanical integrity shall include, and for any Class V well, will include a condition prohibiting injection operations until the permittee shows to the satisfaction of the Department pursuant to N.J.A.C. 7:14A-8.12(c) that the well has mechanical integrity; and
- 8. The Department shall impose on a case-by-case basis such additional conditions as are necessary to prevent the migration of fluids into underground sources of drinking water.

7:14A-8.11 Corrective or preventive action

- (a) Applicants for Class I, II or III injection well permits, or for any Class IV well allowed under N.J.A.C. 7:14A-8.7, shall identify the location of all known wells within the injection well's area of review as specified in N.J.A.C. 7:14A-8.12 which penetrate the injection zone. For wells which are improperly sealed, completed, or abandoned, the applicant shall submit a plan consisting of such steps or modifications as are necessary to prevent movement of fluid into underground sources of drinking water ("corrective or preventive action"). Where the plan is adequate, the Department shall incorporate it into the permit as a condition. Where the Department determines that the permittee's plan is inadequate pursuant to N.J.A.C. 7:14A-8.12(b), the Department shall:
 - 1. Require the applicant to revise the plan;
 - 2. Prescribe a plan for corrective or preventive action as a condition of the permit; or

- 3. Deny the application.
- (b) Requirements for corrective or preventive action are as follows:
 - 1. For an existing injection well, the permit requiring corrective action shall include a compliance schedule for implementing any corrective action required pursuant to (a) above to be completed as soon as possible.
 - 2. For a new injection well, the permit shall prohibit injection until all required corrective or preventive action has been taken pursuant to (a) above.
 - 3. Where the Department determines that a more stringent corrective or preventive alternative is not feasible, the Department shall require as a permit condition that injection pressure in the injection zone does not exceed hydrostatic pressure at the site of any improperly sealed, completed, or abandoned well within the area of review, or alternatively, the Department shall require an injection pressure limitation be included as part of the compliance schedule until all other required corrective or preventive action has been taken. The Department shall only approve an injection pressure limitation in satisfaction of the corrective action requirement if the injection pressure limitation will not endanger groundwater resources. The Department reserves the right to deny permit authorization where it determines that the corrective or preventive plan is inadequate.
 - 4. For Class III wells only, the Department shall consider the overall effect of the project on the hydraulic gradient in potentially affected USDWs and the corresponding changes in potentiometric surface(s) and flow direction(s) rather than the discrete effect of each well. If the Department determines that corrective action is not necessary, the monitoring program required pursuant to N.J.A.C. 7:14A-8.15(c)2 shall be designed to verify the validity of such determination.

7:14A-8.12 General operating criteria and construction standards

- (a) The area of review for each injection well or each field, project or area of the State shall be determined according to either (a)1 or 2 below. The Department strongly encourages owners and operators of injection wells to provide the Department with data concerning which method is most appropriate for each geographic area or field.
 - 1. The zone of endangering influence shall be that area, the radius of which is the lateral distance from an injection well, field or project, in which the pressures in the injection zone may cause the migration of the injection and/or formation fluid into an underground source of drinking water. Computation of the zone of endangering influence must be based upon the parameters listed below and must be calculated for an injection time

period equal to the expected life of the injection well or pattern. The modified Theis equation in Appendix A, incorporated herein by reference, illustrates one form which the mathematical model may take. This equation is based on the following assumptions:

- i. The injection zone is homogeneous and isotropic;
- ii. The injection zone has infinite areal extent;
- iii. The injection well penetrates the entire thickness of the injection zone;
- iv. The well diameter is infinitesimal compared to "r" when injection time is longer than a few minutes; and
- v. The emplacement of fluid into the injection zone creates instantaneous increase in pressure. Other models, such as those mentioned in the EPA publication <u>Radius of Pressure Influence of Injection Wells</u> (EPA-600/279-170), may be used for different situations encountered in the field or where the model assumptions match those situations more closely, if the Department approves of the model and determines that the model is appropriate.
- 2. A fixed radius around the well, field or project, of not less than two miles, shall be determined based on the following:
 - i. Chemistry of injected and formation fluids;
 - ii. Hydrogeology;
 - iii. Population and groundwater use and dependence; and
 - iv. Historical practices in the area.
- 3. If the area of review is determined by a mathematical model pursuant to (a)1 above, the permissible radius resulting from such calculation may be less than two miles. Where the radius calculated is significantly less than two miles, however, the Department reserves the right to require the applicant to submit additional information as needed to assess the possible impact of the proposed injection.
- (b) In determining the adequacy of corrective action proposed by the applicant under N.J.A.C. 7:14A-8.11 and in determining the additional steps needed to prevent fluid movement into underground sources of drinking water, the Department shall consider the following criteria and factors:
 - 1. The nature and volume of the injected fluids;
 - 2. The nature and native fluids or by-products of injection;

- 3. The potentially affected population;
- 4. Geology;
- 5. Hydrology;
- 6. The history of the injection operation;
- 7. Completion and plugging records;
- 8. The abandonment procedures in effect at the time the well was abandoned; and
- 9. The hydraulic connections with underground sources of drinking water.(c) Requirements for mechanical integrity are as follows
 - 1. An injection well has mechanical integrity if:
 - i. There is no significant leak in the casing, tubing or packer; and
 - ii. There is no fluid movement into an underground source of drinking water through vertical channels adjacent to the injection well bore.
 - 2. One of the following tests shall be used to determine the presence of significant leaks under (c)1i above:
 - i. Monitoring of annulus pressure between the casing and the injection tubing; or
 - ii. Pressure test with liquid or gas.
 - 3. One of the following methods shall be used to determine the presence of fluid movement under (c)1ii above:
 - i. For Class II injection wells only, well records demonstrating the presence of adequate cement to prevent such migration; or
 - ii. The results of a temperature or noise log.
 - 4. The Department shall allow the use of a test to demonstrate mechanical integrity other than those listed in (c)2 and 3ii above with the written approval of the EPA. The Department shall allow the use of any other alternate method approved by the EPA and published in the Federal Register unless the use of such method is restricted at the time of approval by the EPA.
 - 5. In conducting and evaluating the tests for mechanical integrity described in this subsection, the owner or operator of the injection well and the

Department shall apply methods and standards generally accepted in the industry. When the owner or operator reports the results of mechanical integrity tests to the Department, he or she shall include a description of the test(s) and the method(s) used. In making its evaluation, the Department shall review monitoring and other test data submitted since the previous evaluations.

- (d) Requirements for plugging and abandoning Class I, II, III, IV and V wells are as follows:
 - 1. Prior to abandoning any Class I, II, III, IV and V well, the well shall be plugged with cement or with other EPA-approved material in a manner which will not allow the movement of fluids either into or between underground sources of drinking water. The abandoned well is to be, at a minimum, filled and sealed in conformance with the requirements of N.J.S.A. 58:4A-4.1 et seq., and N.J.A.C. 7:9D, or in conformance with the requirements of N.J.A.C. 7:9A-12.8, if applicable, or in conformance with the requirements established in a NJPDES permit.
 - 2. Placement of the cement plugs shall be accomplished by one of the following:
 - i. The balance method;
 - ii. The dump bailer method;
 - iii. The two-plug method; or
 - iv. Any other method acceptable to the Department and the EPA that is at least as protective of the ground water as the methods listed in (d)2i through iii.
 - 3. The abandoned well shall be in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a comparable method prescribed by the Department, prior to the placement of the cement plug(s).
 - 4. The plugging and abandonment plan required under N.J.A.C. 7:14A-8.9(a)6 and 8.10(a)5 shall, in the case of a Class III well field, also demonstrate that no movement of contaminants from the mined zone into an underground source of drinking water will occur. The Department shall prescribe aquifer cleanup and monitoring where necessary and feasible to ensure that no migration of contaminants from the mined zone into an underground source of drinking water will occur.
 - 5. The Department shall require a permittee to monitor and submit reports for a period of time after the well has been plugged and abandoned.

7:14A-8.13 Specific operating criteria and construction standards applicable to Class I wells

- (a) This section establishes the operating criteria and construction standards for Class I wells disposing of municipal and/or industrial wastes (other than hazardous wastes or radioactive wastes), where the injection stream quality meets limits established in an individual UIC permit based on primary drinking water standards or applicable ground water quality standards, including antidegradation or non-degradation policies.
- (b) Construction requirements for Class I wells are as follows:
 - 1. Class I wells shall, at a minimum, be constructed in accordance with the requirements and specifications set forth in N.J.A.C. 7:9D. More stringent requirements will be imposed, based on an evaluation of the nature of the injection fluid and/or of geological conditions, or where the Department otherwise determines that it is appropriate.
 - 2. All Class I wells shall be cased and cemented to prevent the movement of fluids into or between underground sources of drinking water. The casing and cement used in the construction of each newly drilled well shall be designed for the life expectancy of the well. In determining and specifying casing and cementing requirements, the following factors shall be considered:
 - i. Depth to injection zone;
 - ii. Injection pressure, external pressure, internal pressure, and axial loading;
 - iii. Hole size;
 - iv. Size and grade of all casing strings (wall thickness, diameter, nominal weight, length, joint specifications, and construction material);
 - v. Corrosiveness of injected fluid, formation fluids, and temperatures;
 - vi. Lithology of injection and confining intervals; and
 - vii. Type and grade of cement.
 - 3. All Class I injection wells shall inject fluids through tubing with a packer set immediately above the injection zone, or tubing with an approved fluid seal as an alternative. The tubing, packer, and fluid seal shall be designed for the expected service.
 - i. To obtain approval of the use of an alternative to a packer, the operator of the injection well shall submit a written request to the Department, which shall set forth the proposed alternative and all

technical data supporting its use. The Department shall approve the request if the alternative method will reliably provide a comparable level of protection to underground sources of drinking water. The Department may approve an alternative method solely for an individual well or for general use.

- ii. In determining and specifying requirements for tubing, packer, or alternatives the following factors shall be considered:
 - (1) The depth of setting;
 - (2) The characteristics of injection fluid (chemical content, corrosiveness, and density);
 - (3) The injection pressure;
 - (4) The annular pressure;
 - (5) The rate, temperature and volume of injected fluids; and
 - (6) The size of casing.
- 4. Appropriate logs and other tests shall be conducted during the drilling and construction of new Class I wells. A descriptive report interpreting the results of such logs and tests shall be prepared by a qualified log analyst and submitted to the Department. At a minimum, such logs and tests shall include:
 - i. Deviation checks on all holes constructed by first drilling a pilot hole, and then enlarging the pilot hole by reaming or another method. Such checks shall be at sufficiently frequent intervals to ensure that vertical avenues for fluid migration in the form of diverging holes are not created during drilling; and
 - ii. Such other logs and tests as may be needed after taking into account the availability of similar data in the area of the drilling site, the construction plan, and the need for additional information, that may arise from time to time as the construction of the well progresses. For surface casings and for intermediate and long strings of casings, the following logs shall be used:
 - (1) For surface casing intended to protect underground sources of drinking water:
 - (A) Resistivity, spontaneous potential, gamma ray, and caliper logs before the casing is installed; and

- (B) A cement bond, temperature, or density log after the casing is set and cemented.
- (2) For intermediate and long strings of casing intended to facilitate injection:
 - (A) Resistivity, spontaneous potential, porosity, and gamma ray logs before the casing is installed;
 - (B) Fracture finder logs; and
 - (C) A cement bond, temperature, or density log after the casing is set and cemented.
- 5. At a minimum, the following information concerning the injection formation shall be determined or calculated for new Class I wells:
 - i. Fluid pressure;
 - ii. Temperature;
 - iii. Fracture pressure;
 - iv. Other physical and chemical characteristics of the injection zone; and
 - v. Physical and chemical characteristics of the formation fluids.
- (c) Operating, monitoring and reporting requirements for Class I wells are as follows:
 - 1. Operating requirements shall, at a minimum, specify that:
 - i. Injection pressure at the wellhead shall not exceed a maximum which shall be calculated so as to ensure that the pressure in the injection zone during injection does not initiate new fractures or propagate existing fractures in the injection zone, initiate fractures in the confining zone or cause the movement of injection or formation fluids into an underground source of drinking water;
 - ii. Injection between the outermost casing protecting underground sources of drinking water and the well bore is prohibited;
 - iii. Unless an alternative to a packer has been approved under (b)3 above, the annulus between the tubing and the long string of casings shall be filled with a fluid approved by the Department.
 - 2. Monitoring requirements shall, at a minimum, include:
 - i. The analysis of the injected fluids with sufficient frequency to yield

data representative of the fluids' characteristics;

- ii. Installation and use of continuous recording devices to monitor injection pressure, flow rate and volume, and the pressure on the annulus between the tubing and the long string of casing;
- iii. A demonstration of mechanical integrity pursuant to N.J.A.C. 7:14A-8.12(c) at least once every five years during the life of the well; and
- iv. The type, number and location of wells within the area of review to be used to monitor any migration of fluids into and pressure in the underground sources of drinking water, the parameters to be measured and the frequency of monitoring.
- 3. Reporting requirements shall, at a minimum, include:
 - i. Quarterly reports to the Department on:
 - (1) The physical, chemical and other relevant characteristics of injection fluids;
 - (2) Monthly average, maximum and minimum values for injection pressure, flow rate and volume, and annular pressure; and
 - (3) The results of monitoring prescribed under (c)2iv above; and
 - ii. The results of the following tests, submitted with the first quarterly report due after the respective test's completion:
 - (1) Periodic tests of mechanical integrity;
 - (2) Any other test of the injection well conducted by the permittee if required by the Department; and
 - (3) Any well repair.

7:14A-8.14 Specific operating criteria and construction standards applicable to Class II wells

- (a) This section establishes operating criteria and construction standards for Class II wells.
- (b) Construction requirements for Class II wells are as follows:
 - 1. Class II wells shall, at a minimum, be constructed in accordance with the requirements and specifications set forth in N.J.A.C. 7:9D. More stringent requirements shall be imposed, based on an evaluation of the nature of the injection fluid and/or of geological conditions, or where the Department

otherwise determines that it is appropriate, based on considering potential impacts on ground water quality.

- 2. All new Class II wells shall be sited in such a fashion that they inject into a formation which has confining zones that are free of open faults or fractures within the area of review.
- 3. All Class II injection wells shall be cased and cemented to prevent movement of fluids into or between underground sources of drinking water. The casing and cement used in the construction of each newly drilled well shall be designed for the life expectancy of the well. In determining and specifying casing and cementing requirements, the following factors shall be considered:
 - i. Depth to injection zone;
 - ii. Injection pressure, external pressure, internal pressure, and axial loading;
 - iii. Hole size;
 - iv. Size and grade of all casing strings (wall thickness, diameter, nominal weight, length, joint specifications, and construction material);
 - v. Corrosiveness of injected fluids, formation fluids and temperatures;
 - vi. Lithology of injection and confining zones; and
 - vii. Type and grade of cement.
- 4. Appropriate logs and other tests shall be conducted during the drilling and construction of new Class II wells. A descriptive report interpreting the results of these logs and tests shall be prepared by a qualified log analyst and submitted to the Department. At a minimum, these logs and tests shall include:
 - i. Deviation checks on all holes constructed by first drilling a pilot hole, and then enlarging the pilot hole by reaming or another method. Such checks shall be at sufficiently frequent intervals to ensure that vertical avenues for fluid movement in the form of diverging holes are not created during drilling; and
 - ii. Such other logs and tests as may be needed after taking into account the availability of similar data in the area of the drilling site, the construction plan, and the need for additional information that may arise from time to time as the construction of the well progresses. For surface casings and for intermediate and long strings of casings, the following logs shall be used:

- (1) Resistivity, spontaneous potential, gamma ray and caliper logs before the casing is installed;
- (2) A cement bond, temperature, or density log after the casing is set and cemented; and
- (3) Fracture finder logs, when intermediate and long strings of casing are intended to facilitate injection.
- 5. At a minimum, the following information concerning the injection formation shall be determined or calculated for new Class II wells:
 - i. Fluid pressure;
 - ii. Temperature;
 - iii. Fracture pressure;
 - iv. Other physical and chemical characteristics of the injection zone; and
 - v. Physical and chemical characteristics of the formation fluids.
- (c) Operating, monitoring, and reporting requirements for Class II wells are as follows:
 - 1. Operating requirements shall, at a minimum, specify that:
 - i. Injection pressure at the well head shall not exceed a maximum which shall be calculated so as to ensure that the pressure in the injection zone during injection does not initiate new fractures or propagate existing fractures in the injection zone. In no case shall injection pressure initiate fractures in the confining zone or cause the movement of injection or formation fluids into an underground source of drinking water; and
 - ii. Injection between the outermost casing protecting underground sources of drinking water and the well bore is prohibited.
 - 2. Monitoring requirements shall, at a minimum, include:
 - i. Monitoring of injected fluids at time intervals sufficiently frequent to yield data representative of the fluids' characteristics;
 - ii. Monitoring of injection pressure, flow rate, and cumulative volume with at least the following frequencies:
 - (1) Weekly for produced fluid disposal operations;
 - (2) Monthly for enhanced recovery operations;

- (3) Daily during the injection of liquid hydrocarbons and injection for withdrawal of stored hydrocarbons; and
- (4) Daily during the injection phase of cyclic steam operations;
- iii. A demonstration of mechanical integrity pursuant to N.J.A.C. 7:14A-8.12(c) at least once every five years during the life of the injection well;
- iv. Maintenance of the results of all monitoring until the next permit review; and
- v. Hydrocarbon storage and enhanced recovery may be monitored on a field or project basis rather than on an individual well basis by manifold monitoring. Manifold monitoring may be used in cases of facilities consisting of more than one injection well, operating with a common manifold. Separate monitoring systems for each well may not be required provided the owner or operator demonstrates that manifold monitoring is comparable to individual well monitoring.
- 3. Reporting requirements shall, at a minimum, include: An annual report to the Department summarizing the results of the monitoring required under (c)2 above. Previously submitted information may be included by reference.
 - i. Owners or operators of hydrocarbon storage and enhanced recovery projects may report on a field or project basis rather than an individual well basis where manifold monitoring is used.

7:14A-8.15 Specific operating criteria and construction standards applicable to Class III wells

- (a) This section establishes operating criteria and construction standards for Class III wells.
- (b) Construction requirements for Class III wells are as follows:
 - 1. Class III wells shall, at a minimum, be constructed in accordance with the requirements and specifications set forth in N.J.A.C. 7:9D. More stringent requirements shall be imposed, based on an evaluation of the nature of the injection fluid and/or of geological conditions, or where the Department otherwise determines that it is appropriate, based on considering potential impacts on ground water quality.
 - 2. All new Class III wells shall be cased and cemented to prevent the migration of fluids into or between underground sources of drinking water. The casing and cement used in the construction of each newly drilled well shall be designed for the life expectancy of the well. In

determining and specifying casing and cementing requirements, the following factors shall be considered:

- i. Depth to the injection zone;
- ii. Injection pressure, external pressure, internal pressure, and axial loading;
- iii. Hole size;
- iv. Size and grade of all casing strings (wall thickness, diameter, nominal weight, length, joint specifications, and construction material);
- v. Corrosiveness of injected fluid, formation fluids and temperatures;
- vi. Lithology of injection and confining zones; and
- vii. Type and grade of cement.
- 3. Appropriate logs and other tests shall be conducted during the drilling and construction of new Class III wells. A descriptive report interpreting the results of such logs and tests shall be prepared by a qualified log analyst and submitted to the Department. The logs and tests appropriate to each type of Class III well shall be determined based on the intended function, depth, construction and other characteristics of the well, availability of similar data in the area of the drilling site and the need for additional information that may arise from time to time as the construction of the well progresses. At a minimum, such logs and tests shall include deviation checks conducted on all holes where pilot holes and reaming are used, at sufficiently frequent intervals to ensure that vertical avenues for fluid migration in the form of diverging holes are not created during drilling.
- 4. Where the injection zone is a water-bearing formation, the following information concerning the injection zone shall be determined or calculated for new Class III wells:
 - i. Fluid pressure;
 - ii. Temperature;
 - iii. Fracture pressure;
 - iv. Other physical and chemical characteristics of the injection zone;
 - v. Physical and chemical characteristics of the formation fluids; and
 - vi. Compatibility of injected fluids with formation fluids.

- 5. Where the injection zone is not a waterbearing formation, the information in (b)4 above shall be determined or calculated and submitted to the Department.
- 6. Where injection is into a formation which contains water with less than 10,000 mg/l total dissolved solids (TDS), monitoring wells shall be completed into the injection zone and into any underground sources of drinking water above the injection zone which could be affected by the mining operation. These wells shall be located so as to detect any excursion of injection fluids, process by-products, or formation fluids outside the mining area or zone. If the operation may be affected by subsidence or catastrophic collapse, the monitoring wells shall be located so that they will not be physically affected.
- 7. Where injection is into a formation which does not contain water with less than 10,000 mg/l TDS, monitoring requirements may be less stringent.
- 8. Where the injection wells penetrate an underground source of drinking water (USDW) in an area subject to subsidence or catastrophic collapse monitoring wells shall be installed into the USDW in sufficient numbers to detect any movement of injected fluids, process by-products or formation fluids into the USDW. The monitoring wells shall be located outside the physical influence of the subsidence or catastrophic collapse.
- 9. In determining the number, location, construction and frequency of monitoring of the monitoring wells, the following criteria shall be considered:
 - i. The population relying on the USDW affected or potentially affected by the injection operation;
 - ii. The proximity of the injection operation to points of withdrawal of drinking water;
 - iii. The local geology and hydrology;
 - iv. The operating pressures and whether a negative pressure gradient is being maintained;
 - v. The nature and volume of the injected fluid, the formation water, and the process by-products; and
 - vi. The injection well density.
- (c) Operating, monitoring, and reporting requirements for Class III wells are as follows:
 - 1. Operating requirements shall, at a minimum, specify that:

- i. Injection pressure at the wellhead shall not exceed a maximum which shall be calculated so as to ensure that the pressure in the injection zone during the injection does not initiate new fractures or propagate existing fractures in the injection zone, initiate fractures in the confining zone, or cause the migration of injection or formation fluids into an underground source of drinking water; and
- ii. Injection between the outermost casing protecting underground sources of drinking water and the well bore is prohibited.
- 2. Where appropriate, Class III wells may be monitored on a field or project basis rather than an individual well basis by manifold monitoring. Manifold monitoring may be used in cases of facilities consisting of more than one injection well, operating with a common manifold. Separate monitoring systems for each well are not required, provided the owner or operator demonstrates that manifold monitoring is comparable to individual well monitoring. Monitoring requirements shall, at a minimum, include:
 - i. Analyses of the injected fluids with sufficient frequency to yield data representative of the fluids' characteristics;
 - ii. Installation and use of continuous recording devices to monitor the injection pressure, flow rate and volume;
 - iii. A demonstration of mechanical integrity pursuant to N.J.A.C. 7:14A-8.12(c) at least once every five years during the life of the well;
 - iv. Weekly monitoring of fluid level and the parameters chosen to measure water quality in the injection zone; and
 - v. Quarterly monitoring of wells adjacent to the injection site to detect any migration from the injection zone into a USDW.
- (d) Reporting requirements shall, at a minimum, include:
 - 1. Quarterly reports to the Department on monitoring required;
 - 2. Results of mechanical integrity, and any other periodic test required by the Department, reported with the first regular report after completion of the test; and
 - 3. Monitoring may be reported on a project or field basis rather than on an individual well basis where manifold monitoring is used.

7:14A-8.16 Specific operating criteria and construction standards applicable to Class V injection wells

- (a) This section establishes the operating criteria and construction standards for Class V wells.
- (b) Class V wells shall, at a minimum, be constructed in accordance with the requirements and specifications set forth in N.J.A.C. 7:9 or 7:9A.
 - 1. Well drilling permit requirements:
 - Where applicable, any owner or operator of a new Class V well shall obtain a well drilling permit before the commencement of any construction, in accordance with the Subsurface and Percolating Waters Act, particularly N.J.S.A. 58:4A-4.1. Information and applications for a well permit may be obtained from:

NJDEP

Water Supply Administration

Bureau of Water Allocation

PO Box 426

Trenton, New Jersey 08625-0426

- 2. Where applicable, individual subsurface sewage disposal systems, septic systems, or disposal beds shall be constructed in accordance with N.J.A.C. 7:9A.
- 3. The following information shall be submitted to the Department with the application for an individual UIC permit for a Class V well:
 - i. Detailed plans for construction of the injection well, including materials used and geologic or soil characteristics;
 - ii. Detailed description and analyses of fluids to be injected; and

iii. Description of the method of injection.

- (c) Operating requirements for Class V wells are as follows:
 - 1. Injection wells constructed in accordance with N.J.S.A. 58:4A-4.1 shall be maintained in accordance with N.J.A.C. 7:9D or any other pertinent regulations, or in accordance with requirements of the UIC permit.
 - 2. Septic systems, disposal beds, or other subsurface sewage disposal systems shall be maintained in accordance with N.J.A.C. 7:9A or in accordance with the requirements of the UIC permit.
- (d) Plugging and abandonment requirements for Class V wells are as follows:

- 1. Class V wells shall be plugged and abandoned in accordance with the requirements of N.J.S.A. 58:4A-4.1 et seq. and N.J.A.C. 7:9D, where applicable. Cessation of injection operations constitutes abandonment in accordance with the requirements of N.J.S.A. 58:4A-4.1. The improper maintenance of a well may constitute abandonment of that well in accordance with N.J.S.A. 58:4A-4.1. The plugging and abandonment of injection wells constructed or operated in accordance with N.J.A.C. 7:9A are, at a minimum, to be abandoned in accordance with N.J.A.C. 7:9A-12.8.
- Large-capacity cesspools as identified in N.J.A.C. 7:14A-8.4(a)3i and motor vehicle waste disposal wells as identified in N.J.A.C. 7:14A-8.4(a)3ii shall be closed in a manner that does not cause a violation of the State primary drinking water regulations under N.J.A.C. 7:10, or any Ground Water Quality Standards under N.J.A.C. 7:9C. At a minimum:
 - i. Large-capacity cesspools and motor vehicle waste disposal wells shall be emptied of wastes. Any soil, gravel, or other loose material within two feet from the bottom and sides which were exposed to waste shall be removed (except for large-capacity cesspools that have not received industrial wastes). Following such emptying and removal, the cavity shall be filled with clean gravel, stones, or soil material;
 - ii. All influent and effluent lines shall be excavated, removed or sealed such that no leaching of contaminants can occur; and
 - All wastes or other materials emptied or removed under (d)2i above shall be managed in accordance with this chapter and the State Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., and its implementing rules at N.J.A.C. 7:26, 7:26A and 7:26G.
- 3. Other Class V wells shall be plugged and abandoned in accordance with the terms of a UIC permit. These permit conditions shall include the following conditions:
 - i. All septic systems, seepage pits, dry wells and cesspools shall be emptied of wastes and removed or filled with gravel, stones, or soil material, in a manner which is acceptable to the administrative authority as defined in N.J.A.C. 7:9A-1;
 - ii. All influent and effluent lines shall be excavated, removed or sealed such that no leaching of contaminants can occur; and
 - When components or residuals (for example, gravel filter material, fill material, soil) from an abandoned individual subsurface sewage disposal system are removed from the ground, such components or residuals shall be managed as follows:
 - (1) Any off site disposal of components and residuals from an

abandoned system shall be managed in accordance with the State Solid Waste Management Act (N.J.S.A. 13:1E-1 et seq.) and its implementing rules at N.J.A.C. 7:26, 7:26A and 7:26G; and

- (2) Onsite management of components and residuals from abandoned systems shall be in a manner which is acceptable to the administrative authority as defined in N.J.A.C. 7:9A-1.
- (e) The UIC permit-by-rule authorization for any Class V well which fails to comply with the requirements of this section automatically terminates.
- (f) Injection wells that exert a total pressure that exceeds the pressure exerted by the fluid under the influence of gravity at its height above the point of discharge plus the atmospheric pressure, shall be required to follow the standards described for Class I wells.
- (g) Requirements for converting a Class V motor vehicle waste disposal well to another type of Class V well are as follows:
 - 1. An application for an individual UIC permit shall be submitted, and shall include:
 - i. The information required under N.J.A.C. 7:14A-8.17;
 - ii. A description of how the requirements in (g)2 and 3 below will be met; and
 - iii. A description of how all motor vehicle waste will be managed in accordance with this chapter and the State Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., and its implementing rules at N.J.A.C. 7:26, 7:26A and 7:26G;
 - 2. All motor vehicle waste is segregated from the intended discharge by physical barriers and is not allowed to enter the well. The use of a semi-permanent plug as the means to segregate waste is not sufficient to convert a motor vehicle waste disposal well to another type of Class V well;
 - 3. The motor vehicle waste disposal well is emptied of wastes. Any soil, gravel, or other loose material within two feet from the bottom and sides which were exposed to waste is removed. All wastes or other materials emptied or removed are managed in accordance with this chapter and the State Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., and its implementing rules at N.J.A.C. 7:26, 7:26A and 7:26G;
 - 4. The Department finds that injection of motor vehicle waste into the well following conversion is unlikely based on the facility's compliance history and records showing proper waste disposal; and
 - 5. The Department approves such conversion in writing.

7:14A-8.17 Additional requirements for applications for individual UIC permits

- (a) In addition to the information required to be submitted pursuant to N.J.A.C. 7:14A-4 and 8.8, and after consultation with the Department, an applicant for an individual NJPDES UIC permit for a Class I, II, III or V well shall submit those items in (a)1 through 5 below as required by the Department.
 - 1. For a permit for an existing Class I, II, III and V well to operate or the construction or conversion of a new Class I, II, III and V well:
 - A map showing the injection well(s) for which a permit is sought and the applicable area of review, determined as per N.J.A.C. 7:14A-8.12(a). Within the area of review, the map shall show the number, or name, and location of all producing wells, injection wells, abandoned wells, dry holes, or wells, surface bodies of water, springs, mines (surface and subsurface), quarries, water wells and other pertinent surface features including residences and roads. All wells, reservoirs, and other bodies of water used for public water supply that are within a five mile radius of the injection well shall be indicated. The map shall also show geologic faults, if known or suspected;
 - A tabulation of data on all wells within the area of review which penetrate into the proposed injection zone. Such data shall include a description of each well's type, geological and geophysical logs, construction, date drilled, location, depth, record of plugging and/or completion, and any additional information the Department may require;
 - iii. Geologic name(s), maps, and cross sections indicating the general vertical and lateral limits of all underground sources of drinking water within the area of review, their position relative to the injection formation and the direction of water movement, where known, in each underground source of drinking water which may be affected by the proposed injection;
 - iv. Maps and cross sections detailing the geological structure of the local area;
 - v. Generalized maps and cross section illustrating the regional geologic setting;
 - vi. Proposed operating data as follows:
 - (1) Average and maximum daily rate and volume of the fluid to be injected;
 - (2) Average and maximum injection pressure; and

- (3) Source and analysis of the chemical, physical, radiological and biological characteristics of injection fluids;
- vii. Proposed formation testing program to obtain an analysis of the chemical, physical, and radiological characteristics of and other information on the receiving formation;
- viii. Proposed stimulation program;
- ix. Proposed injection procedure;
- x. Engineering drawings of the surface and subsurface construction details of the system;
- xi. Any expected changes in pressure, native fluid displacement, direction of movement of injection fluid;
- xii. Contingency plans to address all shut-ins or well failures so as to prevent migration of fluids into any underground source of drinking water;
- xiii. Plans (including maps) for meeting the monitoring requirements for Class I, II and III wells as specified in this section;
- xiv. For wells within the area of review which penetrate the injection zone but are not properly completed or plugged, the corrective action proposed to be taken under N.J.A.C. 7:14A-8.11; and
- xv. Construction procedures including a cementing and casing program, logging procedures, deviation checks, and a drilling, testing, and coring program.
- 2. For the approval of operation of a Class I, II, III and V well:
 - i. All available logging and testing program data on the well(s);
 - A demonstration of mechanical integrity pursuant to N.J.A.C. 7:14A-8.12(c);
 - iii. The actual operating data;
 - iv. The results of the formation testing program;
 - v. The actual injection procedure;
 - vi. The compatibility of injected waste with fluids in the injection zone and minerals in both the injection zone and the confining zone; and

- vii. The status of corrective or preventive action on defective wells in the area of review.
- 3. For the approval of the plugging and abandonment of a Class I, II, III and V well or of a plan for same:
 - i. The type and number of plugs to be used;
 - ii. The placement of each plug including the elevation of the top and bottom;
 - iii. The type and grade and quantity of cement to be used;
 - iv. The method for placement of the plugs; and
 - v. The procedures to be used to meet the requirements of N.J.A.C. 7:14A-8.12(d)3.
- 4. For Class I, II and III wells, the corrective or preventive action proposed to be taken under N.J.A.C. 7:14A-8.11.
- 5. For Class V wells which are subsurface disposal systems, other than those regulated under the Standards for Individual Subsurface Sewage Disposal Systems, N.J.A.C. 7:9A, the information set forth at N.J.A.C. 7:14A-7.13.

7:14A-8.18 Specific operating criteria and construction standards applicable to permit by rule authorizations for underground injection into seepage pits

- (a) This section sets forth the operating criteria and construction standards for underground injection into seepage pits under a permit-by-rule pursuant to N.J.A.C. 7:14A-8.5(b)5.
- (b) Design requirements are as follows:
 - 1. When required to protect against accumulation of fine particles that would impair the proper functioning of the seepage pit, a multiple compartment septic tank shall be designed and constructed in accordance with N.J.A.C. 7:9A-8.2.
 - 2. The percolating area shall be the total outside surface area of the seepage pit lining below the inlet and exclusive of any soil horizons with a percolation rate slower than 40 minutes per inch. The bottom of the seepage pit shall not be counted as part of the percolating area. The minimum percolating area shall be determined from the following table based upon the maximum daily volume of discharge and a weighted average of the percolation or permeability rates of all soil layers exposed

in the sidewalls. In no case, however, shall the percolating area be less than 110 square feet.

MINIMUM AREA REQUIRED FOR SEEPAGE PITS, BASED ON ONE GALLON OF LIQUID PER DAY, AND BASED ON THE PERCOLATION RATE OF THE SOIL

	Minimum Area
Average Percolation Rate	Per Gallon Per Day
(Min/inch)	(Square feet)
10 or less	0.48
11 to 20	0.72
21 to 30	0.96
31 to 40	1.20
over 40	not acceptable

- (c) Construction requirements are as follows:
 - 1. Seepage pits shall be constructed within an excavation affording adequate working space and shall be constructed of stone, brick, cinder, precast concrete or concrete block, or similar material laid dry with open joints where permeable strata have been penetrated, except that if the seepage pit is not of circular construction or if the surrounding ground is subject to cave-in, all horizontal joints shall be mortared so as to prevent structural failure. The following requirements shall be met:
 - i. All joints above the inlet, in all cases, shall be made watertight;
 - ii. Before placement of backfill, all sidewall areas shall be scarified; and
 - iii. The bottom of the seepage pit shall be filled with coarse gravel to a depth of one foot unless the bottom is in a sand or gravel formation.
 - 2. Seepage pits shall be backfilled according to the following procedure:
 - i. The space between the excavation and the seepage pit wall shall be backfilled with at least three inches of coarse gravel or filter material meeting New Jersey Department of Transportation's standards for coarse aggregate sizes 3, 4 and 24.
 - ii. Where cinder or concrete blocks are laid with core openings exposed, the space between the excavation and seepage pit wall shall be backfilled with at least six inches of two and one-half inch crushed stone or gravel.
 - iii. Backfill above the inlet shall be of earth similar to that found at the site which is free from large stones, tree stumps, broken masonry or waste construction material. and shall be thoroughly compacted by hand or mechanical tamping methods. The use of heavy machinery

for this purpose is prohibited.

- 3. Covers shall be constructed of reinforced concrete, shall be a minimum of three inches in thickness, watertight, and shall be designed and constructed so as not to be damaged by any load which is likely to be placed upon them.
- 4. At least one access opening with a removable, watertight cover and a minimum dimension of 24 inches shall be provided. Access openings shall meet the following requirements:
 - i. Access shall be adequate to permit pumping out of the pit as well as inspection and maintenance of the inlet;
 - ii. When the cover of the seepage pit is deeper than 12 inches below finished grade, the access opening shall be extended to within 12 inches of finished grade by means of a concrete riser with cast-iron manhole cover;
 - iii. When the access opening is below finished grade, a permanent marker at finished grade shall be provided to indicate its location; and
 - iv. When the access opening is at or above finished grade, the cover shall be bolted, locked or otherwise secured to prevent access by children.
- (d) Requirements for the submission of certifications are as follows:
 - 1. Any facility qualifying for this permit by rule shall submit an as-built certification from a New Jersey licensed professional engineer which certifies that the system was designed and constructed in accordance with the requirements of this section. The certification and a NJPDES-1 form shall be submitted within 30 days of the completion of construction to:

NJDEP

Division of Water Quality

Bureau of Nonpoint Pollution Control

PO Box 029

Trenton, New Jersey 08625-0029

APPENDIX A

EQUATION FOR AREA OF REVIEW

Modified Theis Equation for determining the "area of review" based on the assumption outlined in N.J.A.C. 7:14A-8.12

$$r := \frac{(2.25 \text{ K} \cdot \text{H} \cdot \text{t})^{0.5}}{\text{s} \cdot 10 \text{ X}}$$

Where

$$\mathbf{X} := \frac{4 \cdot \pi \cdot \mathbf{K} \cdot \mathbf{H} \cdot \mathbf{h}_{w} - \mathbf{h}_{bo} \cdot \mathbf{x} \cdot \mathbf{S}_{p} \cdot \mathbf{G}_{b}}{2.3 \cdot \mathbf{Q}}$$

r = Radius of endangering influence from injection well (length)

K = Hydraulic conductivity of the injection zone (length time)

H = Thickness of the injection zone (length)

t = Time of injection (time)

S = Storage coefficient (dimensionless)

Q = Injection rate (volume/time)

 h_{b0} = Observed original hydrostatic head of injection zone (length) measured from the base of the lowest underground source of drinking water

 h_W = Hydrostatic head of underground source of drinking water (length) measured from the base of the lowest underground source of drinking water

 $SpG_b = Specific gravity of fluid in the injection zone (dimensionless)$

 $\pi = 3.142$ (dimensionless)

SUBCHAPTER 9. GROUND WATER MONITORING REQUIREMENTS FOR SANITARY LANDFILLS

7:14A-9.1 Scope and Purpose

- (a) This subchapter establishes the requirements for conducting ground water monitoring at sanitary landfills, including design of the ground water monitoring system, sampling, parameters and frequency of analyses, evaluation of data, recordkeeping and reporting.
- (b) It is essential that the monitoring program provide adequate data over a sufficient period of time to accurately represent conditions and variations of background ground water quality and the hydrologic characteristic of the sanitary landfill. It is essential that the monitoring program be sufficient to ensure protection of ground water resources.

7:14A-9.2 Applicability

- (a) The requirements in this subchapter apply to all sanitary landfills, except as provided at (c), (d) and (e) below.
- (b) All sanitary landfills shall obtain a NJPDES DGW permit to conduct ground water monitoring as specified in this subchapter.
- (c) Ground water monitoring pursuant to N.J.A.C. 7:14A-9.3 through 9.8 will be suspended for a municipal solid waste landfill (MSWLF) if the owner or operator can demonstrate that there is no potential for migration of any hazardous constituents from the MSWLF to the uppermost aquifer during the active life of the unit and the post-closure care period. This demonstration shall be certified by a qualified ground water scientist and approved by the Department and shall be based upon:
 - 1. Site specific field collected measurements, sampling and analysis of physical, chemical, and biological processes affecting the contaminant fate and transport; and
 - 2. Contaminant fate and transport predictions that maximize contaminant migration and consider impacts on human health and environment.
- (d) For a sanitary landfill that is not a MSWLF under 40 CFR Parts 257 and 258, the Department may waive the requirement to sample for the complete list of Appendix A parameters when in detection mode, and for the complete list of the 40 C.F.R. 258 Appendix II parameters when in assessment or corrective monitoring mode. When the Department grants such a waiver, based upon the known characteristics of the waste and leachate quality, the contamination

potential of the site, or historical permit conditions, the Department shall provide an alternate list of parameters to be monitored that are consistent with those factors. All sanitary landfills remain subject to all other requirements of N.J.A.C. 7:14A-9.3 through 9.8.

- (e) The Department shall exempt a sanitary landfill from the requirement to obtain or maintain a NJPDES permit to conduct ground water monitoring as required by this subchapter when a ground water monitoring program equivalent to the provisions of this subchapter or 40 C.F.R. 258, whichever is more stringent, is being conducted pursuant to the requirements of the Industrial Site Recovery Act (N.J.S.A. 13:1K-6 et seq., as amended), the Spill Compensation and Control Act (N.J.S.A. 58:10-23.11), or the Procedures for Department Oversight of the Remediation of Contaminated Sites at N.J.A.C. 7:26C.
- (f) For the purposes of this subchapter, a "qualified ground water scientist" is a scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and has sufficient training and experience in ground water hydrology as may be demonstrated by state registration, professional certifications, or completion of accredited university programs that enable the individual to make sound professional judgments regarding ground water monitoring, containment fate transport, and corrective action.

7:14A-9.3 Ground water monitoring system performance standards

- (a) A ground water monitoring system shall consist of a sufficient number of wells, installed at appropriate locations and depths, to yield ground water samples from the uppermost aquifer that:
 - 1. Represent the quality of background ground water that has not been affected by leakage. A determination of background ground water quality may include sampling of wells that are not hydraulically upgradient of the solid waste facility area where:
 - i. Hydrogeologic conditions do not allow the owner or operator to determine what wells are hydraulically upgradient; or
 - ii. Sampling at other wells will provide an indication of background ground water quality that is as representative or more representative than that provided by the upgradient wells; and
 - 2. Represent the quality of ground water passing the relevant point of compliance specified by the Department under N.J.A.C. 7:14A-9.6. The downgradient monitoring system shall be installed at the relevant point of compliance specified by the Department that ensures detection of ground water contamination in the uppermost aquifer. When physical obstacles preclude installation of ground water monitoring wells at the relevant

point of compliance, the down-gradient monitoring system may be installed at the closest practicable distance hydraulically down-gradient from the relevant point of compliance specified by the Department that ensures detection of ground water contamination in the uppermost aquifer

- (b) The Department shall approve a multiunit ground water monitoring system instead of separate ground water monitoring systems for each MSWLF when the facility has several units, provided the multiunit ground water monitoring system meets the requirement of (a) above and shall be as protective of human health and the environment as individual monitoring systems for each MSWLF, based on the following factors:
 - 1. The number, spacing, and orientation of the sanitary landfills;
 - 2. The hydrogeologic setting;
 - 3. The site history;
 - 4. The engineering design of the sanitary landfills; and
 - 5. The type of waste accepted at the sanitary landfills.
- (c) Monitoring wells shall be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing shall be screened or perforated and packed with gravel or sand, where necessary, to enable collection of ground water samples. The annular space (that is, the space between the bore hole and well casing) above the sampling depth shall be sealed to prevent contamination of samples and the ground water. In addition to these general well construction standards, all monitoring wells shall be constructed in accordance with the edition of the Department's "Field Sampling Procedures Manual" applicable at the time of construction, an alternate method approved by the Department, or as set forth in the NJPDES-DGW permit.
 - 1. The owner or operator of a sanitary landfill shall notify the Department that the design, installation, development, and decommissioning of any monitoring wells, piezometers and other measurement, sampling, and analytical devices documentation has been placed in the records maintained by the facility; and
 - 2. The monitoring wells, piezometers, and other measurement, sampling, and analytical devices shall be operated and maintained so that they perform to design specifications for the duration of the monitoring program.
- (d) The number, spacing, and depths of monitoring systems shall be:
 - 1. Determined based upon site specific technical information that shall include thorough characterization of:

- i. Aquifer thickness, ground water flow rate, ground water flow direction including seasonal and temporal fluctuations in ground water flow; and
- ii. Saturated and unsaturated geologic strata and fill materials overlying the uppermost aquifer, materials comprising the uppermost aquifer, and materials comprising the confining bed defining the lower boundary of the uppermost aquifer including but not limited to: thickness, stratigraphy, lithology, hydraulic conductivity, porosity and effective porosity.
- (e) The ground water monitoring system shall perform in accordance with the standards established in this section, and shall consist of a minimum of four monitoring wells, placed such that there is one background quality well, and three hydraulically downgradient wells, located in the uppermost aquifer into which a discharge or leak is likely to occur.
- (f) In addition to the minimum number of wells stated in (e) above, additional wells may be required in order to satisfy the performance standards for a ground water monitoring system in N.J.A.C. 7:14A-9.3(a). The number and spacing of these additional wells shall be capable of intercepting a contaminant plume emanating from a leachate leak located at the most downgradient edge of the waste area. This spacing shall be determined as specified in (d) above.
- (g) The Department shall waive the requirements of (e) and (f) above based upon one of the following:
 - 1. Performance of geophysical methods of analysis such as resistivity/conductivity that indicate or confirm that there are no contaminant leaks, or when there are leaks or discharges, that wells are placed in the most concentrated zones of any and all contaminant plumes emanating from the landfill; or
 - 2. Another acceptable method approved in advance by the Department that demonstrates that the minimum number of monitoring wells is not necessary to indicate whether or not the landfill is leaking. A high quality contaminant transport model is one example of an acceptable method.
- (h) The adequacy of the monitoring system shall be certified by a qualified ground water scientist and/or approved by the Department. The certification shall indicate that the performance standards of this section, or of the permit, are met. Within 14 days of this certification, the owner or operator shall notify the Department that the certification has been placed in the records maintained by the facility.
- (a) In addition to monitoring requirements specified elsewhere in this subchapter, the following requirements shall apply to installation, maintenance, sampling

and closure of monitoring wells:

- 1. Ground_water monitoring wells shall be constructed in accordance with the edition of the Department's "Field Sampling Procedures Manual" applicable at the time of well construction, an alternate method approved by the Department, or as set forth in the NJPDES-DGW permit.
- 2. A well permit, as required by N.J.S.A. 58:4A-1 et seq., shall be obtained prior to the installation of any ground water monitoring well. A clear and accurate record or base map providing any monitoring well location, depth, elevation and achievable pumping rate shall be kept at the facility by the owner or operator and be made available to the Department.
- 3. Ground water sampling shall be conducted in accordance with the edition of the Department's "Field Sampling Procedures Manual" applicable at the time of well sampling, an alternate method approved by the Department, or as set forth in the NJPDES-DGW permit.
- 4. Wells shall be capped to prevent precipitation from entering the well bore hole or introduction of extraneous material and substances into the well which might invalidate analytical results. All monitoring wells shall be cased in a manner that maintains the integrity of the monitoring well bore hole. Wells shall be screened and packed with gravel or sand where necessary to enable sample collection at depths where appropriate. The annular space (that is, the space between the bore hole and well casing) above the sampling depth shall be sealed with a suitable material (for example, cement grout or bentonite slurry) to prevent contamination of samples and ground water.
- 5. The elevation of the top of the well casing for each ground water monitoring well shall be established and said elevation shall be permanently marked on the well casing. The elevation established shall be in relation to the New Jersey Geodetic Control Survey datum. Each monitoring well casing shall be permanently marked with a number assigned or approved by the Department. This number will typically be the well permit number issued with the permit to construct the well.

7:14A-9.5 Ground water Monitoring Program Requirements for Sanitary Landfills

(a) The ground water monitoring program shall include sampling and analysis procedures that are designed to ensure monitoring results that provide an accurate representation of ground water quality at the background and downgradient wells installed in compliance with N.J.A.C. 7:14A-9.3(a). The owner or operator shall notify the Department, pursuant to the NJPDES permit, that the sampling and analysis program documentation has been placed in the operating record and the program shall include procedures and techniques for:

- 1. Sample collection;
- 2. Sample preservation and shipment;
- 3. Analytical procedures;
- 4. Chain of custody control; and
- 5. Quality assurance and quality control.
- (b) The ground water monitoring program shall include sampling and analytical methods that are appropriate for ground water sampling and that accurately measure hazardous constituents and other monitoring parameters in ground water samples. Ground water samples shall not be field filtered prior to laboratory analysis.
- (c) The sampling procedures and frequency shall be protective of human health and the environment.
- (d) Ground water elevations shall be measured in each well immediately prior to purging, each time ground water is sampled. The owner or operator shall determine the rate and direction of ground water flow each time ground water is sampled Ground water elevations in wells which monitor the same area shall be measured within a period of time short enough to avoid temporal variations in ground water flow which could preclude accurate determination of ground water flow rate and direction.
- (e) The owner or operator shall establish background ground water quality in a hydraulically upgradient or background well(s) for each of the monitoring parameters or constituents required in the particular ground water monitoring program that applies to the sanitary landfill, as determined pursuant to N.J.A.C. 7:14A-9.7(a) or 9.8(a). Background ground water quality may be established at wells that are not located hydraulically upgradient from the sanitary landfill if it meets the requirements of N.J.A.C. 7:14A-9.3(a)1.
- (f) The number of samples collected to establish ground water quality data shall be consistent with the appropriate statistical procedures determined pursuant to (g) below. The sampling procedures shall be those specified under N.J.A.C. 7:14A-9.7(b) for detection monitoring, N.J.A.C. 7:14A-9.8(b) and (d) for assessment monitoring, and N.J.A.C. 7:14A-9.9(b) for corrective measures.
- (g) The owner or operator shall specify in the records maintained by the facility one of the following statistical methods to be used in evaluating ground water monitoring data for each hazardous constituent. The statistical test shall be conducted separately for each hazardous constituent in each well. Guidance for selecting and conducting the appropriate tests, and for evaluating the results of the tests is described in detail in Statistical Analysis of Ground Water

Monitoring Data At RCRA Facilities—Interim Final Guidance Document, 4/89 (NTIS #PB 89-151-047. EPA/530-SW-89-026).

- 1. A parametric analysis of variance (ANOVA) followed by multiple comparison procedures to identify statistically significant evidence of contamination. The method shall include estimation and testing of the contrasts between the mean and the background mean levels for each compliance well for each constituent;
- 2. An analysis of variance (ANOVA) based on ranks followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method shall include estimation and testing of the contrasts between each compliance well's median and the background median levels for each compliance well for each constituent;
- 3. A tolerance or prediction interval procedure in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit;
- 4. A control chart approach that gives control limits for each constituent; or
- 5. Another statistical test method that meets the performance standards of (h) below. The owner or operator shall place a justification for this alternative in the records maintained by the facility and notify the Department, pursuant to the NJPDES permit, of the use of this alternative test. The justification shall demonstrate that the alternative method meets the performance standards of (h) below.
- (h) Any statistical method chosen pursuant to (g) above shall comply with the following performance standards, as appropriate:
 - 1. The statistical method used to evaluate ground water monitoring data shall be appropriate for the distribution of chemical parameters or hazardous constituents. If the distribution of the chemical parameters or hazardous constituents is shown by the owner or operator to be inappropriate for a normal theory test, then the data must be transformed or a distribution free theory test must be used. If the distributions for the constituents differ, more than one statistical method shall be needed.
 - 2. If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background constituent concentrations or a ground water protection standard, the test shall be done at a type I error level no less than 0.01 for each testing period. If a multiple comparisons procedure is used the type I experiment wise error rate for each testing period shall be no less than 0.05. However, the type I error of no less than 0.01 for individual well

comparison shall be maintained. The performance standard does not apply to tolerance intervals, prediction intervals or control charts.

- 3. If a control chart approach is used to evaluate ground water monitoring data, the specific type of control chart and its associated parameter values shall be protective of human health and the environment. The parameters shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.
- 4. If a tolerance interval or a prediction interval is used to evaluate ground water monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval shall contain shall be protective of human health and the environment. These parameters shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.
- 5. The statistical method shall account for data below the limit of detection with one or more statistical procedures that are protective of human health and the environment. Any practical quantitation limit (PQL) that is used in the statistical method shall be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.
- 6. If necessary, the statistical method shall include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.
- (i) The owner or operator shall determine whether or not there is a statistically significant increase over background values for each parameter or constituent required in the particular ground water monitoring program that applies to the sanitary landfill, as determined under N.J.A.C. 7:14A-9.7(a) or 9.8(a).
 - 1. In determining whether a statistically significant increase has occurred, the owner or operator shall compare the ground water quality of each parameter or constituent at each monitoring well designated pursuant to N.J.A.C. 7:14A-9.3(a)2 to the background value of that constituent, according to the statistical procedures and performance standards specified at (g) and (h) above.
 - 2. Within a reasonable period of time after completing sampling and analysis, not to exceed 90 days unless otherwise approved by the Department in writing, the owner or operator shall determine whether there has been a statistically significant increase over background at each monitoring well.

7:14A-9.6 Relevant Point of Compliance

- (a) The relevant point of compliance for a MSWLF shall be no more than 150 meters from the actual disposal area and shall be located on land owned by the owner of the sanitary landfill. In determining the relevant point of compliance, the Department shall consider the following factors:
 - 1. The hydrogeologic characteristics of the facility and the surrounding land;
 - 2. The volume and physical and chemical characteristics of the leachate;
 - 3. The quantity, quality and direction of flow of ground water;
 - 4. The proximity and withdrawal rate of the ground water users;
 - 5. The availability of alternative drinking water supplies; and
 - 6. The existing quality of the ground water, including other sources of contamination and their cumulative impacts on the ground water, and whether the ground water is currently used or reasonably expected to be used for drinking water.
- (b) The relevant point of compliance for sanitary landfills that are not MSWLFs shall be the sanitary landfill property boundary, but when possible, shall be no more than 150 meters from the actual disposal area within the "set back" as defined in N.J.A.C. 7:26-1.6.

7:14A-9.7 Leak Detection Monitoring Program

- (a) Leak detection monitoring is required at sanitary landfills at all ground water monitoring wells installed as part of a ground water monitoring system established pursuant to N.J.A.C. 7:14A-9.3(a)1 and 2. At a minimum, a detection monitoring program shall include the monitoring for the constituents listed in Appendix A to this subchapter, incorporated herein by reference.
 - 1. The Department shall remove any of the Appendix A monitoring parameters for a sanitary landfill if it can be shown that the removed constituents are not reasonably expected to be in or derived from the waste contained in the sanitary landfill unit.
 - 2. The Department will establish an alternative list of inorganic indicator parameters for a sanitary landfill, in lieu of some or all of the heavy metals (constituents 1 through 15 in Appendix A to this subchapter), if the alternative parameters provide a reliable indication of inorganic releases from the sanitary landfill to the ground water. In determining alternative parameters, the Department shall consider the following factors:

- i. The types, quantities, and concentrations of constituents in wastes managed at the sanitary landfill;
- ii. The mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the sanitary landfill;
- iii. The detectability of indicator parameters, waste constituents and reaction products in the ground water; and
- iv. The concentration or values and coefficients of variation of monitoring parameters or constituents in the ground water background.
- (b) The monitoring frequency for all constituents listed in Appendix A to this subchapter, or in the alternative list approved in accordance with (a)2 above, shall be at least semiannual during the active life of the facility (including closure) and the post closure period. A minimum of four independent samples from each well (background and downgradient) shall be collected and analyzed for the Appendix A constituents, or the alternative list approved in accordance with (a)2 above during the first semiannual sampling event. At least one sample from each well (background and downgradient) shall be collected and analyzed during subsequent semiannual sampling events. The Department will specify an appropriate alternative frequency for repeated sampling and analysis for Appendix A constituents, or the alternative list approved in accordance with (a)2 above during the active life (including closure) and the post closure care period. The alternative frequency during the active life (including closure) shall be no less than annual. The alternative frequency shall be based on consideration of the following factors:
 - 1. The lithology of the aquifer and unsaturated zone;
 - 2. The hydraulic conductivity of the aquifer and unsaturated zone;
 - 3. The ground water flow rates;
 - 4. The minimum distance between upgradient edge of the sanitary landfill and downgradient monitoring well screen (minimum distance of travel), and
 - 5. The resource value of the aquifer.
- (c) If the owner or operator of a sanitary landfill determines, pursuant to N.J.A.C. 7:14A-9.5(g), that there is a statistically significant increase over background for one or more of the constituents listed in Appendix A-Part A to this subchapter or in the alternative list approved in accordance with (a)2 above, at any monitoring well at the boundary specified under N.J.A.C. 7:14A-9.3(a)2,

the owner or operator shall:

- 1. Within 14 days of this finding, place a notice in the records maintained by the facility indicating which constituents have shown statistically significant changes from background levels, and notify the Department that this notice was placed in the operating record; and
- 2. Establish an assessment monitoring program meeting the requirements of N.J.A.C. 7:14A-9.8 within 90 days except as provided at (d) below.
- 3. The owner or operator may demonstrate that a source other than a sanitary landfill caused the contamination or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in ground water quality. A report documenting this demonstration shall be certified by a qualified ground water scientist or approved by the Department and be placed in the records maintained by the facility. If a successful demonstration is made and documented the owner or operator may continue detection monitoring as specified in this section. If, after 90 days, a successful demonstration is not made, the owner or operator shall initiate an assessment monitoring program as required in N.J.A.C. 7:14A-9.8.

7:14A-9.8 Assessment Monitoring Program

- (a) Assessment monitoring is required whenever a statistically significant increase over background has been detected for one or more of the constituents listed in Appendix A to this subchapter or in the alternative list established in accordance with N.J.A.C. 7:14A-9.7(a)2.
- (b) Within 90 days of initiating an assessment monitoring program, and annually thereafter, the owner or operator shall sample and analyze the ground water for all constituents identified in 40 C.F.R. 258 Appendix II. A minimum of one sample from each downgradient well shall be collected and analyzed during each sampling event. For any constituent detected in the downgradient wells as a result of the complete 40 C.F.R. 258 Appendix II analysis a minimum of four independent samples from each well (background and downgradient) shall be collected and analyzed to establish background for the constituents. The Department will specify an appropriate subset of wells to be sampled and analyzed for 40 C.F.R. 258 Appendix II constituents during assessment monitoring. The Department will remove any of the 40 C.F.R. 258 Appendix II monitoring parameters for a sanitary landfill if it can be shown that the removed constituents are not reasonably expected to be in or derived from the waste contained in the unit.
- (c) The Department will specify an appropriate alternate frequency for repeated sampling and analysis for the full set of 40 C.F.R. 258 Appendix II constituents required to be monitored pursuant to (b) above, during the active

life (including closure) and post closure care of the unit based on the following factors:

- 1. The lithology of the aquifer and unsaturated zone;
- 2. The hydraulic conductivity of the aquifer and unsaturated zone;
- 3. The ground water flow rate;
- 4. The minimum distance between upgradient edge of the sanitary landfill and downgradient monitoring well screen (minimum distance of travel);
- 5. The resource value of the aquifer; and
- 6. The nature (fate and transport) of any constituents detected.
- (d) After obtaining the results from the initial or subsequent sampling required pursuant to (b) above, the owner or operator shall:
 - 1. Within 14 days, place a notice in the records maintained by the facility identifying the 40 C.F.R. 258 Appendix II constituents that have been detected and notify the Department that this notice has been placed in the records maintained by the facility;
 - Within 90 days, and on at least a semiannual basis thereafter, resample all 2. wells installed as part of the ground water monitoring system established pursuant to N.J.A.C. 7:14A-9.3(a) and conduct analyses for all constituents in Appendix A to this subchapter or in the alternative list established pursuant to N.J.A.C. 7:14A-9.7(a)2, and for those constituents in 40 C.F.R. 258 Appendix II that are detected in response to (b) above and record their concentrations in the records maintained by the facility. At least one sample from each well (background and downgradient) shall be collected and analyzed during these sampling events. The Department will specify an alternative monitoring frequency during the active life (including closure) and the post closure period for the constituents referred to in this paragraph. The alternative frequency for Appendix A constituents or the alternative list established pursuant to N.J.A.C. 7:14A-9.7(a)2 during the active life (including closure) shall be no less than annual. The alternative frequency shall be based on consideration of the factors specified at (c) above;
 - 3. Establish background concentrations for any constituents detected pursuant to (b) or (d) above; and
 - 4. Establish ground water protection standards for all constituents detected pursuant to (b) or (d) above. The ground water protection standards shall be established in accordance with (h) below, or when available, shall be

the Ground Water Quality Standards set forth in N.J.A.C. 7:9C.

- (e) If the concentrations of all 40 C.F.R. 258 Appendix II constituents are shown to be at or below background values, using the statistical procedures set forth at N.J.A.C. 7:14A-9.5(g), for two consecutive sampling events, the owner or operator shall notify the Department of this finding and may resume detection monitoring pursuant to N.J.A.C. 7:14A-9.7.
- (f) If the concentrations of any 40 C.F.R. 258 Appendix II constituents are above background values, but all concentrations are below the ground water protection standard established pursuant to (h) below using the statistical procedures in N.J.A.C. 7:14A-9.5(g), the owner or operator shall continue assessment monitoring in accordance with this section.
- (g) If one or more 40 C.F.R. 258 Appendix II constituents are detected at statistically significant levels above the ground water protection standards established pursuant to (d) 4 above in any sampling event, the owner or operator shall within 14 days of this finding, place a notice in the records maintained by the facility identifying the 40 C.F.R. 258 Appendix II constituents that have exceeded the ground water protection standard and notify the Department and all appropriate local government officials that the notice has been placed in said records.
 - 1. The owner or operator shall also:
 - i. Characterize the nature and extent of the release by installing additional monitoring wells as necessary;
 - ii. Install at least one additional monitoring well at the facility boundary in the direction of contaminant migration and sample this well in accordance with (d)(2) above;
 - iii. Notify all persons who own the land or reside on the land that directly overlies any part of the plume of contamination if contaminants have migrated off-site as indicated by sampling of wells in accordance with this subsection; and
 - iv. Initiate an assessment of corrective measures as required by N.J.A.C. 7:14A-9.9 within 90 days; or
 - 2. The owner or operator may demonstrate that a source other than a sanitary landfill unit caused the contamination, or that the statistically significant increase resulted from error in sampling, analysis, or natural variation in ground water quality. A report documenting this demonstration shall be certified by a qualified ground water scientist or approved by the Department and placed in the records maintained by the facility. If a successful demonstration is made, the owner or operator shall continue

monitoring in accordance with the assessment monitoring program established pursuant to this section, and may resume to detection monitoring if the40 C.F.R. 258 Appendix II constituents are at or below background as specified at (e) above. Until a successful demonstration is made, the owner or operator shall comply with (g) above, including initiating an assessment of corrective measures.

(h) Ground water protection standards for each 40 C.F.R. 258 Appendix II parameter shall be determined according to the criteria in N.J.A.C. 7:9C or in accordance with 40 C.F.R. 258.55(h) through (i), whichever is more stringent.

7:14A-9.9 Assessment of Corrective Measures.

- (a) Within 90 days of finding that any of the constituents listed in 40 C.F.R. 258 Appendix II have been detected at a statistically significant level exceeding the ground water protection standards under N.J.A.C. 7:14A-9.8(h), the owner or operator shall initiate an assessment of corrective measures. Such assessment shall be completed within a reasonable period of time, not to exceed 90 days unless otherwise approved by the Department in writing.
- (b) The owner or operator shall continue to monitor in accordance with the assessment monitoring program specified in N.J.A.C. 7:14A-9.8.
- (c) The assessment shall include an analysis of the effectiveness of potential corrective measures in meeting all of the requirements and objectives of the remedy as described under N.J.A.C. 7:14A-9.10, addressing at least the following:
 - 1. The performance, reliability, ease of implementation, and potential impacts of appropriate potential remedies, including safety impacts, cross-media impacts, and control of exposure to any residual contamination;
 - 2. The time required to begin and complete the remedy;
 - 3. The costs of remedy implementation; and
 - 4. The institutional requirements such as State or local permit requirements or other environmental or public health requirements that may substantially affect implementation of the remedy(s).
- (d) The owner or operator shall discuss the results of the corrective measures assessment, prior to the selection of remedy, in a public meeting with interested and affected parties.

7:14A-9.10 Selection of remedy

(a) Based on the results of the assessment of corrective measures conducted

pursuant to N.J.A.C. 7:14A-9.9, the owner or operator shall select a remedy that, at a minimum, meets the standards listed at (b) below. The owner or operator shall notify the Department, within 14 days of selecting a remedy, that a report describing the selected remedy has been placed in the records maintained by the facility and how it meets the standards in (b) below.

- (b) Remedies shall:
 - 1. Be protective of human health and the environment;
 - 2. Attain the ground water protection standard specified pursuant to N.J.A.C. 7:14A-9.8(h);
 - 3. Control the source(s) of releases so as to reduce or eliminate, to the maximum extent practicable, further releases of 40 C.F.R. 258 Appendix II constituents into the environment that may pose a threat to human health or the environment;
 - 4. Comply with standards for management of wastes specified in N.J.A.C. 7:14A-9.11(d); and
 - 5. Be implemented in accordance with provisions in the solid waste facility permit, or the closure plan approval issued in accordance with N.J.A.C. 7:26.
- (c) In selecting a remedy that meets the standards of (b) above, the owner or operator shall consider the following factors:
 - 1. The long and short term effectiveness and protectiveness of the potential remedy(s), along with the degree of certainty that the remedy will prove successful based on:
 - i. The magnitude of reduction of existing risks;
 - ii. The magnitude of residual risks in terms of likelihood of other releases due to waste remaining following implementation of a remedy:
 - iii. The type and degree of long term management required, including monitoring, operation, and maintenance;
 - iv. The short term risks that might be posed to the community, workers, or the environment during implementation of such a remedy, including potential threat to human health and the environment associated with excavation, transportation, and redisposal or containment;
 - v. The time until full protection is achieved;

- vi. The potential for exposure of humans and environmental receptors to remaining wastes, considering the potential threat to human health and the environment associated with excavation, transportation, redisposal, or containment;
- vii. The long term reliability of the engineering and institutional controls; and
- viii. The potential need for replacement of the remedy.
- 2. The effectiveness of the remedy in controlling the source to reduce further releases based on:
 - i. The extent to which containment practices will reduce further releases; and
 - ii. The extent to which treatment technologies may be used.
- 3. The ease or difficulty of implementing a potential remedy(s) based on:
 - i. The degree of difficulty associated with constructing the technology;
 - ii. The expected operational reliability of the technology;
 - iii. The need to coordinate with and obtain necessary approvals and permits from other agencies;
 - iv. The availability of necessary equipment and specialists; and
 - v. The available capacity and location of needed treatment, storage, and disposal services.
- 4. The practicable capability of the owner or operator, including a consideration of the technical and economic capability.
- 5. The degree to which community concerns are addressed by a potential remedy(s).
- (d) The owner or operator shall specify as part of the selected remedy a schedule(s) for initiating and completing remedial activities. Such a schedule shall specify the initiation of remedial activities within a reasonable period of time, not to exceed 90 days unless otherwise approved by the Department in writing, taking into consideration the factors set forth in (d) (1)-(8) below:
 - 1. The extent and nature of contamination;
 - 2. The practical capabilities of remedial technologies in achieving compliance with ground water protection standards established under

N.J.A.C. 7:14A-9.8(g) or (h) and other objectives of the remedy;

- 3. The availability of treatment or disposal capacity for wastes managed during implementation of the remedy;
- 4. The desirability of utilizing technologies that are not currently available, but which may offer significant advantages over already available technologies in terms of effectiveness, reliability, safety, or ability to achieve remedial objectives;
- 5. The potential risks to human health and the environment from exposure to contamination prior to completion of the remedy;
- 6. The resource value of the aquifer including:
 - i. Current and future uses;
 - ii. The proximity and withdrawal rate of users;
 - iii. Ground water quantity and quality;
 - iv. The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituent;
 - v. The hydrogeologic characteristic of the facility and surrounding land;
 - vi. Ground water removal and treatment costs; and
 - vii. The cost and availability of alternative water supplies;
- 7. The practicable capability of the owner or operator; and
- 8. Other relevant factors.
- (e) The Department shall determine that remediation of a release of a 40 CFR 258 Appendix II constituent from a sanitary landfill is not necessary if the owner or operator demonstrates to the satisfaction of the Department that:
 - 1. The ground water is additionally contaminated by substances that have originated from a source other than a sanitary landfill and those substances are present in concentrations such that cleanup of the release from the sanitary landfill would provide no significant reduction in risk to actual or potential receptors;
 - 2. The constituent(s) is present in ground water that:
 - i. Is not currently or reasonable expected to be a source of drinking water; and

- ii. Is not hydraulically connected with waters to which the hazardous constituents are migrating or are likely to migrate in a concentration(s) that would exceed the ground water protection standards established under N.J.A.C. 7:14A-9.8(h);
- 3. Remediation of the release(s) is technically impracticable; or
- 4. Remediation results in unacceptable cross-media impacts.
- (f) A determination by the Department pursuant to (e) above shall not affect the authority of the State to require the owner or operator to undertake source control measures or other measures that may be necessary to eliminate or minimize further releases to the ground water, to prevent exposure to the ground water, or to remediate the ground water to concentrations that are technically practicable and significantly reduce threats to human health or the environment.
- (g) When ground water contamination is known to have migrated outside the sanitary landfill boundary, the sanitary landfill shall request to conduct a cleanup in accordance with the Procedures for Department Oversight of the Remediation of Contaminated Sites at N.J.A.C. 7:26C within 90 days unless it can be demonstrated that a source other than the MSWLF caused the contamination, or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in ground water quality. A report documenting this demonstration shall be certified by a qualified ground water scientist or approved by the Department and placed in the records maintained by the facility.

7:14A-9.11 Implementation of the Corrective Action Program

- (a) Based on the schedule established under N.J.A.C. 7:14A-9.10(d) for initiation and completion of remedial activities, the owner/operator shall:
 - 1. Establish and implement a corrective action ground water monitoring program that:
 - i. At a minimum, meets the requirements of an assessment monitoring program under N.J.A.C. 7:14A-9.8;
 - ii. Indicates the effectiveness of the corrective action remedy; and
 - iii. Demonstrates compliance with ground water protection standards pursuant to (e) below;
 - 2. Implement the corrective action remedy selected under N.J.A.C. 7:14A-9.10; and

- 3. Take any interim measures necessary to ensure the protection of human health and the environment. Interim measures shall, to the greatest extent practicable, be consistent with the objectives of and contribute to the permanence of any remedy that may be required pursuant to N.J.A.C. 7:14A-9.10. The following factors shall be considered by an owner or operator in determining whether interim measures are necessary:
 - i. The time required to develop and implement a final remedy;
 - ii. The actual or potential exposure of nearby populations or environmental receptors to hazardous constituents;
 - iii. The actual or potential contamination of drinking water supplies or sensitive ecosystems;
 - iv. The further degradation of the ground water that may occur if remedial action is not initiated expeditiously;
 - v. Weather conditions that may cause hazardous constituents to migrate or be released;
 - vi. The risks of fire or explosion, or potential for exposure to hazardous constituents as a result of an accident or failure of a container or handling system; and
 - vii. Other situations that may pose threats to human health and the environment.
- (b) An owner or operator may determine, based on information developed after implementation of the remedy has begun or other information, that compliance with N.J.A.C. 7:14A-9.10(b) is not being achieved through the remedy selected. In such a case, the owner or operator shall implement other methods or techniques that could practicably achieve compliance with the requirements, unless the owner or operator makes the determination under (c) below.
- (c) If the owner or operator determines that compliance with N.J.A.C. 7:14A-9.10(b) cannot be practically achieved with any currently available methods, the owner or operator shall:
 - 1. Obtain certification of a qualified ground water scientist or approval by the Department that compliance with N.J.A.C. 7:14A-9.10(b) cannot be practically achieved with any currently available methods;
 - 2. Implement alternate measures to control exposure of humans or the environment to residual contamination, as necessary to protect human health and the environment;
 - 3. Implement alternate measures for control of the sources of contamination,

or for removal or decontamination of equipment, units, devices, or structures that are:

- i. Technically practicable; and
- ii. Consistent with the overall objective of the remedy; and
- 4. Notify the Department within 14 days that a report justifying the alternative measures prior to implementing such alternative measures has been placed in the records maintained by the facility.
- (d) All solid wastes that are managed pursuant to a remedy required under N.J.A.C. 7:14A-9.10, or an interim measure required under (a)3 above, shall be managed in a manner that:
 - 1. Is protective of human health and the environment; and
 - 2. Complies with applicable RCRA requirements.
- (e) Remedies selected pursuant to N.J.A.C. 7:14A-9.10 shall be considered complete when:
 - 1. The owner or operator complies with the ground water protection standards established under N.J.A.C. 7:14A-9.8(h) at all points within the plume of contamination that lie beyond the ground water monitoring well system established pursuant to N.J.A.C. 7:14A-9.3(a);
 - 2. Compliance with the ground water protection standards established under N.J.A.C. 7:14A-9.8(h) has been achieved by demonstrating that concentrations of 40 C.F.R. 258 Appendix II constituents have not exceeded the ground water protection standard(s) for a period of three consecutive years using the statistical procedures and performance standards in N.J.A.C. 7:14A-9.5(g) and (h). The Department will specify an alternative length of time during which the owner or operator shall demonstrate that concentrations of 40 C.F.R. 258 Appendix II constituents have not exceeded the ground water protection standard(s) taking into consideration:
 - i. Extent and concentration of the release(s);
 - ii. Behavior characteristics of the hazardous constituents in the ground water
 - iii. Accuracy of monitoring or modeling techniques, including any seasonal, meteorological, or other environmental variabilities that may affect the accuracy; and
 - iv. Characteristics of the ground water; and

- 3. All actions required to complete the remedy have been satisfied.
- (f) Upon completion of the remedy, the owner or operator shall notify the Department within 14 days that a certification that the remedy has been completed in compliance with the requirements of N.J.A.C. 7:14A-9.11(e) has been placed in the records maintained by the facility. The certification shall be signed by the owner or operator and by a qualified ground water scientist or approved by the Department.
- (g) When, upon completion of the certification, the owner or operator determines that the corrective action remedy has been completed in accordance with the requirements of (e) above, the owner or operator shall be released from the requirements for financial assurance for corrective action under 40 CFR 258.73.

7:14A-9.12 Application Requirements For NJPDES-DGW Permits for Sanitary Landfills

- (a) In addition to the information required pursuant to N.J.A.C. 7:14A-4.3, an applicant for a NJPDES-DGW sanitary landfill monitoring permit shall ensure that the Department has in its possession maps, cross sections and reports as follows. Maps may be combined if all required features are clearly shown.
 - 1. A location map:
 - i. The site shall be located on a U.S. Geological Survey 7.5 minute series Topographic Quadrangle. The quadrangle shall be the most recent revision.
 - ii. The site shall be shown by legal boundaries surveyed by a New Jersey licensed land surveyor indicating roadways, adjacent property ownerships and all inhabited structures and facilities within one half mile of site boundaries.
 - 2. A topographic map(s):
 - The topographic map of the facility shall have a horizontal scale of at least one inch equals 200 feet and a contour interval of five feet. Contour elevations shall be based on established N.J. Geological Control Survey Datum and the map shall be keyed into the New Jersey State plane coordinate systems. The topographic map(s) shall indicate original, existing, and proposed topography.
 - ii. An additional topographic map shall indicate all surface waters within one-half mile of the sanitary landfill site and all water supply reservoirs and public recreational bodies of water within one mile of the landfill boundary;

- 3. A ground water supply map showing the depth and location of wells within one-half mile radius and all public supply wells or wells permitted to pump over 100,000 gallons per day or 70 gallons per minute within 1½ miles of the proposed sanitary landfill shall be plotted. Pump capacity or diversion allocation for all wells yielding greater than 70 gallons per minute shall be reported and keyed to the map. All occupied buildings, including private dwellings, within one-half mile radius of the proposed sanitary landfill facility shall be plotted and identified as to type (for example, industrial, commercial, or residential). The service areas, if any, of municipal or community water supply systems shall be identified;
- 4. A detailed geologic map of the entire site, including all the area outside the sanitary landfill site boundary to a distance of one-half mile. The base data for this map shall be compiled by a geologist. The scale of the geologic map shall be at least one inch equals 400 feet and shall show the following information:
 - i. Bedrock outcrops;
 - ii. Dip and strike of sedimentary formations and foliation trends and dip angles of igneous and metamorphic rocks;
 - iii. Fault(s) and prominent shear zone(s) trends;
 - iv. Joint or fracture trends in bedrock outcrops including dip angles;
 - v. The trend direction of solution channels in carbonate rocks and sink holes;
 - vi. The location of any active or abandoned mine workings; and
 - vii. A geologic report describing the major characteristics of the formation(s), including thickness, lithology, structural features, degree of weathering, and amount of overburden;
- 5. Geologic cross-section(s) and fence diagrams, preferably in three dimensions, showing the spatial relationship of the sanitary landfill, the geology, the monitoring wells, any other engineered site improvements, or other significant features that influence the interpretation of analytical results and explanations;
- 6. Soils map and borings:
 - A soils map shall be submitted with a scale of at least one inch equals 400 feet. Soils information should be drawn from the U.S.D.A. Soil Conservation Service Report(s) with site specific soils data determined by a soil scientist using the U.S.D.A. textural

classification system on data obtained from the required borings and other available data.

- ii. A sufficient number of borings necessary to determine soil characteristics, depth to bedrock (where applicable), permeability and ground water elevations shall be drilled. Where, in the judgment of the Department, submitted information is insufficient to adequately evaluate the site, additional and/or deeper borings, supplemented by excavations, test pits or geophysical methods will be required.
 - (1) Subsurface data obtained by borings shall be collected by split spoon drive method, shelby tube or diamond bit coring. Auger borings are not acceptable.
 - (2) All borings shall be a minimum depth of 10 feet below the seasonally high water table. In no case shall borings be less than 20 feet below the lowest elevation by the sanitary landfill.
 - (3) Split spoon, shelby tube and diamond bit core samples shall be labeled and properly stored for a minimum period of one year from the date of the permit application.
 - (4) Profiles shall be shown for each boring giving the depths and texture of each soil stratum or horizon and the elevation of any ground water or aquifer encountered, and shall include the date each boring was taken;
- 7. A hydrogeologic report shall be provided for the site and for a one-half mile radius of the proposed site. The hydrogeologic report shall include:
 - i. A piezometric map based upon stabilized ground water elevations below the site showing direction(s) and rate(s) of ground water flow and an indication as to whether the ground water is unconfined, confined (artesian) or both for the proposed sanitary landfill;
 - ii. A generalized piezometric map based upon available data including, but not limited to, existing topography, surface drainage and existing well data, shall be provided for the area within one-half mile radius of the site boundary;
 - iii. A survey of wells identified on the ground water supply map prepared pursuant to (b)3 above including the use, approximate yield, and depth of each well; and
 - iv. All public water supplies and wells capable of pumping over 70 gallons per minute or 100,000 gallons per day within a 1 ½ mile

radius of the sanitary landfill, including an assessment of the potential impact on those supplies by the sanitary landfill;

- 8. Maps showing the location of all existing and proposed ground water monitor wells; and
- 9. Results of leachate generation calculations provided by performing a water balance calculation such as the Hydrologic Evaluation of Landfill Performance (HELP) Model, EPA/600/9-94/xxx, U.S. Environmental Protection Agency Risk Reduction Engineering Laboratory, Cincinnati, OH.
- 10. Leachate generation calculations shall be provided by performing a water balance calculation.

7:14A-9 APPENDIX A - CONSTITUENTS FOR DETECTION MONITORING

Number	Common Name ¹	CAS
		RN ²
1	Antimony	(Total)
2	Arsenic	(Total)
3	Barium	(Total)
4	Beryllium	(Total)
5	Cadmium	(Total)
6	Chromium	(Total)
7	Cobalt	(Total)
8	Copper	(Total)
9	Lead	(Total)
10	Nickel	(Total)
11	Selenium	(Total)
12	Silver	(Total)
13	Thallium	(Total)
14	Vanadium	(Total)
15	Zinc	(Total)

		1
16	Acetone	67-64-1
17	Acrylonitrile	107-13-1
18	Benzene	71-43-2
19	Bromochloromethane	74-97-5
20	Bromodichloromethane	75-27-4
21	Bromoform; Tribromomethane	75-25-2
22	Carbon disulfide	75-15-0
23	Carbon tetrachloride	56-23-5
24	Chlorobenzene	108-90-7
25	Chloroethane; Ethyl chloride	75-00-3
26	Chloroform; Trichloromethane	67-66-3
27	Dibromochloromethane;	124-48-1
	Chlorodibromomethane	
28	1,2-Dibromo-3-chloropropane; DBCP	96-12-8
29	1,2-Dibromoethane; Ethylene dibromide;	106-93-4
	EDB	
30	o-Dichlorobenzene; 1,2-Dichlorobenzene	95-50-1
31	p-Dichlorobenzene; 1,4-Dichlorobenzene	106-46-7
32	trans-1,4-Dichloro-2-butene	110-57-6
33	1,1-Dichloroethane; Ethylidene chloride	75-34-3
34	1,2-Dichloroethane; Ethylene dichloride	107-06-2
35	1,1-Dichloroethylene; 1,1-	75-35-4
	Dichloroethene Vinylidene	
	chloride	

36	cis-1,2-Dichloroethylene; cis-1,2-	156-59-2
	Dichloroethene	

¹This list contains 47 volatile organics for which possible analytical procedures provided in EPA Report SW-846 'Test Methods for Evaluating Solid Waste,' third edition, November 1986, as revised December 1987, includes Method 8260; and 15 metals for which SW-846 provides either Method 6010 or a method from the 7000 series of methods. Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

 $^{^2}$ Chemical Abstracts Service registry number. Where 'Total' is entered, all species in the ground water that contain this element are included.

37	trans-1,2-Dicloroethylene; trans-1,2- Dichloroethene	156-60-5
38	1,2-Dichloropropane; Propylene dichloride	78-87-5
39	cis-1,3-Dichloropropene	10061-01-5
40	trans-1,3-Dichloropropene	10061-02-6
41	Ethylbenzene	100-41-4
42	2-Hexanone; Methyl butyl ketone	591-78-6
43	Methyl bromide; Bromomethane	74-83-9
44	Methyl chloride; Chloromethane	74-87-3
45	Methylene bromide; Dibromomethane	74-95-3
46	Methylene chloride; Dichloromethane	75-09-2
47	Methyl ethyl ketone; MEK; 2-Butanone	78-93-3
48	Methyl iodide; Iodomethane	74-88-4
49	4-Methyl-2-pentanone; Methyl isobutyl	108-10-1
	ketone	
50	Styrene	100-42-5
51	1,1,1,2-Tetrachloroethane	630-20-6

52	1,1,2,2-Tetrachloroethane	79-34-5
53	Tetrachloroethylene; Tetrachloroethene;	127-18-4
	Per- chloroethylene.127-18-4	
54	Toluene	108-88-3
55	1,1,1-Trichloroethane; Methylchloroform	71-55-6
56	1,1,2-Trichloroethane	79-00-5
57	Trichloroethylene; Trichloroethene	79-01-6
58	Trichloro-fluoromethane; CFC-11	75-69-4
59	1,2,3,-Trichloropropane	96-18-4
60	Vinyl accetate	108-05-4
61	Vinyl chloride	75-01-4
62	Xylenes	1330-20-7

Part B Parameters

Ammonia (as N)	
Nitrate (as N)	
Total Dissolved Solids (TDS)	
Conductivity	

SUBCHAPTER 10. GROUND WATER MONITORING REQUIREMENTS FOR HAZARDOUS WASTE FACILITIES

7:14A-10.1 Scope and purpose

- (a) This subchapter establishes the requirements for conducting ground water monitoring at hazardous waste facilities, as required by N.J.A.C. 7:26G and 40 C.F.R. Parts 264 and 265, including design of the ground water monitoring system, sampling, parameters and frequency of analyses, evaluation of data, recordkeeping, and reporting.
- (b) It is essential that the monitoring program provide adequate data over a sufficient period of time to accurately represent conditions and variations of background ground water quality and the hydrologic characteristic of the hazardous waste facility site area. It is essential that the monitoring program be sufficient to ensure protection of ground water resources.

7:14A-10.2 Applicability

- (a) The requirements in this subchapter apply to:
 - Hazardous waste facilities as defined by N.J.A.C. 7:26G-8 through 7:26G-9.
- (b) All hazardous waste facilities shall obtain a NJPDES-DGW permit to conduct ground water monitoring and corrective action as specified in this subchapter, unless exempted pursuant to N.J.A.C. 7:14A-2.5(a)9 or 10.

7:14A-10.3 Exemptions

- (a) The owner or operator of a hazardous waste facility unit or units is not subject to regulation for releases into the uppermost aquifer under this subchapter if:
 - 1. The owner or operator is exempt pursuant to the rules governing hazardous waste facilities in N.J.A.C. 7:26G-8 through 9.

7:14A-10.4 General ground water monitoring well requirements

- (a) In addition to monitoring requirements specified elsewhere in this subchapter, all of the following requirements apply to the installation, maintenance, sampling and closure of monitoring wells.
 - 1. Ground water monitoring wells shall be constructed in accordance with the edition of the Department's "Field Sampling Procedures Manual"

applicable at the time of well construction, an alternate method approved by the Department, or as set forth in the NJPDES-DGW permit.

- 2. A well permit, as required by N.J.S.A. 58:4A-1 et seq., shall be obtained prior to the installation of any ground water monitoring well. A clear and accurate record or base map providing the monitoring well location, depth, elevation and achievable pumping rate shall be kept at the facility by the owner or operator and made available to the Department.
- 3. Ground water sampling and analysis shall be conducted in accordance with the edition of the Department's "Field Sampling Procedures Manual" applicable at the time of sampling, an alternate method approved by the Department, or as set forth in the NJPDES-DGW permit.
- 4. Wells shall be capped to prevent precipitation from entering the well bore hole or introduction of extraneous material and substances into the well which might invalidate analytical results. All monitoring wells shall be cased in a manner that maintains the integrity of the monitoring well bore hole. Wells shall be screened and packed with gravel or sand where necessary to enable sample collection at depths where appropriate. The annular space (that is, the space between the bore hole and well casing) above the sampling depth shall be sealed with a suitable material (for example, cement grout or bentonite slurry) to prevent contamination of samples and ground water.
- 5. The elevation of the top of the well casing for each ground water monitoring well shall be established and said elevation shall be permanently marked on the well casing. The elevation established shall be in relation to the New Jersey Geodetic Control Survey datum. Each monitoring well casing shall be permanently marked with a number to be assigned or approved by the Department. This will typically be the well permit number issued with the permit to construct the well.

7:14A-10.5 Ground water monitoring program requirements for hazardous waste facilities

- (a) Any owner or operator subject to this subchapter shall conduct a monitoring program as follows:
 - 1. Whenever any hazardous constituent pursuant N.J.A.C. 7:14A-10.7 from a hazardous waste facility unit is detected at a compliance point established pursuant to N.J.A.C. 7:14A-10.9, the owner or operator shall institute a compliance monitoring program under N.J.A.C. 7:14A-10.13. "Detected" is defined as statistically significant evidence of contamination as described in N.J.A.C. 7:14A-10.12(f);
 - 2. Whenever the ground water protection standard under N.J.A.C. 7:14A-

10.6 is exceeded, the owner or operator shall institute a corrective action program under N.J.A.C. 7:14A-10.14. "Exceeded" is defined as statistically significant evidence of increased contamination as described in N.J.A.C. 7:14A-10.13(d);

- Whenever hazardous constituents under N.J.A.C. 7:14A-10.7 from a hazardous waste facility unit exceed concentration limits under N.J.A.C. 7:14A-10.8 in ground water between the relevant point of compliance under N.J.A.C. 7:14A-10.9 and the downgradient hazardous waste facility property boundary, the owner or operator shall institute a corrective action program under N.J.A.C. 7:14A-10.14; or
- ii. In all other cases, the owner or operator shall institute a detection monitoring program under N.J.A.C. 7:14A-10.11.
- (b) The Department shall specify in the NJPDES-DGW permit the specific elements of the monitoring and response program. The Department may include one or more of the programs identified in (a) above in the NJPDES-DGW permit as may be necessary to protect human health and the environment and shall specify the circumstances under which each of the programs will be required. In deciding whether to require the owner or operator to institute a particular program, the Department shall consider the potential adverse effects on human health and the environment that might occur before final administrative action on a permit modification application to incorporate such a program could be taken.

7:14A-10.6 Ground water protection standard

The owner or operator shall comply with conditions specified in the NJPDES-DGW permit that are designed to ensure that hazardous constituents under N.J.A.C. 7:14A-10.7 detected in the ground water from a hazardous waste facility unit do not exceed the concentration limits under N.J.A.C. 7:9C or 7:14A-10.8 in the uppermost aquifer underlying the hazardous waste facility area beyond the relevant point of compliance under N.J.A.C. 7:14A-10.9 during the compliance period under N.J.A.C. 7:14A-10.10. The Department shall establish this ground water protection standard in the NJPDES-DGW permit when hazardous constituents have been detected in the ground water.

7:14A-10.7 Hazardous constituents

(a) The Department shall specify in the NJPDES-DGW permit the hazardous constituents to which the ground water protection standard of N.J.A.C. 7:14A-10.6 applies. Hazardous constituents are constituents identified in 40 CFR Part 261 Appendix VIII that have been detected in ground water in the uppermost aquifer under lying a hazardous waste facility unit and that are reasonably

expected to be in or derived from waste contained in a hazardous waste facility unit, unless the Department has excluded them under (b) below.

- (b) The Department shall exclude a 40 CFR Part 261 Appendix VIII constituent from the list of hazardous constituents specified in the NJPDES-DGW permit if it finds that the constituent is not capable of posing a substantial present or potential hazard to human health or the environment based on the following:
 - 1. Potential adverse effects on ground water quality, considering:
 - i. The physical and chemical characteristics of the waste in the hazardous waste facility unit, including its potential for migration;
 - ii. The hydrogeological characteristics of the facility and surrounding land;
 - iii. The quantity of ground water and the direction of ground water flow:
 - iv. The proximity and withdrawal rates of ground water users;
 - v. The current and future uses of ground water in the area;
 - vi. The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground water quality;
 - vii. The potential for health risks caused by human exposure to waste constituents;
 - viii. The potential damage to wild life, crops, vegetation, and physical structures caused by exposure to waste constituents; and
 - ix. The persistence and permanence of the potential adverse effects;
 - 2. Potential adverse effects on hydraulically connected surface water quality, considering:
 - i. The volume and physical and chemical characteristics of the waste in the hazardous waste facility unit;
 - ii. The hydrogeological characteristics of the facility and surrounding land;
 - iii. The quantity and quality of ground water, and the direction of ground water flow;
 - iv. The patterns of rainfall in the region;

- v. The proximity of the hazardous waste facility unit to surface waters;
- vi. The current and future uses of surface waters in the area and any water quality standards established for those surface waters;
- vii. The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality;
- viii. The potential for health risks caused by human exposure to waste constituents;
- ix. The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and
- x. The persistence and permanence of the potential adverse effects.
- (c) In making any determination under (b) above, the Department shall assess any identified underground sources of drinking water.

7:14A-10.8 Concentration limits

- (a) The Department shall specify in the NJPDES-DGW permit concentration limits in the ground water for hazardous constituents established under N.J.A.C. 7:14A-10.7. The concentration of a hazardous constituent:
 - 1. Shall not exceed the background level of that constituent in the ground water at the time that limit is specified in the permit;
 - 2. For any of the constituents listed in (a)2i below, shall not exceed the ground water quality criteria of N.J.A.C. 7:9C, or the 40 CFR 264.93 Table 1 concentration, whichever is more stringent, if the background level of the constituent is below the more stringent of the relevant concentration limits for those parameters; or
 - i. The following constitutents shall be evaluated in accordance with (a)2 above: arsenic, silver, barium, endrin, cadmium, lindane, chromium, methoxychlor, lead, toxaphene, mercury, 2, 4-D, selenium, 2, 4, 5-TP Silvex; or
 - Shall not exceed an alternate limit established by the Department under (b) below.
- (b) The Department shall establish an alternate concentration limit for a hazardous constituent if it finds that the constituent shall not pose a substantial present or potential hazard to human health or the environment if such alternate concentration limit is not exceeded, based on the following:
 - 1. Potential adverse effects on ground water quality, considering:

- i. The physical and chemical characteristics of the waste in the hazardous waste facility unit, including its potential for migration;
- ii. The hydrogeological characteristics of the facility and surrounding land;
- iii. The quantity of ground water and the direction of ground water flow;
- iv. The proximity and withdrawal rates of ground water users;
- v. The current and future uses of ground water in the area;
- vi. The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground water quality;
- vii. The potential for health risks caused by human exposure to waste constituents;
- viii. The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure. to waste constituents; and
- ix. The persistence and permanence of the potential adverse effects;
- 2. Potential adverse effects on hydraulically connected surface water quality, considering:
 - i. The volume and physical and chemical characteristics of the waste in the hazardous waste facility unit;
 - ii. The hydrogeological characteristics of the facility and surrounding land;
 - iii. The quantity and quality of ground water, and the direction of ground water flow;
 - iv. The patterns of rainfall in the region;
 - v. The proximity of the hazardous waste facility unit to surface waters;
 - vi. The current and future uses of for those surface waters in the area and any water quality standards established for those surface waters;
 - vii. The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality;
 - viii. The potential for health risks caused by human exposure to waste constituents;

- ix. The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and
- x. The persistence and permanence of the potential adverse effects.
- (c) In making any determination under (b) above, the Department shall assess any identified underground sources of drinking water.

7:14A-10.9 Relevant point of compliance

- (a) The Department shall specify in the NJPDES-DGW permit the relevant point of compliance at which the ground water protection standard of N.J.A.C. 7:14A-10.6 applies and at which monitoring shall be conducted. The relevant point of compliance is a vertical surface located at the hydraulically downgradient limit of the hazardous waste facility unit (unit) that extends down into the uppermost aquifer underlying the hazardous waste facility unit(s).
- (b) The hazardous waste management unit is the limit projected in the horizontal plane of the area on which hazardous waste shall be placed during the active life of a hazardous waste facility unit.
 - 1. The hazardous waste management unit includes horizontal space taken up by any liner, dike, or other barrier designed to contain hazardous waste in a hazardous waste facility unit.
 - 2. If the facility contains more than one hazardous waste facility unit, the hazardous waste management unit is described by an imaginary line circumscribing the several hazardous waste facility units.
- (c) Unless otherwise determined by the Department, the relevant point of compliance specified shall be no more than 150 meters from the hazardous waste management unit boundary and shall be located on land owned by the owner of the hazardous waste facility. In determining the relevant point of compliance, the Department shall consider the following factors:
 - 1. The hydrogeologic characteristics of the facility and the surrounding land;
 - 2. The volume and physical and chemical characteristics of the leachate;
 - 3. The quantity, quality and direction of flow of ground water;
 - 4. The proximity and withdrawal rate of the ground water users;
 - 5. The availability of alternative drinking water supplies; and
 - 6. The existing quality of the ground water, including other sources of contamination and their cumulative impacts on the ground water, and

whether the ground water is currently used or reasonably expected to be used for drinking water.

7:14A-10.10 Compliance period

- (a) The Department shall specify in the NJPDES-DGW permit the compliance period during which the ground water protection standard of N.J.A.C. 7:14A-10.6 applies. The compliance period is the number of years equal to the active life of the hazardous waste management unit in N.J.A.C. 7:14A-10.9(b) (including any hazardous waste management activity prior to permitting and the closure period.)
- (b) The compliance period begins when the owner or operator initiates a compliance monitoring program meeting the requirements of N.J.A.C. 7:14A-10.13.
- (c) If the owner or operator is engaged in a corrective action program at the end of the compliance period specified in (a) above, the compliance period is extended until the owner or operator can demonstrate that the ground water protection standard of N.J.A.C. 7:14A-10.6 has not been exceeded for a period of three consecutive years.

7:14A-10.11 Ground water monitoring system performance standards

- (a) The owner or operator shall comply with the following requirements for any ground water monitoring program developed to satisfy N.J.A.C. 7:14A-10.12, 10.13 or 10.14. A ground water monitoring system shall consist of a sufficient number of wells, installed at appropriate locations and depths to yield ground water samples from the upper most aquifer that:
 - 1. Represent the quality of background water that has not been affected by leakage from a hazardous waste facility unit.
 - i. A determination of background ground water quality may include sampling of wells that are not hydraulically upgradient of the hazardous waste management area as described at N.J.A.C. 7:14A-10.9(b), where:
 - (1) Hydrogeologic conditions do not allow the owner or operator to determine what wells are hydraulically upgradient; and
 - (2) Sampling at other wells will provide an indication of background ground water quality that is representative or more representative than that provided by the upgradient wells;
 - 2. Represent the quality of ground water passing the relevant point of compliance; and

- 3. Allow for the detection of contamination when hazardous waste or hazardous constituents have migrated from the hazardous waste management area to the uppermost aquifer.
- (b) If a facility contains more than one hazardous waste facility unit, separate ground water monitoring systems are not required for each hazardous waste facility unit provided that provisions for sampling the ground water in the uppermost aquifer will enable detection and measurement at the relevant point of compliance of hazardous constituents from the hazardous waste facility units that have entered the ground water in the uppermost aquifer.
- (c) Monitoring wells shall be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing shall be screened or perforated and packed with gravel or sand, where necessary, to enable collection of ground water samples. The annular space (that is, the space between the bore hole and well casing) above the sampling depth shall be sealed to prevent contamination of samples and the ground water. In addition to these general well construction standards, all monitoring wells shall be constructed in accordance with the edition of the Department's "Field Sampling Procedures Manual" applicable at the time of construction, an alternate method approved by the Department, or as set forth in the NJPDES-DGW permit.
- (d) The ground water monitoring system shall include sampling and analysis procedures that are designed to ensure monitoring results that provide a reliable indication of ground water quality below the hazardous waste management area as described at N.J.A.C. 7:14A-10.9(b). At a minimum, the program shall include procedures and techniques for:
 - 1. Sample collection;
 - 2. Sample preservation and shipment;
 - 3. Analytical procedures; and
 - 4. Chain of custody control.
- (e) The ground water monitoring system shall include sampling and analytical methods that are appropriate for ground water sampling and that accurately measure hazardous constituents in ground water samples.
- (f) The ground water monitoring system shall include a determination of the ground water surface elevation each time ground water is sampled.
- (g) In detection monitoring or, where appropriate, in compliance monitoring, data on each hazardous constituent specified in the permit shall be collected from background wells and wells at the compliance point(s). The number and kinds of samples collected to establish background shall be appropriate for the form

of statistical test employed, following generally accepted statistical principles. The sample size shall be as large as necessary to ensure with reasonable confidence that a contaminant release to ground water from a facility will be detected. The owner or operator shall determine an appropriate sampling procedure and interval for each hazardous constituent listed in the NJPDES-DGW permit which shall be specified in the NJPDES-DGW permit upon approval by the Department. This sampling procedure shall be:

- 1. A sequence of at least four samples, taken at an interval that ensures, to the greatest extent technically feasible, that an independent sample is obtained, by reference to the uppermost aquifer's effective porosity, hydraulic conductivity, and hydraulic gradient, and the fate and transport characteristics of the potential contaminants, or
- 2. An alternate sampling procedure approved by the Department.
- (h) The owner or operator shall specify one of the following statistical methods to be used in evaluating ground water monitoring data for each hazardous constituent which, upon approval by the Department, shall be specified in the NJPDES-DGW permit. The statistical test shall be conducted separately for each hazardous constituent in each well. Where practical quantification limits (PQLs) are used in any of the following statistical procedures to comply with (i)5 below, the PQL shall be approved by the Department. Use of any of the following statistical methods shall be protective of human health and the environment and shall comply with the performance standards in (i) below.
 - 1. A parametric analysis of variance (ANOVA) followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method shall include estimation and testing of the contrasts between the mean and the background mean levels for each compliance well for each constituent;
 - 2. An analysis of variance (ANOVA) based on ranks followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method shall include estimation and testing of the contrasts between the median and the background median levels for each compliance well for each constituent;
 - 3. A tolerance or prediction interval procedure in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit;
 - 4. A control chart approach that gives control limits for each constituent; or
 - 5. Another statistical test method approved by the Department.

- (i) Any statistical method chosen pursuant to (h) above shall comply with the following performance standards, as appropriate:
 - 1. The statistical method used to evaluate ground water monitoring data shall be appropriate for the distribution of chemical parameters or hazardous constituents. If the distribution of the chemical parameters or hazardous constituents is shown by the owner or operator to be inappropriate for a normal theory test, then the data must be transformed or a distribution free theory test must be used. If the distribution for the constituents differ, more than one statistical method shall be needed.
 - 2. If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background constituent concentration or a ground water protection standard, the test shall be done at a Type I error level no less than 0.01 for each testing period. If a multiple comparison procedure is used, the Type I experimentwise error rate for each testing period shall be no less than 0.05; however, the Type I error of no less than 0.01 for individual well comparison shall be maintained. This performance standard does not apply to tolerance intervals, prediction intervals or control charts.
 - 3. If a control chart approach is used to evaluate ground water monitoring data, the specific type of control chart and its associated parameter values shall be proposed by the owner or operator and approved by the Department if it finds it to be protective of human health and the environment.
 - 4. If a tolerance interval or a prediction interval is used to evaluate ground water monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval shall contain, shall be proposed by the owner or operator and approved by the Department if it finds these parameters to be protective of human health and the environment. These parameters shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.
 - 5. The statistical method shall account for data below the limit of detection with one or more statistical procedures that are protective of human health and the environment. Any practical quantification limit (PQL) approved by the Department under (h) above that is used in the statistical method shall be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.
 - 6. If necessary, the statistical method shall include procedures to control or correct for seasonal and spatial variability as well as temporal correlation

in the data.

(j) Ground water monitoring data collected in accordance with (g) above, including actual levels of constituents, shall be maintained in the permanent records maintained by the facility. The Department shall specify in the permit when the data shall be submitted for review.

7:14A-10.12 Leak detection monitoring program

- (a) An owner or operator required to establish a leak detection monitoring program under this subchapter shall monitor for indicator parameters (for example, specific conductance, total organic carbon, or total organic halogen), or waste constituents or reaction products that provide a reliable indication of the presence of hazardous constituents in ground water. The Department shall specify the parameters or constituents to be monitored in the NJPDES-DGW permit, based on the following factors:
 - 1. The types, quantities, and concentrations of constituents in wastes managed at the hazardous waste facility unit;
 - 2. The mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the hazardous waste facility unit;
 - 3. The detectability of indicator parameters, waste constituents, and reaction products in ground water; and
 - 4. The concentrations or values and coefficients of variation of proposed monitoring parameters or constituents in the ground water background.
- (b) The owner or operator shall install a ground water monitoring system at the relevant point of compliance specified under N.J.A.C. 7:14A-10.9. The ground water monitoring system shall comply with N.J.A.C. 7:14A-10.11(a), (b) and (c).
- (c) The owner or operator shall conduct a ground water monitoring system for each chemical parameter and hazardous constituent specified in the permit pursuant to (a) above in accordance with N.J.A.C. 7:14A-10.11(g). The owner or operator shall maintain a complete and continuous record of ground water analytical data as measured and in a form necessary for the determination of statistical significance under N.J.A.C. 7:14A-10.11(h).
- (d) The Department shall specify the frequencies for collecting samples and conducting statistical tests to determine whether there is statistically significant evidence of contamination for any parameter or hazardous constituent specified pursuant to (a) above in accordance with N.J.A.C. 7:14A-10.11(g). A sequence of at least four samples from each well (background and compliance

wells) shall be collected at least semiannually during leak detection monitoring.

- (e) The owner or operator shall determine the ground water flow rate and direction in the uppermost aquifer at least annually.
- (f) The owner or operator shall determine whether there is statistically significant evidence of contamination for any chemical parameter or hazardous constituent specified pursuant to (a) above at a frequency specified pursuant to (d) above.
 - 1. In determining whether statistically significant evidence of contamination exists, the owner or operator shall use the method(s) specified under N.J.A.C. 7:14A-10.11(h). These method(s) shall compare data collected at the compliance point(s) to the background ground water quality data.
 - 2. The owner or operator shall determine whether there is statistically significant evidence of contamination at each monitoring well at the relevant point of compliance within a reasonable period of time after completion of sampling. The Department shall specify in the NJPDES-DGW permit what period of time is reasonable, after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of ground water samples.
- (g) If the owner or operator determines pursuant to (f) above that there is statistically significant evidence of contamination for chemical parameters or hazardous constituents specified pursuant to (a) above at any monitoring well at the relevant point of compliance, the owner or operator shall:
 - 1. Notify the Department of this finding in writing within seven days. The notification shall indicate what chemical parameters or hazardous constituents have shown statistically significant evidence of contamination;
 - 2. Immediately sample the ground water in all monitoring wells and determine whether constituents in the list of 40 C.F.R. Part 264 Appendix IX are present, and if so, in what concentration;
 - 3. For any 40 C.F.R. Part 264 Appendix IX compounds found in the analysis pursuant to (g)2 above, the owner or operator may resample within one month and repeat the analysis for those compounds detected. If the results of the second analysis confirm the initial results, then these constituents shall form the basis for compliance monitoring. If the owner or operator does not resample for the compounds found pursuant to (g)2 above, the hazardous constituents found during this initial 40 C.F.R. Part 264 Appendix IX analysis shall form the basis for compliance monitoring;

- 4. Within 90 days after statistically significant evidence for contamination is identified, submit to the Department an application for a permit modification to establish a compliance monitoring program meeting the requirements of N.J.A.C. 7:14A-10.13. The application shall include the following information:
 - i. Identification of the concentration or any 40 C.F.R. Part 264 Appendix IX constituent detected in the ground water at each monitoring well at the compliance point;
 - ii. Any proposed changes to the ground water monitoring system at the facility necessary to meet the requirements of N.J.A.C. 7:14A-10.13;
 - iii. Any proposed additions or changes to the monitoring frequency, sampling and analysis procedures or methods, or statistical methods used at the facility necessary to meet the requirements of N.J.A.C. 7:14A-10.13; and
 - iv. For each hazardous constituent detected at the relevant compliance point, a proposed concentration limit under N.J.A.C. 7:14A-10.8(a) 1 or 2, or a notice of intent to seek an alternate concentration limit under N.J.A.C. 7:14A-10.8(b);
- 5. Within 180 days after statistically significant evidence for contamination is identified, submit to the Department:
 - i. All data necessary to justify an alternate concentration limit sought under N.J.A.C. 7:14A-10.8(b); and
 - ii. Engineering feasibility plan for a corrective action program necessary to meet the requirement of N.J.A.C. 7:14A-10.14, unless:
 - All hazardous constituents identified under (g)2 above are listed in N.J.A.C. 7:14A-10.8(a)2i and their concentrations do not exceed the ground water quality criteria of N.J.A.C. 7:9C, or the 40 C.F.R. 264.94 Table 1 concentration, whichever is more stringent; or
 - (2) The owner or operator has sought an alternate concentration limit under N.J.A.C. 7:14A-10.8(b) for every hazardous constituent identified under (g)2 above; and
- 6. If the owner or operator determines, pursuant to (f) above, that there is a statistically significant difference for chemical parameters or hazardous constituents specified pursuant to (a) above at any monitoring well at the compliance point, the owner or operator may demonstrate that a source other than the owner/operator's hazardous waste facility unit caused the

contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the ground water. The owner operator may make a demonstration under this paragraph in addition to, or in lieu of, submitting a permit modification application under (g)4 above; however, the owner or operator is not relieved of the requirement to submit a permit modification application within the time specified in (g)4 above unless the demonstration made under this paragraph successfully shows that a source other than a hazardous waste facility unit caused the increase, or that the increase resulted from error in sampling or analysis. In making a demonstration under this paragraph, the owner or operator shall:

- i. Notify the Department in writing within seven days of determining statistically significant evidence of contamination at the relevant point of compliance that the owner or operator intends to make a demonstration under this paragraph;
- ii. Within 90 days after determining statistically significant evidence of contamination, submit a report to the Department which demonstrates that a source other than a hazardous waste facility unit caused the contamination or that the contamination resulted from error in sampling or analysis;
- iii. Within 90 days after receipt by the Department of the report required in ii above, submit to the Department an application for a permit modification to make any appropriate changes to the leak detection monitoring program facility; and
- iv. Continue to monitor in accordance with the leak detection monitoring program established under this section.
- (h) If the owner or operator determines that the leak detection monitoring program no longer satisfies the requirements of this section, the owner or operator shall, within 90 days, submit an application for a permit modification to make any appropriate changes to the leak detection monitoring program.

7:14A-10.13 Compliance monitoring program

- (a) The owner or operator required to establish a compliance monitoring program under this subchapter shall monitor the ground water at the relevant point(s) of compliance to determine whether hazardous waste facility units are in compliance with the ground water protection standard under N.J.A.C. 7:14A-10.6. The Department shall specify the ground water protection standard in the NJPDES-DGW permit, including:
 - 1. A list of the hazardous constituents identified under N.J.A.C. 7:14A-10.7;

- 2. Concentration limits under N.J.A.C. 7:14A-10.8 for each of those hazardous constituents;
- 3. The relevant point of compliance under N.J.A.C. 7:14A-10.9; and
- 4. The compliance period under N.J.A.C. 7:14A-10.10.
- (b) The owner or operator shall install a ground water monitoring system at the compliance point as specified under N.J.A.C. 7:14A-10.9. The ground water monitoring system shall comply with N.J.A.C. 7:14A-10.11(a), (b) and (c).
- (c) The Department shall specify the sampling procedures and statistical methods appropriate for the specified hazardous constituents and the facility, consistent with N.J.A.C. 7:14A-10.11(g) and (h).
 - 1. The owner or operator shall conduct a sampling program for each chemical parameter or hazardous constituent in accordance with N.J.A.C. 7:14A-10.11(g).
 - 2. The owner or operator shall record ground water analytical data as measured and in a form necessary for the determination of statistical significance under N.J.A.C. 7:14A-10.11(h) for the compliance period of the facility.
- (d) The owner or operator shall determine whether there is statistically significant evidence of increased contamination for any chemical parameter or hazardous constituent specified pursuant to (a) above at a frequency specified under (f) below.
 - 1. In determining whether statistically significant evidence of increased contamination exists, the owner or operator shall use the method(s) specified under N.J.A.C. 7:14A-10.11(h). The method(s) shall compare data collected at the compliance point(s) to a concentration limit developed pursuant to N.J.A.C. 7:14A-10.8.
 - 2. The owner or operator shall determine whether there is statistically significant evidence of increased contamination at each monitoring well at the compliance point within a reasonable time period after completion of sampling. The Department shall specify that time period in the NJPDES-DGW permit, after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of ground water samples.
- (e) The owner or operator shall determine the ground water flow rate and direction in the uppermost aquifer at least annually.
- (f) The Department shall specify the frequencies for collecting samples and

conducting statistical tests to determine statistically significant evidence of increased contamination in accordance with N.J.A.C. 7:14A-10.11(g). A sequence of at least four samples from each well (background and compliance wells) shall be collected at least semi-annually during the compliance period of the facility.

- (g) The owner or operator shall analyze samples from all monitoring wells at the compliance point for all constituents contained in 40 C.F.R. Part 264 Appendix IX at least annually to determine whether additional hazardous constituents are present in the uppermost aquifer and, if so, at what concentration pursuant to procedures in N.J.A.C. 7:14A-10.12(f). If the owner or operator finds 40 C.F.R. Part 264 Appendix IX constituents in the ground water that are not already identified in the permit as monitoring constituents, the owner or operator may resample within one month and repeat the 40 C.F.R. 264 Appendix IX analysis. If the second analysis confirm the presence of new constituents, the owner or operator shall report the concentration of these additional constituents to the Department within seven days after the completion of the second analysis and add them to the list of constituents to be sampled for. If the owner or operator chooses not to resample, then the owner or operator shall report the concentrations of these additional constituents to the Department within seven days after completion of the initial analysis and add them to the list of constituents to be sampled for.
- (h) If the owner or operator determines pursuant to (d) above that any concentration limits under N.J.A.C. 7:14A-10.8 are being exceeded at any monitoring well at the point of compliance, the owner or operator shall:
 - 1. Notify the Department of this finding in writing within seven days. The notification shall indicate what concentration limits have been exceeded; and
 - 2. Submit to the Department an application for a permit modification to establish a corrective action program meeting the requirements of N.J.A.C. 7:14A-10.14 within 180 days after determining that any concentration limits have been exceeded, or within 90 days after said determination if an engineering feasibility study has been previously submitted to the Department under N.J.A.C. 7:14A-10.12(h)5. The application shall, at a minimum, include the following information:
 - i. A detailed description of corrective actions that shall achieve compliance with the ground water protection standard specified pursuant to (a) above; and
 - ii. A plan for a ground water monitoring program that shall demonstrate the effectiveness of the corrective action. Such a ground water monitoring program may be based on a compliance monitoring program developed to meet the requirements of this section.

- (i) If the owner or operator determines, pursuant to (d) above, that the ground water concentration limits under this section are being exceeded at any monitoring well at the point of compliance, the owner or operator may demonstrate that a source other than the owner/operator's hazardous waste facility unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the ground water. In making a demonstration under this paragraph, the owner or operator shall:
 - 1. Notify the Department in writing within seven days that the owner or operator intends to make a demonstration under this paragraph;
 - 2. Within 90 days of determining that the ground water concentration limits under this section are being exceeded, submit a report to the Department which demonstrates that a source other than a hazardous waste facility unit caused the standard to be exceeded or that the apparent noncompliance with the standards resulted from error in sampling, analysis, or evaluation;
 - Within 90 days after receipt by the Department of the report required in (i)2 above, submit to the Department an application for a permit modification to make any appropriate changes to the compliance monitoring program at the facility; and
 - 4. Continue to monitor in accord with the compliance monitoring program established under this section.
- (j) If the owner or operator determines that the compliance monitoring program no longer satisfies the requirements of this section, the owner or operator shall, within 90 days, submit an application for a permit modification to make any appropriate changes to the program.

7:14A-10.14 Corrective action program

- (a) The owner or operator required to establish a compliance monitoring program under this subchapter shall take corrective action to ensure that hazardous waste facility units are in compliance with the ground water protection standards of N.J.A.C. 7:9C. The Department shall specify the ground water protection standard in the NJPDES-DGW permit, including:
 - 1. A list of the hazardous constituents identified under N.J.A.C. 7:14A-10.7;
 - 2. Concentration limits under N.J.A.C. 7:14A-10.8 for each of those hazardous constituents;
 - 3. The relevant point of compliance under N.J.A.C. 7:14A-10.9; and

- 4. The compliance period under N.J.A.C. 7:14A-10.10.
- (b) The owner or operator shall implement a corrective action program that prevents hazardous constituents from exceeding their respective concentration limits at the compliance point by removing the hazardous waste constituents or treating them in place. The permit shall specify the specific measures that shall be taken.
- (c) The owner or operator shall begin corrective action within a reasonable time period after the ground water protection standard is exceeded. The Department shall specify that time period in the NJPDES-DGW permit. If a NJPDES-DGW permit includes a corrective action program in addition to a compliance monitoring program, the permit shall specify when the corrective action will begin and such a requirement will operate in lieu of N.J.A.C. 7:14A-10.13(i)2.
- (d) In conjunction with a corrective action program, the owner or operator shall establish and implement a ground water monitoring program to demonstrate the effectiveness of the corrective action program Such a monitoring program may be based on the requirements for a compliance monitoring program under N.J.A.C. 7:14A-10.13 and shall be as effective as that program in determining compliance with the ground water protection standard under N.J.A.C. 7:14A-10.6 and in determining the success of a corrective action program under (e) below, where appropriate.
- (e) In addition to the other requirements of this section, the owner or operator shall conduct a corrective action program to remove or treat in place any hazardous constituents under N.J.A.C. 7:14A-10.7 that exceed concentration limits under N.J.A.C. 7:14A-10.8 in ground water as specified in (e)1 and 2 below. Corrective action measures under this subsection shall be initiated and completed within a reasonable period of time, as specified in the NJPDES-DGW permit, considering the extent of contamination. Corrective action measures under this subsection may be terminated once the concentration of hazardous constituents under N.J.A.C. 7:14A-10.13. is reduced to levels below their respective concentration limits under N.J.A.C. 7:14A-10.8.
 - 1. Between the compliance point under N.J.A.C. 7:14A-10.9 and the downgradient property boundary; and
 - 2. Beyond the facility boundary where necessary to protect human health and the environment, unless the owner or operator demonstrates to the satisfaction of the Department that, despite the owners or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action. The owner or operator is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where offsite access is denied. Onsite measures to address such releases shall be determined on a case by case basis.

- (f) The owner or operator shall continue corrective action measures during the compliance period to the extent necessary to ensure that the ground water protection standard is not exceeded. If the owner or operator is conducting corrective action at the end of the compliance period, the owner or operator shall continue that corrective action for as long as necessary to achieve compliance with the ground water protection standard. The owner or operator may terminate corrective action measures taken beyond the period equal to the active life of the hazardous waste facility area (including the closure period) if the owner or operator can demonstrate, based on data from the ground water monitoring program under (d) above that the ground water protection standard of N.J.A.C. 7:14A-10.6 has not been exceeded for a period of three consecutive years.
- (g) The owner or operator shall report in writing to the Department on the effectiveness of the corrective action program. The owner or operator shall submit these reports semiannually.
- (h) If the owner or operator determines that the corrective action program no longer satisfies the requirements if this section, the owner or operator shall, within 90 days after said determination, submit an application for a permit modification to make any appropriate changes to the program.

7:14A-10.15 Application requirements for NJPDES-DGW permits for hazardous waste facilities

Application requirements for hazardous waste facilities are the same as those listed in N.J.A.C. 7:14A-7.9.

7:14A-10.16 Application requirements for NJPDES-DGW permits for hazardous waste facilities with surface impoundments

Application requirements for hazardous waste facility surface impoundments shall be the same as those listed in N.J.A.C. 7:14A-7.10.

7:14A-10.17 Application requirements for NJPDES-DGW permits for hazardous waste facilities with land discharge by infiltration-percolation lagoons

Application requirements for hazardous waste facility land discharge by infiltration-percolation lagoons shall be the same as those listed in N.J.A.C. 7:14A-7.13.

7:14A-10.18 Application requirements for NJPDES-DGW permits for hazardous waste landfills

Application requirements for hazardous waste landfills shall be the same as the requirements for sanitary landfills as described in N.J.A.C. 7:14A-9.12.

SUBCHAPTER 11. PROCEDURES AND CONDITIONS APPLICABLE TO NJPDES-DSW Permits

7:14A-11.1 Purpose and scope

(a) This subchapter sets forth specific conditions and procedures which are applicable only to DSW permits. N.J.A.C. 7:14A-24 and 25 set forth additional specific conditions and procedures which are applicable to DSW or DGW permits for stormwater discharges.

(b) The DSW program requires permits for the discharge of pollutants into surface waters of the State from any point source, stormwater discharge associated with industrial activity or small construction activity, and nonpoint sources regulated under N.J.A.C. 7:14A-2.5(d) or 24.2(a)7ii.

7:14A-11.2 Establishing DSW permit conditions

(a) In addition to the conditions established under N.J.A.C. 7:14A-6.3, the Department shall include in DSW permits one or more conditions which meet the following requirements, as applicable:

- 1. Pollutants for which the permittee is required to report noncompliance with an effluent limitation in accordance with N.J.A.C. 7:14A-6.10(a)1 shall be identified and listed in the permit. This list shall include any toxic pollutant or hazardous substance or another appropriate indicator specifically identified as the method to control a toxic pollutant or hazardous substance;
- 2. In addition to the monitoring requirements contained in N.J.A.C. 7:14A-6.5, to assure compliance with permit limitations, a permittee shall be required to monitor:
- i. The mass, or other measurement specified in the permit, for each pollutant limited in the permit;
- ii. The volume of effluent discharged from each outfall;
- iii. Other measurements as appropriate, including pollutants in internal waste streams addressed at N.J.A.C. 7:14A-13.16(a), pollutants in intake water for net limitations addressed at N.J.A.C. 7:14A-13.4(k); parameters for noncontinuous discharges addressed at N.J.A.C. 7:14A-13.20; pollutants subject to notification requirements at N.J.A.C. 7:14A-11.3(a); and pollutants in sewage sludge, or other monitoring as specified in 40 C.F.R. 503 or as determined to be necessary on a case-by-case basis pursuant to section 405(d)(4) of the CWA; and
- iv. In accordance with the test procedures under 40 C.F.R. 136 for the analyses of pollutants having approved methods (unless other test procedures have been specified in the permit), or according to a test procedure specified in the permit for pollutants with no approved methods pursuant to N.J.A.C. 7:14A-6.5(a)2. If more than one method

exists for analyzing a pollutant and the Department specifies a particular method in the permit, the Department shall provide the basis for selecting the particular method in the fact sheet for the draft permit in accordance with N.J.A.C. 7:14A-15.8;

- 3. For municipal separate storm sewer systems and for stormwater discharges associated with industrial activity or small construction activity that are not subject to an effluent limitation guideline that establishes monitoring requirements or numeric effluent limitations, monitoring requirements shall be established in accordance with N.J.A.C. 7:14A-24.9;
- 4. (Reserved)
- 5. For facilities that may operate at certain times as a means of transportation over water, the permit shall contain a condition that the discharge shall comply with any applicable regulations established for safe transportation, handling, carriage, and storage of pollutants as promulgated by the Secretary of the Department within which the Coast Guard is operating; and/or
- 6. Any conditions that the Secretary of the Army considers necessary to ensure that navigation and anchorage shall not be substantially impaired, in accordance with N.J.A.C. 7:14A-11.4.

7:14A-11.3 Additional requirements for all existing manufacturing, commercial, mining, silviculture, and research facilities

(a) The following condition, in addition to those set forth in N.J.A.C. 7:14A-11.2 and the general conditions applicable to all permits in N.J.A.C. 7:14A-6.2, applies to all DSW permits for the facilities specified below:

- 1. In addition to the reporting requirements under N.J.A.C. 7:14A-6.5 and 6.10, all existing manufacturing, commercial, mining, and silvicultural dischargers and research facilities shall notify the Department, in writing, as soon as they know or have reason to believe:
- i. That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit if such discharge will exceed the highest of the following notification levels:
 - (1) One hundred micrograms per liter (100 μ g/L);
 - (2) Two hundred micrograms per liter (200 μg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five times the maximum concentration value reported for the pollutant in the permit application in accordance with N.J.A.C. 7:14A-4.4(b); or

- (4) The notification level established by the Department in accordance with N.J.A.C. 7:14A-6.2(b)2.
- ii. With the exception of research facilities, that they have begun or expect to begin to use or manufacture as an intermediate or final product or by-product any toxic pollutant which was not reported in the permit application pursuant to N.J.A.C. 7:14A-4.3(a)19 or in the request for authorization under N.J.A.C. 7:14A-6.13(d), unless the general permit expressly refers to a "request for authorization" and does not require the request for authorization to include a listing of toxic pollutants.

7:14A-11.4 Permit denial or conditions requested by other governmental agencies

(a) If during the comment period for a draft DSW permit, the District Engineer of the Army Corps of Engineers advises the Department in writing that anchorage and navigation of any of the waters of the United States would be substantially impaired by the granting of a point source DSW permit, the permit shall be denied and the applicant so notified.

(b) If the District Engineer advises the Department that imposing specified conditions upon the permit is necessary to avoid any substantial impairment of anchorage or navigation, then the Department shall include the specified conditions in the permit.

(c) Review or appeal of a denial of a permit or of conditions specified by the District Engineer shall be made through the applicable procedures of the Corps of Engineers, and may not be made through the procedures provided in this chapter. If the conditions are stayed by a court of competent jurisdiction or by applicable procedures of the Corps of Engineers, those conditions shall be considered stayed in the DSW permit for the duration of that stay.

(d) If, during the comment period, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, or any other State or Federal Agency with jurisdiction over fish, wildlife, or public health advises the Department in writing that the imposition of specified conditions upon the permit is necessary to avoid substantial impairment of fish, shellfish, or wildlife resources, the Department shall include the specified conditions in the permit to the extent they are determined necessary to carry out provisions of 40 CFR 122.49 and the State and Federal Acts.

(e) In appropriate cases the Department may consult with one or more of the agencies referred to in this section or other agencies it deems appropriate before issuing a draft permit and may reflect such agencies' views in the statement of basis, the fact sheet, or the draft permit.

7:14A-11.5 (Reserved)

- 7:14A-11.6 Federal criteria and standards for DSW permits
 - (a) The following Federal criteria and standards apply to DSW permits:
 - 1. The criteria and standards for the imposition of technology-based treatment requirements in DSW permits shall be as set forth in 40 C.F.R. 125, Subpart A;
 - 2. The criteria for issuance of a permit to aquaculture projects shall be as set forth in 40 C.F.R. 125, Subpart B;

- 3. The criteria and standards for determining fundamentally different factors shall be as set forth in 40 C.F.R. 125, Subpart D;
- 4. The criteria and standards for determining alternative effluent limitations for the thermal component of a discharge shall be as set forth in 40 C.F.R. 125, Subpart H;
- 5. The criteria applicable to cooling water intake structures shall be as set forth in 40 C.F.R. 125, Subpart I, when the USEPA adopts these criteria;
- 6. (Reserved)
- 7. The criteria and standards for imposing conditions for the disposal of sewage sludge shall be as set forth in 40 C.F.R. 125, Subpart L; and
- 8. The criteria for ocean discharges shall be as set forth in 40 C.F.R. 125, Subpart M.

(b) Whenever the provisions elsewhere in this chapter are more stringent than the criteria and standards referenced in this section, the more stringent provisions elsewhere in this chapter shall apply.

7:14A-11.7 Variances and modifications under the State and Federal acts

(a) Any discharger may request a variance from effluent limitations by filing a request by the close of the public comment period established pursuant to N.J.A.C. 7:14A-15.10 as follows:

- 1. A variance under N.J.A.C. 7:9B-1.8 or 1.9 for achieving water quality based effluent limitations. An applicant shall follow the procedures in N.J.A.C. 7:9B-1.8 or 1.9.
- 2. A variance under Section 316(a) of the Federal Act for the thermal component of any discharge. A copy of the request submitted to USEPA pursuant to 40 C.F.R. 125, Subpart H, shall be submitted simultaneously to the Department as required under 40 C.F.R. 125. Such request shall be determined in accordance with N.J.A.C. 7:14A-11.11.

(b) A discharger which is not a POTW may request a variance from otherwise applicable effluent limitations under any of the following statutory or regulatory provisions within the time period specified in this subsection:

- 1. A request for a variance based on the presence of fundamentally different factors from those on which the effluent limitation guideline was based shall be submitted as follows:
- i. For a request for a variance from best practicable control technology currently available (BPT), by the close of the public comment period established under N.J.A.C. 7:14A-15.10.
- ii. For a request for a variance from best available technology economically achievable (BAT) and/or best conventional pollutant control technology (BCT), by no later than 180 days after the date on which an effluent limitation guideline is published in the Federal Register for a request based on an effluent limitation guideline promulgated on or after February 4, 1987.

- iii. Any request for a variance made under this paragraph shall explain how the requirements of 40 C.F.R. 125, Subpart D have been met.
- 2. A request for a variance from the BAT requirements of Section 301(b)(2)(F) of the Federal Act for non-conventional pollutants (ammonia; chlorine; color; iron; total phenols (4AAP) and any other pollutant which the Administrator lists under Section 301(g)(4) of the Federal Act) pursuant to Section 301(c) of the Federal Act because of the economic capability of the owner or operating entity, or pursuant to Section 301(g) of the Federal Act shall be submitted as follows:
- i. For those requests for a variance from an effluent limitation based upon an effluent limitation guideline a requester shall submit:
 - (1) An initial request to the Regional Administrator and to the Department, stating the name of discharger, the permit number, the outfall number(s), the applicable effluent guideline, and whether the discharger is requesting a Section 301(c) or Section 301(g) modification or both. This request shall be filed not later than 270 days after promulgation of an applicable effluent limitation guideline for guidelines promulgated after December 27, 1977; and
 - (2) A complete request no later than the close of the public comment period established under N.J.A.C. 7:14A-15.10, demonstrating that the requirements of N.J.A.C. 7:14A-15.13 and the applicable requirements of 40 C.F.R. 125 have been met. Notwithstanding this provision, the complete request under section 301(g) shall be filed 180 days before the Department is required to make a final decision (unless the Department establishes a shorter or longer period).
- ii. For those requests for a variance from effluent limitations not based on effluent limitation guidelines, the request need only comply with (b)2i(2) above, and need not be preceded by an initial request under (b)2i(1) above.
- 3. A request for a modification, under Section 302(b)(2) of the Federal Act, of water quality related effluent limitations developed by the USEPA under Section 302(a) of the Federal Act shall be submitted by the close of the public comment period established under N.J.A.C. 7:14A-15.10 on the permit for which the modification is being sought.
- 4. A request for a modification of effluent limitations which are more stringent than the BAT based limitations established in accordance with N.J.A.C. 7:14A-13.4 shall be submitted by the close of the public comment period established under N.J.A.C. 7:14A-15.10 on the permit for which the modification is being sought. For a modification requested under this paragraph, the relief and procedures in N.J.A.C. 7:9B-1.8 or 1.9 shall apply.

(c) Notwithstanding the time period requirements in (a) and (b) above, the Department may send notification before a draft permit is issued under N.J.A.C. 7:14A-15.6 that the draft permit will likely contain limitations which are eligible for variances. In the notice, the Department may require as a condition of consideration of any potential variance request submission a request explaining how the requirements of 40 C.F.R. 125 applicable to the variance have been met and may require submission of such a request within a specified reasonable time after receipt of the notice. The notice may be sent before the permit application has been submitted. The draft or final permit may contain the alternative limitations which may become effective upon granting of the variance.

(d) A discharger who cannot file a complete request required under (a)1, (b)2i(2), 2ii or 4 above may request a one time extension. The extension may be granted or denied at the discretion of the Department. If the extension request is denied, the Department shall state the reason(s) for the denial. An extension shall be limited to:

1. Twelve months for a variance requested under (a)1 or (b)4; or

2. Six months for a variance requested under (b)2i(2) or 2ii.

7:14A-11.8 Decisions on variances

(a) The Department may grant or deny a request for a variance for the thermal component of a discharge under Section 316(a) of the Federal Act.

(b) The Department may deny, forward to the Regional Administrator with a written concurrence, or submit to USEPA without recommendation a completed request for:

- 1. A variance based on the economic capability of the applicant under Section 301(c) of the Federal Act; and
- 2. A variance based on water quality related effluent limitations under Section 302(b)(2) of the Federal Act.

(c) The Department may deny or forward to the Regional Administrator with a written concurrence a completed request for:

- 1. A variance based on the presence of "fundamentally different factors" from those on which an effluent limitation guideline was based; and
- 2. A variance based on certain water quality factors under section 301(g) of the Federal Act.

(d) The Department shall reopen or revoke and reissue a permit, after final action by the USEPA, for a variance from water quality based effluent limitations under N.J.A.C. 7:9B-1.8 or 1.9.

(e) If the USEPA approves the variance, the Department shall prepare a draft permit incorporating the variance. Any public notice of a draft permit for which a variance or modification has been approved or denied shall identify the applicable procedures for appealing that determination under 40 C.F.R. 124.64, or under N.J.A.C. 7:14A-17.2 if the variance was denied or partially denied by the Department.

7:14A-11.9 Procedures for variances

(a) A request for a variance filed under N.J.A.C. 7:14A-11.7 shall be processed as follows:

- 1. If, at the time that a request for a variance is submitted, the Department has received an application for issuance or renewal of a permit but has not yet prepared a draft permit, the Department may:
- i. Prepare a draft permit for public notice incorporating the Department's decision on the variance request; or
- ii. If the variance determination will cause significant delay in issuing the permit, separate the variance request from the permit application and process the permit application.
- 2. If, at the time that a request for a variance is submitted the Department has published public notice of the draft permit but has not issued a final permit decision, the Department may:
- i. Stay administrative proceedings concerning the draft permit and prepare a new draft permit incorporating the Department's decision on the variance request; or
- ii. If the variance determination will cause significant delay in issuing the permit, separate the variance request from the draft permit and issue the final permit decision.
- 3. If the final permit decision has been issued and a variance request has been separated from a draft permit pursuant to (a)1 or 2 above, the Department may subsequently prepare a new draft permit for public notice incorporating the Department's decision on the variance request.

(b) The Department may grant a stay of an effluent limitation(s) until a decision on a variance is made in accordance with the following:

- 1. For a request under Section 301(g), effluent limitations shall not be stayed unless:
- i. In the judgment of the Department, the stay or variance sought will not result in the discharge of pollutants in quantities which may be reasonably anticipated to pose an unacceptable risk to human health or the environment because of bioaccumulation, persistence in the environment, acute toxicity, chronic toxicity, or synergistic propensities;
- ii. In the judgment of the Department, there is a substantial likelihood that the discharger will succeed on the merits of its appeal; and
- iii. The discharger files a bond or appropriate security as deemed necessary by the Department to assure timely compliance with the requirements from which a variance is sought in the event that the appeal is unsuccessful.
- 2. For a request other than under Section 301(g), the requirements for requesting a stay in accordance with N.J.A.C. 7:14A-17.6 shall apply.

7:14A-11.10 Public notice of Section 316(A) request

(a) In addition to the information required under N.J.A.C. 7:14A-15.10(f), public notice of a DSW draft permit for a discharge where a request under section 316(a) of the Federal Act and Section 6 of the State Act has been filed under N.J.A.C. 7:14A-11.7(a)2 shall include:

- 1. A statement that the thermal component of the discharge is subject to effluent limitations under Sections 301 and 306 of the Federal Act and Section 6 of the State Act and a brief description, including a quantitative statement, of the thermal effluent limitations proposed under Sections 301 or 306 of the Federal Act and Section 6 of the State Act;
- 2. A statement that a Section 316(a) request has been filed and that alternative less stringent effluent limitations may be imposed on the thermal component of the discharge under Section 316(a) and a brief description, including a quantitative statement, of the alternative effluent limitations, if any, included in the request; and
- 3. If the applicant has filed an early screening request pursuant to 40 C.F.R. 125.72 for a Section 316(a) variance, a statement that the applicant has submitted such a request.

7:14A-11.11 Special procedures for decisions on thermal variances under Section 316(A)

(a) Except as provided in 40 C.F.R. 124.65, the only issues connected with issuance of a particular permit on which the Department will make a final decision before the final permit decision is issued under N.J.A.C. 7:14A-15.15 are whether alternative effluent limitations would be justified under Section 316(a) of the Federal Act and Section 6 of the State Act and whether cooling water intake structures will use the best available technology under Section 316(b) of the Federal Act. A permit applicant who seeks an early decision on these issues should request it and furnish supporting reasons with the permit application filed under N.J.A.C. 7:14A-4.2. The Department shall decide whether or not to make an early decision. If the Department makes an early decision, such a decision on issues under Section 6 of the State Act and Section 316(a) or (b) of the Federal Act and the grant of the balance of the permit shall be considered issuance of a final permit decision under this chapter, subject to the requirements of public notice and comment and adjudicatory hearing requests of N.J.A.C. 7:14A-15 and 17.

(b) If the Department, on review of the administrative record, determines that the information necessary to decide issues under Section 6 of the State Act and Section 316(a) of the Federal Act is not likely to be available before the final permit decision, the Department may issue a permit under N.J.A.C. 7:14A-15.15 for a term up to five years. This permit shall require achievement of the effluent limitations initially proposed for the thermal component of the discharge no later than the date otherwise required by State or Federal law. However, the permit shall also afford the permittee an opportunity to file a demonstration under Section 316(a) of the Federal Act after conducting such studies as are required under 40 C.F.R. 125, Subpart H. A new discharger may not exceed the thermal effluent limitation which is initially proposed unless and until its State Act Section 6 and Federal Act Section 316(a) variance request is finally approved.

(c) Any proceeding held under (a) above shall be subject to public notice as required by N.J.A.C. 7:14A-15.10 and shall be conducted at a time allowing the permittee to take necessary measures to meet the final compliance date in the event its request for modification of thermal limits is denied.

(d) Whenever the Department defers the decision under Section 316(a) of the Federal Act and Section 6 of the State Act, any decision under Section 316(b) may be deferred.

7:14A-11.12 Discharges from combined sewer overflows

Permits issued for discharges from combined sewer overflows shall include applicable provisions of the Federal Combined Sewer Overflow (CSO) Policy (59 Federal Register 18688, published April 19, 1994) incorporated herein at Appendix C.

7:14A-11.13 NJPDES/DSW PCB Pollutant Minimization Plans for Major Facilities Discharging to PCB Impaired Waterbodies

(a) The following conditions apply to any major facility that discharges to a PCB impaired waterbody segment.

- 1. PCB-impaired waterbody segments are those listed on Sublist 5 of the New Jersey List of Water Quality Limited Waters (also known as the 303(d) List or as the Impaired Waterbodies List), as being impaired or threatened for one or more designated uses due to PCBs. The reference in this paragraph to the List of Water Quality Limited Waters includes all amendments, supplements, and updates thereto. The current list of Water Quality Limited Waters is included in the New Jersey Integrated Water Quality Monitoring and Assessment Report, which can be found on the Department's web site at http://www.state.nj.us/dep/wmm/sgwqt/wat/integratedlist/2004report.html.
- 2. Major facility is defined at N.J.A.C. 7:14A-1.2.

(b) Facilities subject to an adopted TMDL that establishes requirements for PCBs shall be subject to that TMDL. The adopted TMDL shall supercede the requirements of this section.

(c) Monitoring requirements shall be in accordance with N.J.A.C. 7:14A-14.4 and include the following:

- 1. The permittee shall analyze its effluent for the 209 PCB congeners.
- 2. Sanitary wastewater treatment plants and publicly owned treatment works shall perform three dry weather and three wet weather samples on the facility's main outfall by 24 months after the effective date of the modification or renewal of the facilities' permits under (e) below. Industrial facilities with discharges consisting of process wastewater, as defined at N.J.A.C. 7:14A-1.2, shall perform three dry weather samples by 24 months after the effective date of the modification or renewal of the modification or renewal of the facilities' permits under (e) below. Industrial facilities with commingled process wastewater and stormwater discharges shall perform three dry weather and three wet weather samples by 24 months after the effective date of the modification or renewal of the facilities' permits under (e) below.
- i. Dry weather sampling shall be conducted when less than 0.1 inches of rainfall has occurred within the previous 72 hours.
- ii. Wet weather sampling shall be performed within 72 hours after the onset of a precipitation event in which at least 0.1 inches of rainfall has occurred.

- 3. Discharges consisting of non-contact cooling water only shall not be subject to this section.
- 4. All samples shall be collected at least 30 days after the previous sampling event.
- 5. All sampling shall be performed during periods which are representative of normal facility operations.
- 6. All testing shall be performed using Method 1668A, Revision A: Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by HRGC/HRMS. EPA-821-R-00-002, December 1999, as supplemented or amended, and incorporated by reference herein.

(d) After submission of the PCB monitoring required under (c) above and under the facility's permit, the Department will determine whether each permittee must complete a PCB Pollutant Minimization Plan (PMP), and will notify each permittee of this decision in writing.

- 1. If the Department determines that a permittee is required to complete a PMP, the permittee shall prepare and submit the PMP by the date specified in the permit or as otherwise directed by the Department.
- 2. The PMP shall be developed to achieve maximum practical reduction in accordance with the PMP Technical Manual, which can be found on the Department's web site at <u>www.state.nj.us/dep/dwq/techmans</u>.
- 3. The permittee shall implement the PMP within 30 days after written notification from the Department that the PMP is complete.

(e) The Department will modify the permits of the major facilities identified in (a) above in accordance with the procedures at N.J.A.C. 7:14A-16. For any permit that is expired as of January 16, 2007, the requirements set forth in this section and N.J.A.C. 7:14A-14.4 will be incorporated into the permit at the next renewal of the permit.

APPENDIX A (Reserved)

APPENDIX B (Reserved)

APPENDIX C

FEDERAL POLICY ON COMBINED SEWER OVERFLOWS

Appendix C incorporates the Federal policy on combined sewer overflows published in the Federal Register on April 19, 1994.

ENVIRONMENTAL PROTECTION AGENCY

[FRL-4732-7]

Combined Sewer Overflow (CSO) Control Policy

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final policy.

SUMMARY: EPA has issued a national policy statement entitled ``Combined Sewer Overflow (CSO) Control Policy." This policy establishes a consistent national approach for controlling discharges from CSOs to the Nation's

waters through the National Pollutant Discharge Elimination System (NPDES) permit program.

- FOR FURTHER INFORMATION CONTACT: Jeffrey Lape, Office of Wastewater Enforcement and Compliance, MC-4201, U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460, (202) 260-7361.
- SUPPLEMENTARY INFORMATION: The main purposes of the CSO Control Policy are to elaborate on the Environmental Protection Agency's (EPA's) National CSO Control Strategy published on September 8, 1989, at 54 FR 37370, and to expedite compliance with the requirements of the Clean Water Act (CWA). While implementation of the 1989 Strategy has resulted in progress toward controlling CSOs, significant public health and water quality risks remain.
 - This Policy provides guidance to permittees with CSOs, NPDES authorities and State water quality standards authorities on coordinating the planning, selection, and implementation of CSO controls that meet the requirements of the CWA and allow for public involvement during the decision-making process.
 - Contained in the Policy are provisions for developing appropriate, sitespecific NPDES permit requirements for all combined sewer systems (CSS) that overflow as a result of wet weather events. For example, the Policy lays out two alternative approaches--the ``demonstration" and the ``presumption" approaches--that provide communities with targets for CSO controls that achieve compliance with the Act, particularly protection of water quality and designated uses. The Policy also includes enforcement initiatives to require the immediate elimination of overflows that occur during dry weather and to ensure that the remaining CWA requirements are complied with as soon as practicable.
 - The permitting provisions of the Policy were developed as a result of extensive input received from key stakeholders during a negotiated policy dialogue. The CSO stakeholders included representatives from States, environmental groups, municipal organizations and others. The negotiated dialogue was conducted during the Summer of 1992 by the Office of Water and the Office of Water's Management Advisory Group. The enforcement initiatives, including one which is underway to address CSOs during dry weather, were developed by EPA's Office of Water and Office of Enforcement.
 - EPA issued a Notice of Availability on the draft CSO Control Policy on January 19, 1993, (58 FR 4994) and requested comments on the draft Policy by March 22, 1993. Approximately forty-one sets of written comments were submitted by a variety of interest groups including cities and municipal groups, environmental groups, States, professional organizations and others. All comments were considered as EPA prepared the Final Policy. The public comments were largely supportive of the draft Policy. EPA received broad endorsement of and support for the key principles and provisions from most commenters. Thus, this final Policy does not include significant changes to the major provisions of the draft Policy, but rather, it includes clarification and better explanation of the elements of the Policy to address several of the

questions that were raised in the comments. Persons wishing to obtain copies of the public comments or EPA's summary analysis of the comments may write or call the EPA contact person.

The CSO Policy represents a comprehensive national strategy to ensure that municipalities, permitting authorities, water quality standards authorities and the public engage in a comprehensive and coordinated planning effort to achieve cost effective CSO controls that ultimately meet appropriate health and environmental objectives. The Policy recognizes the site-specific nature of CSOs and their impacts and provides the necessary flexibility to tailor controls to local situations. Major elements of the Policy ensure that CSO controls are cost effective and meet the objectives and requirements of the CWA.

The major provisions of the Policy are as follows.

- CSO permittees should immediately undertake a process to accurately characterize their CSS and CSO discharges, demonstrate implementation of minimum technology-based controls identified in the Policy, and develop long-term CSO control plans which evaluate alternatives for attaining compliance with the CWA, including compliance with water quality standards and protection of designated uses. Once the long-term CSO control plans are completed, permittees will be responsible to implement the plans' recommendations as soon as practicable.
- State water quality standards authorities will be involved in the long-term CSO control planning effort as well. The water quality standards authorities will help ensure that development of the CSO permittees' long-term CSO control plans are coordinated with the review and possible revision of water quality standards on CSO-impacted waters.
- NPDES authorities will issue/reissue or modify permits, as appropriate, to require compliance with the technology-based and water quality-based requirements of the CWA. After completion of the long- term CSO control plan, NPDES permits will be reissued or modified to incorporate the additional requirements specified in the Policy, such as performance standards for the selected controls based on average design conditions, a post-construction water quality assessment program, monitoring for compliance with water quality standards, and a reopener clause authorizing the NPDES authority to reopen and modify the permit if it is determined that the CSO controls fail to meet water quality standards or protect designated uses. NPDES authorities should commence enforcement actions against permittees that have CWA violations due to CSO discharges during dry weather. In addition, NPDES authorities should ensure the implementation of the minimum technology- based controls and incorporate a schedule into an appropriate enforceable mechanism, with appropriate milestone dates, to implement the required long-term CSO control plan. Schedules for implementation of the long-term CSO control plan may be phased based on the relative importance of adverse impacts upon water quality standards and designated uses, and on a permittee's financial capability.

EPA is developing extensive guidance to support the Policy and will announce the availability of the guidances and other outreach efforts through various means, as they become available. For example, EPA is preparing

guidance on the nine minimum controls, characterization and monitoring of CSOs, development of long-term CSO control plans, and financial capability.

Permittees will be expected to comply with any existing CSO-related requirements in NPDES permits, consent decrees or court orders unless revised to be consistent with this Policy.

The policy is organized as follows:

I. Introduction

- A. Purpose and Principles
- B. Application of Policy
- C. Effect on Current CSO Control Efforts
- D. Small System Considerations
- E. Implementation Responsibilities
- F. Policy Development

II. EPA Objectives for Permittees

- A. Overview
- B. Implementation of the Nine Minimum Controls
- C. Long-Term CSO Control Plan
 - 1. Characterization, Monitoring, and Modeling of the
 - Combined Sewer Systems
 - 2. Public Participation
 - 3. Consideration of Sensitive Areas
 - 4. Evaluation of Alternatives
 - 5. Cost/Performance Consideration
 - 6. Operational Plan
 - 7. Maximizing Treatment at the Existing POTW

Treatment Plant

- 8. Implementation Schedule
- 9. Post-Construction Compliance Monitoring Program

III. Coordination With State Water Quality Standards

- A. Overview
- B. Water Quality Standards Reviews

IV. Expectations for Permitting Authorities

A. Overview

B. NPDES Permit Requirements

1. Phase I Permits--Requirements for Demonstration of the Nine Minimum Controls and Development of the

Long-Term CSO Control Plan

2. Phase II Permits--Requirements for Implementation of

a Long- Term CSO Control Plan

3. Phasing Considerations

V. Enforcement and Compliance

A. Overview

- B. Enforcement of CSO Dry Weather Discharge Prohibition
- C. Enforcement of Wet Weather CSO Requirements

- 1. Enforcement for Compliance With Phase I Permits
- 2. Enforcement for Compliance With Phase II Permits

D. Penalties

List of Subjects in 40 CFR Part 122

Water pollution control.

Authority: Clean Water Act, 33 U.S.C. 1251 et seq.

Dated: April 8, 1994.

Carol M. Browner,

Administrator.

Combined Sewer Overflow (CSO) Control Policy

I. Introduction

A. Purpose and Principles

The main purposes of this Policy are to elaborate on EPA's National Combined Sewer Overflow (CSO) Control Strategy published on September 8, 1989 at 54 FR 37370 (1989 Strategy) and to expedite compliance with the requirements of the Clean Water Act (CWA). While implementation of the 1989 Strategy has resulted in progress toward controlling CSOs, significant water quality risks remain.

- A combined sewer system (CSS) is a wastewater collection system owned by a State or municipality (as defined by section 502(4) of the CWA) which conveys sanitary wastewaters (domestic, commercial and industrial wastewaters) and storm water through a single-pipe system to a Publicly Owned Treatment Works (POTW) Treatment Plant (as defined in 40 CFR 403.3(p)). A CSO is the discharge from a CSS at a point prior to the POTW Treatment Plant. CSOs are point sources subject to NPDES permit requirements including both technology-based and water quality-based requirements of the CWA. CSOs are not subject to secondary treatment requirements applicable to POTWs.
- CSOs consist of mixtures of domestic sewage, industrial and commercial wastewaters, and storm water runoff. CSOs often contain high levels of suspended solids, pathogenic microorganisms, toxic pollutants, floatables, nutrients, oxygen-demanding organic compounds, oil and grease, and other pollutants. CSOs can cause exceedances of water quality standards (WQS). Such exceedances may pose risks to human health, threaten aquatic life and its habitat, and impair the use and enjoyment of the Nation's waterways.

This Policy is intended to provide guidance to permittees with CSOs, National Pollutant Discharge Elimination System (NPDES) permitting authorities, State water quality standards authorities and

enforcement authorities. The purpose of the Policy is to coordinate the planning, selection, design and implementation of CSO management practices and controls to meet the requirements of the CWA and to involve the public fully during the decision making process.

This Policy reiterates the objectives of the 1989 Strategy:

- 1. To ensure that if CSOs occur, they are only as a result of wet weather;
- 2. To bring all wet weather CSO discharge points into compliance with the technology-based and water quality-based requirements of the CWA; and
- 3. To minimize water quality, aquatic biota, and human health impacts from CSOs.
- This CSO Control Policy represents a comprehensive national strategy to ensure that municipalities, permitting authorities, water quality standards authorities and the public engage in a comprehensive and coordinated planning effort to achieve cost-effective CSO controls that ultimately meet appropriate health and environmental objectives and requirements. The Policy recognizes the site-specific nature of CSOs and their impacts and provides the necessary flexibility to tailor controls to local situations. Four key principles of the Policy ensure that CSO controls are cost-effective and meet the objectives of the CWA. The key principles are:
 - 1. Providing clear levels of control that would be presumed to meet appropriate health and environmental objectives;
 - 2. Providing sufficient flexibility to municipalities, especially financially disadvantaged communities, to consider the sitespecific nature of CSOs and to determine the most cost-effective means of reducing pollutants and meeting CWA objectives and requirements;
 - 3. Allowing a phased approach to implementation of CSO controls considering a community's financial capability; and
 - 4. Review and revision, as appropriate, of water quality standards and their implementation procedures when developing CSO control plans to reflect the site-specific wet weather impacts of CSOs.
- This Policy is being issued in support of EPA's regulations and policy initiatives. This Policy is Agency guidance only and does not

establish or affect legal rights or obligations. It does not establish a binding norm and is not finally determinative of the issues addressed. Agency decisions in any particular case will be made by applying the law and regulations on the basis of specific facts when permits are issued. The Administration has recommended that the 1994 amendments to the CWA endorse this final Policy.

B. Application of Policy

The permitting provisions of this Policy apply to all CSSs that overflow as a result of storm water flow, including snow melt runoff (40 CFR 122.26(b)(13)). Discharges from CSSs during dry weather are prohibited by the CWA. Accordingly, the permitting provisions of this Policy do not apply to CSOs during dry weather. Dry weather flow is the flow in a combined sewer that results from domestic sewage, groundwater infiltration, commercial and industrial wastewaters, and any other non- precipitation related flows (e.g., tidal infiltration). In addition to the permitting provisions, the Enforcement and Compliance section of this Policy describes an enforcement initiative being developed for overflows that occur during dry weather.

- Consistent with the 1989 Strategy, 30 States that submitted CSO permitting strategies have received EPA approval or, in the case of one State, conditional approval of its strategy. States and EPA Regional Offices should review these strategies and negotiate appropriate revisions to them to implement this Policy. Permitting authorities are encouraged to evaluate water pollution control needs on a watershed management basis and coordinate CSO control efforts with other point and nonpoint source control activities.
- C. Effect on Current CSO Control Efforts
 - EPA recognizes that extensive work has been done by many Regions, States, and municipalities to abate CSOs. As such, portions of this Policy may already have been addressed by permittees' previous efforts to control CSOs. Therefore, portions of this Policy may not apply, as determined by the permitting authority on a case-by-case basis, under the following circumstances:
 - 1. Any permittee that, on the date of publication of this final Policy, has completed or substantially completed construction of CSO control facilities that are designed to meet WQS and protect designated uses, and where it has been determined that WQS are being or will be attained, is not covered by the initial planning and construction provisions in this Policy; however, the operational plan and post-construction monitoring provisions continue to apply. If, after monitoring, it is determined that WQS

are not being attained, the permittee should be required to submit a revised CSO control plan that, once implemented, will attain WQS.

- 2. Any permittee that, on the date of publication of this final Policy, has substantially developed or is implementing a CSO control program pursuant to an existing permit or enforcement order, and such program is considered by the NPDES permitting authority to be adequate to meet WQS and protect designated uses and is reasonably equivalent to the treatment objectives of this Policy, should complete those facilities without further planning activities otherwise expected by this Policy. Such programs, however, should be reviewed and modified to be consistent with the sensitive area, financial capability, and postconstruction monitoring provisions of this Policy.
- 3. Any permittee that has previously constructed CSO control facilities in an effort to comply with WQS but has failed to meet such applicable standards or to protect designated uses due to remaining CSOs may receive consideration for such efforts in future permits or enforceable orders for long-term CSO control planning, design and implementation.
- In the case of any ongoing or substantially completed CSO control effort, the NPDES permit or other enforceable mechanism, as appropriate, should be revised to include all appropriate permit requirements consistent with Section IV.B. of this Policy.
- D. Small System Considerations

The scope of the long-term CSO control plan, including the characterization, monitoring and modeling, and evaluation of alternatives portions of this Policy may be difficult for some small CSSs. At the discretion of the NPDES Authority, jurisdictions with populations under 75,000 may not need to complete each of the formal steps outlined in Section II.C. of this Policy, but should be required through their permits or other enforceable mechanisms to comply with the nine minimum controls (II.B), public participation (II.C.2), and sensitive areas (II.C.3) portions of this Policy. In addition, the permittee may propose to implement any of the criteria contained in this Policy for evaluation of alternatives described in II.C.4. Following approval of the proposed plan, such jurisdictions should construct the control projects and propose a monitoring program sufficient to determine whether WQS are attained and designated uses are protected.

- In developing long-term CSO control plans based on the small system considerations discussed in the preceding paragraph, permittees are encouraged to discuss the scope of their long-term CSO control plan with the WQS authority and the NPDES authority. These discussions will ensure that the plan includes sufficient information to enable the permitting authority to identify the appropriate CSO controls.
- E. Implementation Responsibilities

NPDES authorities (authorized States or EPA Regional Offices, as appropriate) are responsible for implementing this Policy. It is their responsibility to assure that CSO permittees develop long-term CSO control plans and that NPDES permits meet the requirements of the CWA. Further, they are responsible for coordinating the review of the long- term CSO control plan and the development of the permit with the WQS authority to determine if revisions to the WQS are appropriate. In addition, they should determine the appropriate vehicle (i.e., permit reissuance, information request under CWA section 308 or State equivalent or enforcement action) to ensure that compliance with the CWA is achieved as soon as practicable.

Permittees are responsible for documenting the implementation of the nine minimum controls and developing and implementing a long-term CSO control plan, as described in this Policy. EPA recognizes that financial considerations are a major factor affecting the implementation of CSO controls. For that reason, this Policy allows consideration of a permittee's financial capability in connection with the long-term CSO control planning effort, WQS review, and negotiation of enforceable schedules. However, each permittee is ultimately responsible for aggressively pursuing financial arrangements for the implementation of its long-term CSO control plan. As part of this effort, communities should apply to their State Revolving Fund program, or other assistance programs as appropriate, for financial assistance.

- EPA and the States will undertake action to assure that all permittees with CSSs are subject to a consistent review in the permit development process, have permit requirements that achieve compliance with the CWA, and are subject to enforceable schedules that require the earliest practicable compliance date considering physical and financial feasibility.
- F. Policy Development

This Policy devotes a separate section to each step involved in developing and implementing CSO controls. This is not to imply that each function occurs separately. Rather, the entire process surrounding CSO controls, community planning, WQS and permit

development/revision, enforcement/compliance actions and public participation must be coordinated to control CSOs effectively. Permittees and permitting authorities are encouraged to consider innovative and alternative approaches and technologies that achieve the objectives of this Policy and the CWA.

In developing this Policy, EPA has included information on what responsible parties are expected to accomplish. Subsequent documents will provide additional guidance on how the objectives of this Policy should be met. These documents will provide further guidance on: CSO permit writing, the nine minimum controls, longterm CSO control plans, financial capability, sewer system characterization and receiving water monitoring and modeling, and application of WQS to CSO-impacted waters. For most CSO control efforts however, sufficient detail has been included in this Policy to begin immediate implementation of its provisions.

- II. EPA Objectives for Permittees
 - A. Overview

Permittees with CSSs that have CSOs should immediately undertake a process to accurately characterize their sewer systems, to demonstrate implementation of the nine minimum controls, and to develop a long-term CSO control plan.

B. Implementation of the Nine Minimum Controls

Permittees with CSOs should submit appropriate documentation demonstrating implementation of the nine minimum controls, including any proposed schedules for completing minor construction activities.

The nine minimum controls are:

- 1. Proper operation and regular maintenance programs for the sewer system and the CSOs;
- 2. Maximum use of the collection system for storage;
- 3. Review and modification of pretreatment requirements to assure CSO impacts are minimized;
- 4. Maximization of flow to the POTW for treatment;
- 5. Prohibition of CSOs during dry weather;
- 6. Control of solid and floatable materials in CSOs;

- 7. Pollution prevention;
- 8. Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts; and
- 9. Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls.

Selection and implementation of actual control measures should be based on site-specific considerations including the specific CSS's characteristics discussed under the sewer system characterization and monitoring portions of this Policy. Documentation of the nine minimum controls may include operation and maintenance plans, revised sewer use ordinances for industrial users, sewer system inspection reports, infiltration/inflow studies, pollution prevention programs, public notification plans, and facility plans for maximizing the capacities of the existing collection, storage and treatment systems, as well as contracts and schedules for minor construction programs for improving the existing system's operation. The permittee should also submit any information or data on the degree to which the nine minimum controls achieve compliance with water quality standards. These data and information should include results made available through monitoring and modeling activities done in conjunction with the development of the long-term CSO control plan described in this Policy.

This documentation should be submitted as soon as practicable, but no later than two years after the requirement to submit such documentation is included in an NPDES permit or other enforceable mechanism. Implementation of the nine minimum controls with appropriate documentation should be completed as soon as practicable but no later than January 1, 1997. These dates should be included in an appropriate enforceable mechanism.

- Because the CWA requires immediate compliance with technologybased controls (section 301(b)), which on a Best Professional Judgment basis should include the nine minimum controls, a compliance schedule for implementing the nine minimum controls, if necessary, should be included in an appropriate enforceable mechanism.
- C. Long-Term CSO Control Plan

Permittees with CSOs are responsible for developing and implementing long-term CSO control plans that will ultimately result in compliance with the requirements of the CWA. The long-term plans should consider the site-specific nature of CSOs and evaluate the cost

effectiveness of a range of control options/strategies. The development of the long-term CSO control plan and its subsequent implementation should also be coordinated with the NPDES authority and the State authority responsible for reviewing and revising the State's WQS. The selected controls should be designed to allow cost effective expansion or cost effective retrofitting if additional controls are subsequently determined to be necessary to meet WQS, including existing and designated uses.

This policy identifies EPA's major objectives for the long-term CSO control plan. Permittees should develop and submit this long-term CSO control plan as soon as practicable, but generally within two years after the date of the NPDES permit provision, Section 308 information request, or enforcement action requiring the permittee to develop the plan. NPDES authorities may establish a longer timetable for completion of the long-term CSO control plan on a case-by-case basis to account for site-specific factors which may influence the complexity of the planning process. Once agreed upon, these dates should be included in an appropriate enforceable mechanism.

- EPA expects each long-term CSO control plan to utilize appropriate information to address the following minimum elements. The Plan should also include both fixed-date project implementation schedules (which may be phased) and a financing plan to design and construct the project as soon as practicable. The minimum elements of the long-term CSO control plan are described below.
- 1. Characterization, Monitoring, and Modeling of the Combined Sewer System

In order to design a CSO control plan adequate to meet the requirements of the CWA, a permittee should have a thorough understanding of its sewer system, the response of the system to various precipitation events, the characteristics of the overflows, and the water quality impacts that result from CSOs. The permittee should adequately characterize through monitoring, modeling, and other means as appropriate, for a range of storm events, the response of its sewer system to wet weather events including the number, location and frequency of CSOs, volume, concentration and mass of pollutants discharged and the impacts of the CSOs on the receiving waters and their designated uses. The permittee may need to consider information on the contribution and importance of other pollution sources in order to develop a final plan designed to meet water quality standards. The purpose of the system characterization, monitoring and

modeling program initially is to assist the permittee in developing appropriate measures to implement the nine minimum controls and, if necessary, to support development of the long-term CSO control plan. The monitoring and modeling data also will be used to evaluate the expected effectiveness of both the nine minimum controls and, if necessary, the long-term CSO controls, to meet WQS.

The major elements of a sewer system characterization are described below.

- a. Rainfall Records--The permittee should examine the complete rainfall record for the geographic area of its existing CSS using sound statistical procedures and best available data. The permittee should evaluate flow variations in the receiving water body to correlate between CSOs and receiving water conditions.
- b. Combined Sewer System Characterization--The permittee should evaluate the nature and extent of its sewer system through evaluation of available sewer system records, field inspections and other activities necessary to understand the number, location and frequency of overflows and their location relative to sensitive areas and to pollution sources in the collection system, such as indirect significant industrial users.
- c. CSO Monitoring--The permittee should develop a comprehensive, representative monitoring program that measures the frequency, duration, flow rate, volume and pollutant concentration of CSO discharges and assesses the impact of the CSOs on the receiving waters. The monitoring program should include necessary CSO effluent and ambient in-stream monitoring and, where appropriate, other monitoring protocols such as biological assessment, toxicity testing and sediment sampling. Monitoring parameters should include, for example, oxygen demanding pollutants, nutrients, toxic pollutants, sediment contaminants, pathogens, bacteriological indicators (e.g., Enterococcus, E. Coli), and toxicity. A representative sample of overflow points can be selected that is sufficient to allow characterization of CSO discharges and their water quality impacts and to facilitate evaluation of control plan alternatives.
- d. Modeling--Modeling of a sewer system is recognized as a valuable tool for predicting sewer system response to

various wet weather events and assessing water quality impacts when evaluating different control strategies and alternatives. EPA supports the proper and effective use of models, where appropriate, in the evaluation of the nine minimum controls and the development of the long-term CSO control plan. It is also recognized that there are many models which may be used to do this. These models range from simple to complex. Having decided to use a model, the permittee should base its choice of a model on the characteristics of its sewer system, the number and location of overflow points, and the sensitivity of the receiving water body to the CSO discharges. Use of models should include appropriate calibration and verification with field measurements. The sophistication of the model should relate to the complexity of the system to be modeled and to the information needs associated with evaluation of CSO control options and water quality impacts. EPA believes that continuous simulation models, using historical rainfall data, may be the best way to model sewer systems, CSOs, and their impacts. Because of the iterative nature of modeling sewer systems, CSOs, and their impacts, monitoring and modeling efforts are complementary and should be coordinated.

2. Public Participation

In developing its long-term CSO control plan, the permittee will employ a public participation process that actively involves the affected public in the decision-making to select the long-term CSO controls. The affected public includes rate payers, industrial users of the sewer system, persons who reside downstream from the CSOs, persons who use and enjoy these downstream waters, and any other interested persons.

3. Consideration of Sensitive Areas

EPA expects a permittee's long-term CSO control plan to give the highest priority to controlling overflows to sensitive areas. Sensitive areas, as determined by the NPDES authority in coordination with State and Federal agencies, as appropriate, include designated Outstanding National Resource Waters, National Marine Sanctuaries, waters with threatened or endangered species and their habitat, waters with primary contact recreation, public drinking water intakes or their designated protection areas, and shellfish beds. For such areas, the long-term CSO control plan should:

- a. Prohibit new or significantly increased overflows;
- b.
- i. Eliminate or relocate overflows that discharge to sensitive areas wherever physically possible and economically achievable, except where elimination or relocation would provide less environmental protection than additional treatment; or
 - ii. Where elimination or relocation is not physically possible and economically achievable, or would provide less environmental protection than additional treatment, provide the level of treatment for remaining overflows deemed necessary to meet WQS for full protection of existing and designated uses. In any event, the level of control should not be less than those described in Evaluation of Alternatives below; and
- c. Where elimination or relocation has been proven not to be physically possible and economically achievable, permitting authorities should require, for each subsequent permit term, a reassessment based on new or improved techniques to eliminate or relocate, or on changed circumstances that influence economic achievability.
- 4. Evaluation of Alternatives

EPA expects the long-term CSO control plan to consider a reasonable range of alternatives. The plan should, for example, evaluate controls that would be necessary to achieve zero overflow events per year, an average of one to three, four to seven, and eight to twelve overflow events per year. Alternatively, the long-term plan could evaluate controls that achieve 100% capture, 90% capture, 85% capture, 80% capture, and 75% capture for treatment. The long-term control plan should also consider expansion of POTW secondary and primary capacity in the CSO abatement alternative analysis. The analysis of alternatives should be sufficient to make a reasonable assessment of cost and performance as described in Section II.C.5. Because the final long-term CSO control plan will become the basis for NPDES permit limits and requirements, the selected controls should be sufficient to meet CWA requirements.

In addition to considering sensitive areas, the long-term CSO control plan should adopt one of the following approaches:

a. ``Presumption" Approach

A program that meets any of the criteria listed below would be presumed to provide an adequate level of control to meet the water quality-based requirements of the CWA, provided the permitting authority determines that such presumption is reasonable in light of the data and analysis conducted in the characterization, monitoring, and modeling of the system and the consideration of sensitive areas described above. These criteria are provided because data and modeling of wet weather events often do not give a clear picture of the level of CSO controls necessary to protect WQS.

- i. No more than an average of four overflow events per year, provided that the permitting authority may allow up to two additional overflow events per year. For the purpose of this criterion, an overflow event is one or more overflows from a CSS as the result of a precipitation event that does not receive the minimum treatment specified below; or
- ii. The elimination or the capture for treatment of no less than 85% by volume of the combined sewage collected in the CSS during precipitation events on a systemwide annual average basis; or
- iii. The elimination or removal of no less than the mass of the pollutants, identified as causing water quality impairment through the sewer system characterization, monitoring, and modeling effort, for the volumes that would be eliminated or captured for treatment under paragraph ii. above. Combined sewer flows remaining after implementation of the nine minimum controls and within the criteria specified at II.C.4.a.i or ii, should receive a minimum of:

Primary clarification (Removal of floatables and settleable solids may be achieved by any combination of treatment technologies or methods that are shown to be equivalent to primary clarification.); Solids and floatables disposal; and

Disinfection of effluent, if necessary, to meet WQS, protect designated uses and protect human health, including removal of harmful disinfection chemical residuals, where necessary.

b. ``Demonstration" Approach

A permittee may demonstrate that a selected control program, though not meeting the criteria specified in II.C.4.a. above is adequate to meet the water quality-based requirements of the CWA. To be a successful demonstration, the permittee should demonstrate each of the following:

- i. The planned control program is adequate to meet WQS and protect designated uses, unless WQS or uses cannot be met as a result of natural background conditions or pollution sources other than CSOs;
- ii. The CSO discharges remaining after implementation of the planned control program will not preclude the attainment of WQS or the receiving waters' designated uses or contribute to their impairment.
 Where WQS and designated uses are not met in part because of natural background conditions or pollution sources other than CSOs, a total maximum daily load, including a wasteload allocation and a load allocation, or other means should be used to apportion pollutant loads;
- iii. The planned control program will provide the maximum pollution reduction benefits reasonably attainable; and
- iv. The planned control program is designed to allow cost effective expansion or cost effective retrofitting if additional controls are subsequently determined to be necessary to meet WQS or designated uses.

5. Cost/Performance Considerations

The permittee should develop appropriate cost/performance curves to demonstrate the relationships among a comprehensive set of reasonable control alternatives that correspond to the different ranges specified in Section II.C.4. This should include an analysis to determine where the increment of pollution reduction

achieved in the receiving water diminishes compared to the increased costs. This analysis, often known as knee of the curve, should be among the considerations used to help guide selection of controls.

6. Operational Plan

After agreement between the permittee and NPDES authority on the necessary CSO controls to be implemented under the longterm CSO control plan, the permittee should revise the operation and maintenance program developed as part of the nine minimum controls to include the agreed-upon long-term CSO controls. The revised operation and maintenance program should maximize the removal of pollutants during and after each precipitation event using all available facilities within the collection and treatment system. For any flows in excess of the criteria specified at II.C.4.a.i., ii. or iii and not receiving the treatment specified in II.C.4.a, the operational plan should ensure that such flows receive treatment to the greatest extent practicable.

- 7. Maximizing Treatment at the Existing POTW Treatment Plant
 - In some communities, POTW treatment plants may have primary treatment capacity in excess of their secondary treatment capacity. One effective strategy to abate pollution resulting from CSOs is to maximize the delivery of flows during wet weather to the POTW treatment plant for treatment. Delivering these flows can have two significant water quality benefits: First, increased flows during wet weather to the POTW treatment plant may enable the permittee to eliminate or minimize overflows to sensitive areas; second, this would maximize the use of available POTW facilities for wet weather flows and would ensure that combined sewer flows receive at least primary treatment prior to discharge.
 - Under EPA regulations, the intentional diversion of waste streams from any portion of a treatment facility, including secondary treatment, is a bypass. EPA bypass regulations at 40 CFR 122.41(m) allow for a facility to bypass some or all the flow from its treatment process under specified limited circumstances. Under the regulation, the permittee must show that the bypass was unavoidable to prevent loss of life, personal injury or severe property damage, that there was no feasible alternative to the bypass and that the permittee submitted the required notices. In addition, the regulation provides that a bypass may be approved only after consideration of adverse effects.

Normally, it is the responsibility of the permittee to document, on a case-by-base basis, compliance with 40 CFR 122.41(m) in order to bypass flows legally. For some CSO-related permits, the study of feasible alternatives in the control plan may provide sufficient support for the permit record and for approval of a CSO-related bypass in the permit itself, and to define the specific parameters under which a bypass can legally occur. For approval of a CSOrelated bypass, the long-term CSO control plan, at a minimum, should provide justification for the cut-off point at which the flow will be diverted from the secondary treatment portion of the treatment plant, and provide a benefit-cost analysis demonstrating that conveyance of wet weather flow to the POTW for primary treatment is more beneficial than other CSO abatement alternatives such as storage and pump back for secondary treatment, sewer separation, or satellite treatment. Such a permit must define under what specific wet weather conditions a CSO-related bypass is allowed and also specify what treatment or what monitoring, and effluent limitations and requirements apply to the bypass flow. The permit should also provide that approval for the CSO-related bypass will be reviewed and may be modified or terminated if there is a substantial increase in the volume or character of pollutants being introduced to the POTW. The CSO-related bypass provision in the permit should also make it clear that all wet weather flows passing the headworks of the POTW treatment plant will receive at least primary clarification and solids and floatables removal and disposal, and disinfection, where necessary, and any other treatment that can reasonably be provided.

Under this approach, EPA would allow a permit to authorize a CSO-related bypass of the secondary treatment portion of the POTW treatment plant for combined sewer flows in certain identified circumstances. This provision would apply only to those situations where the POTW would ordinarily meet the requirements of 40 CFR 122.41(m) as evaluated on a case-by-case basis. Therefore, there must be sufficient data in the administrative record (reflected in the permit fact sheet or statement of basis) supporting all the requirements in 40 CFR 122.41(m)(4) for approval of an anticipated bypass.

For the purposes of applying this regulation to CSO permittees, ``severe property damage" could include situations where flows above a certain level wash out the POTW's secondary treatment system. EPA further believes that the feasible alternatives requirement of the regulation can be met if the record shows that the secondary treatment system is properly operated and

maintained, that the system has been designed to meet secondary limits for flows greater than the peak dry weather flow, plus an appropriate quantity of wet weather flow, and that it is either technically or financially infeasible to provide secondary treatment at the existing facilities for greater amounts of wet weather flow. The feasible alternative analysis should include, for example, consideration of enhanced primary treatment (e.g., chemical addition) and non-biological secondary treatment. Other bases supporting a finding of no feasible alternative may also be available on a case-by-case basis. As part of its consideration of possible adverse effects resulting from the bypass, the permitting authority should also ensure that the bypass will not cause exceedances of WQS.

- This Policy does not address the appropriateness of approving anticipated bypasses through NPDES permits in advance outside the CSO context.
- 8. Implementation Schedule

The permittee should include all pertinent information in the long term control plan necessary to develop the construction and financing schedule for implementation of CSO controls. Schedules for implementation of the CSO controls may be phased based on the relative importance of adverse impacts upon WQS and designated uses, priority projects identified in the longterm plan, and on a permittee's financial capability.

Construction phasing should consider:

- a. Eliminating overflows that discharge to sensitive areas as the highest priority;
- b. Use impairment;
- c. The permittee's financial capability including consideration of such factors as:
 - i. Median household income;
 - ii. Total annual wastewater and CSO control costs per household as a percent of median household income;
 - iii. Overall net debt as a percent of full market property value;
 - iv. Property tax revenues as a percent of full market property value;

- v. Property tax collection rate;
- vi. Unemployment; and
- vii. Bond rating;
- d. Grant and loan availability;
- e. Previous and current residential, commercial and industrial sewer user fees and rate structures; and
- f. Other viable funding mechanisms and sources of financing.
- 9. Post-Construction Compliance Monitoring Program

The selected CSO controls should include a post-construction water quality monitoring program adequate to verify compliance with water quality standards and protection of designated uses as well as to ascertain the effectiveness of CSO controls. This water quality compliance monitoring program should include a plan to be approved by the NPDES authority that details the monitoring protocols to be followed, including the necessary effluent and ambient monitoring and, where appropriate, other monitoring protocols such as biological assessments, whole effluent toxicity testing, and sediment sampling.

- III. Coordination With State Water Quality Standards
 - A. Overview

WQS are State adopted, or Federally promulgated rules which serve as the goals for the water body and the legal basis for the water qualitybased NPDES permit requirements under the CWA. WQS consist of uses which States designate for their water bodies, criteria to protect the uses, an anti-degradation policy to protect the water quality improvements gained and other policies affecting the implementation of the standards. A primary objective of the long-term CSO control plan is to meet WQS, including the designated uses through reducing risks to human health and the environment by eliminating, relocating or controlling CSOs to the affected waters.

State WQS authorities, NPDES authorities, EPA regional offices, permittees, and the public should meet early and frequently throughout the long-term CSO control planning process. Development of the long-term plan should be coordinated with the review and appropriate revision of WQS and implementation procedures on CSO-impacted waters to ensure that the long-term controls will be sufficient to meet water quality standards. As part of these meetings, participants should agree on the data, information and

analyses needed to support the development of the long-term CSO control plan and the review of applicable WQS, and implementation procedures, if appropriate. Agreements should be reached on the monitoring protocols and models that will be used to evaluate the water quality impacts of the overflows, to analyze the attainability of the WQS and to determine the water quality-based requirements for the permit. Many opportunities exist for permittees and States to share information as control programs are developed and as WQS are reviewed. Such information should assist States in determining the need for revisions to WQS and implementation procedures to better reflect the site-specific wet weather impacts of CSOs. Coordinating the development of the long-term CSO control plan and the review of the WQS and implementation procedures provides greater assurance that the long-term control plan selected and the limits and requirements included in the NPDES permit will be sufficient to meet WQS and to comply with sections 301(b)(1)(C) and 402(a)(2) of the CWA.

- EPA encourages States and permittees jointly to sponsor workshops for the affected public in the development of the long-term CSO control plan and during the development of appropriate revisions to WQS for CSO-impacted waters. Workshops provide a forum for including the public in discussions of the implications of the proposed long-term CSO control plan on the water quality and uses for the receiving water.
- B. Water Quality Standards Reviews
 - The CWA requires States to periodically, but at least once every three years, hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards. States must provide the public an opportunity to comment on any proposed revision to water quality standards and all revisions must be submitted to EPA for review and approval.
 - EPA regulations and guidance provide States with the flexibility to adapt their WQS, and implementation procedures to reflect sitespecific conditions including those related to CSOs. For example, a State may adopt site-specific criteria for a particular pollutant if the State determines that the site-specific criteria fully protects the designated use (40 CFR 131.11). In addition, the regulations at 40 CFR 131.10(g), (h), and (j) specify when and how a designated use may be modified. A State may remove a designated use from its water quality standards only if the designated use is not an existing use. An existing use is a use actually attained in the water body on or after November 28, 1975. Furthermore, a State may not remove a designated use that will be attained by implementing the technology-

based effluent limits required under sections 301(b) and 306 of the CWA and by implementing cost-effective and reasonable best management practices for nonpoint source controls. Thus, if a State has a reasonable basis to determine that the current designated use could be attained after implementation of the technology-based controls of the CWA, then the use could not be removed.

- In determining whether a use is attainable and prior to removing a designated use, States must conduct and submit to EPA a use attainability analysis. A use attainability analysis is a structured scientific assessment of the factors affecting the use, including the physical, chemical, biological, and economic factors described in 40 CFR 131.10(g). As part of the analysis, States should evaluate whether the designated use could be attained if CSO controls were implemented. For example, States should examine if sediment loadings from CSOs could be reduced so as not to bury spawning beds, or if biochemical oxygen demanding material in the effluent or the toxicity of the effluent could be corrected so as to reduce the acute or chronic physiological stress on or bioaccumulation potential of aquatic organisms.
- In reviewing the attainability of their WQS and the applicability of their WQS implementation procedures to CSO-impacted waters, States are encouraged to define more explicitly their recreational and aquatic life uses and then, if appropriate, modify the criteria accordingly to protect the designated uses.
- Another option is for States to adopt partial uses by defining when primary contact recreation such as swimming does not exist, such as during certain seasons of the year in northern climates or during a particular type of storm event. In making such adjustments to their uses, States must ensure that downstream uses are protected, and that during other seasons or after the storm event has passed, the use is fully protected.
- In addition to defining recreational uses with greater specificity, States are also encouraged to define the aquatic uses more precisely. Rather than ``aquatic life use protection," States should consider defining the type of fishery to be protected such as a cold water fishery (e.g., trout or salmon) or a warm weather fishery (e.g., bluegill or large mouth bass). Explicitly defining the type of fishery to be protected may assist the permittee in enlisting the support of citizens for a CSO control plan.
- A water quality standard variance may be appropriate, in limited circumstances on CSO-impacted waters, where the State is uncertain as to whether a standard can be attained and time is needed for the

State to conduct additional analyses on the attainability of the standard. Variances are short-term modifications in water quality standards. Subject to EPA approval, States, with their own statutory authority, may grant a variance to a specific discharger for a specific pollutant. The justification for a variance is similar to that required for a permanent change in the standard, although the showings needed are less rigorous. Variances are also subject to public participation requirements of the water quality standards and permits programs and are reviewable generally every three years. A variance allows the CSO permit to be written to meet the ``modified" water quality standard as analyses are conducted and as progress is made to improve water quality.

Justifications for variances are the same as those identified in 40 CFR 131.10(g) for modifications in uses. States must provide an opportunity for public review and comment on all variances. If States use the permit as the vehicle to grant the variance, notice of the permit must clearly state that the variance modifies the State's water quality standards. If the variance is approved, the State appends the variance to the State's standards and reviews the variance every three years.

- IV. Expectations for Permitting Authorities
 - A. Overview

CSOs are point sources subject to NPDES permit requirements including both technology-based and water quality-based requirements of the CWA. CSOs are not subject to secondary treatment regulations applicable to publicly owned treatment works (Montgomery Environmental Coalition vs. Costle, 646 F.2d 568 (D.C. Cir. 1980)).

All permits for CSOs should require the nine minimum controls as a minimum best available technology economically achievable and best conventional technology (BAT/BCT) established on a best professional judgment (BPJ) basis by the permitting authority (40 CFR 125.3). Water quality-based requirements are to be established based on applicable water quality standards.

This policy establishes a uniform, nationally consistent approach to developing and issuing NPDES permits to permittees with CSOs. Permits for CSOs should be developed and issued expeditiously. A single, system-wide permit generally should be issued for all discharges, including CSOs, from a CSS operated by a single authority. When different parts of a single CSS are operated by more than one authority, permits issued to each authority should generally require joint preparation and implementation of the elements of this Policy and should specifically define the responsibilities and duties of

each authority. Permittees should be required to coordinate systemwide implementation of the nine minimum controls and the development and implementation of the long-term CSO control plan.

- The individual authorities are responsible for their own discharges and should cooperate with the permittee for the POTW receiving the flows from the CSS. When a CSO is permitted separately from the POTW, both permits should be cross-referenced for informational purposes.
- EPA Regions and States should review the CSO permitting priorities established in the State CSO Permitting Strategies developed in response to the 1989 Strategy. Regions and States may elect to revise these previous priorities. In setting permitting priorities, Regions and States should not just focus on those permittees that have initiated monitoring programs. When setting priorities, Regions and States should consider, for example, the known or potential impact of CSOs on sensitive areas, and the extent of upstream industrial user discharges to the CSS.
- During the permittee's development of the long-term CSO control plan, the permit writer should promote coordination between the permittee and State WQS authority in connection with possible WQS revisions. Once the permittee has completed development of the long-term CSO control plan and has coordinated with the permitting authority the selection of the controls necessary to meet the requirements of the CWA, the permitting authority should include in an appropriate enforceable mechanism, requirements for implementation of the longterm CSO control plan, including conditions for water quality monitoring and operation and maintenance.
- **B. NPDES Permit Requirements**

Following are the major elements of NPDES permits to implement this Policy and ensure protection of water quality.

1. Phase I Permits--Requirements for Demonstration of Implementation of the Nine Minimum Controls and Development of the Long-Term CSO Control Plan

In the Phase I permit issued/modified to reflect this Policy, the NPDES authority should at least require permittees to:

a. Immediately implement BAT/BCT, which at a minimum includes the nine minimum controls, as determined on a BPJ basis by the permitting authority;

- b. Develop and submit a report documenting the implementation of the nine minimum controls within two years of permit issuance/modification;
- c. Comply with applicable WQS, no later than the date allowed under the State's WQS, expressed in the form of a narrative limitation; and
- d. develop and submit, consistent with this Policy and based on a schedule in an appropriate enforceable mechanism, a longterm CSO control plan as soon as practicable, but generally within two years after the effective date of the permit issuance/ modification. However, permitting authorities may establish a longer timetable for completion of the long-term CSO control plan on a case-by-case basis to account for sitespecific factors that may influence the complexity of the planning process.
- The NPDES authority should include compliance dates on the fastest practicable schedule for each of the nine minimum controls in an appropriate enforceable mechanism issued in conjunction with the Phase I permit. The use of enforceable orders is necessary unless Congress amends the CWA. All orders should require compliance with the nine minimum controls no later than January 1, 1997.
- 2. Phase II Permits--Requirements for Implementation of a Long-Term CSO Control Plan
 - Once the permittee has completed development of the long-term CSO control plan and the selection of the controls necessary to meet CWA requirements has been coordinated with the permitting and WQS authorities, the permitting authority should include, in an appropriate enforceable mechanism, requirements for implementation of the long-term CSO control plan as soon as practicable. Where the permittee has selected controls based on the ``presumption" approach described in Section II.C.4, the permitting authority must have determined that the presumption that such level of treatment will achieve water quality standards is reasonable in light of the data and analysis conducted under this Policy. The Phase II permit should contain:
 - a. Requirements to implement the technology-based controls including the nine minimum controls determined on a BPJ basis;

- b. Narrative requirements which insure that the selected CSO controls are implemented, operated and maintained as described in the long-term CSO control plan;
- c. Water quality-based effluent limits under 40 CFR 122.44(d)(1) and 122.44(k), requiring, at a minimum, compliance with, no later than the date allowed under the State's WQS, the numeric performance standards for the selected CSO controls, based on average design conditions specifying at least one of the following:
 - i. A maximum number of overflow events per year for specified design conditions consistent with II.C.4.a.i; or
 - ii. A minimum percentage capture of combined sewage by volume for treatment under specified design conditions consistent with II.C.4.a.ii; or
 - iii. A minimum removal of the mass of pollutants discharged for specified design conditions consistent with II.C.4.a.iii; or
 - iv. performance standards and requirements that are consistent with II.C.4.b. of the Policy.
- d. A requirement to implement, with an established schedule, the approved post-construction water quality assessment program including requirements to monitor and collect sufficient information to demonstrate compliance with WQS and protection of designated uses as well as to determine the effectiveness of CSO controls.
- e. A requirement to reassess overflows to sensitive areas in those cases where elimination or relocation of the overflows is not physically possible and economically achievable. The reassessment should be based on consideration of new or improved techniques to eliminate or relocate overflows or changed circumstances that influence economic achievability;
- f. Conditions establishing requirements for maximizing the treatment of wet weather flows at the POTW treatment plant, as appropriate, consistent with Section II.C.7. of this Policy;
- g. A reopener clause authorizing the NPDES authority to reopen and modify the permit upon determination that the

CSO controls fail to meet WQS or protect designated uses. Upon such determination, the NPDES authority should promptly notify the permittee and proceed to modify or reissue the permit. The permittee should be required to develop, submit and implement, as soon as practicable, a revised CSO control plan which contains additional controls to meet WQS and designated uses. If the initial CSO control plan was approved under the demonstration provision of Section II.C.4.b., the revised plan, at a minimum, should provide for controls that satisfy one of the criteria in Section II.C.4.a. unless the permittee demonstrates that the revised plan is clearly adequate to meet WQS at a lower cost and it is shown that the additional controls resulting from the criteria in Section II.C.4.a. will not result in a greater overall improvement in water quality.

Unless the permittee can comply with all of the requirements of the Phase II permit, the NPDES authority should include, in an enforceable mechanism, compliance dates on the fastest practicable schedule for those activities directly related to meeting the requirements of the CWA. For major permittees, the compliance schedule should be placed in a judicial order. Proper compliance with the schedule for implementing the controls recommended in the long-term CSO control plan constitutes compliance with the elements of this Policy concerning planning and implementation of a long term CSO remedy.

3. Phasing Considerations

Implementation of CSO controls may be phased based on the relative importance of and adverse impacts upon WQS and designated uses, as well as the permittee's financial capability and its previous efforts to control CSOs. The NPDES authority should evaluate the proposed implementation schedule and construction phasing discussed in Section II.C.8. of this Policy. The permit should require compliance with the controls proposed in the long-term CSO control plan no later than the applicable deadline(s) under the CWA or State law. If compliance with the Phase II permit is not possible, an enforceable schedule, consistent with the Enforcement and Compliance Section of this Policy, should be issued in conjunction with the Phase II permit which specifies the schedule and milestones for implementation of the long-term CSO control plan.

V. Enforcement and Compliance

A. Overview

It is important that permittees act immediately to take the necessary steps to comply with the CWA. The CSO enforcement effort will commence with an initiative to address CSOs that discharge during dry weather, followed by an enforcement effort in conjunction with permitting CSOs discussed earlier in this Policy. Success of the enforcement effort will depend in large part upon expeditious action by NPDES authorities in issuing enforceable permits that include requirements both for the nine minimum controls and for compliance with all other requirements of the CWA. Priority for enforcement actions should be set based on environmental impacts or sensitive areas affected by CSOs.

As a further inducement for permittees to cooperate with this process, EPA is prepared to exercise its enforcement discretion in determining whether or not to seek civil penalties for past CSO violations if permittees meet the objectives and schedules of this Policy and do not have CSOs during dry weather.

B. Enforcement of CSO Dry Weather Discharge Prohibition

EPA intends to commence immediately an enforcement initiative against CSO permittees which have CWA violations due to CSOs during dry weather. Discharges during dry weather have always been prohibited by the NPDES program. Such discharges can create serious public health and water quality problems. EPA will use its CWA Section 308 monitoring, reporting, and inspection authorities, together with NPDES State authorities, to locate these violations, and to determine their causes. Appropriate remedies and penalties will be sought for CSOs during dry weather. EPA will provide NPDES authorities more specific guidance on this enforcement initiative separately.

C. Enforcement of Wet Weather CSO Requirements

Under the CWA, EPA can use several enforcement options to address permittees with CSOs. Those options directly applicable to this Policy are section 308 Information Requests, section 309(a) Administrative Orders, section 309(g) Administrative Penalty Orders, section 309 (b) and (d) Civil Judicial Actions, and section 504 Emergency Powers. NPDES States should use comparable means.

NPDES authorities should set priorities for enforcement based on environmental impacts or sensitive areas affected by CSOs. Permittees that have voluntarily initiated monitoring and are progressing expeditiously toward appropriate CSO controls should be given due consideration for their efforts.

1. Enforcement for Compliance With Phase I Permits

Enforcement for compliance with Phase I permits will focus on requirements to implement at least the nine minimum controls, and develop the long-term CSO control plan leading to compliance with the requirements of the CWA. Where immediate compliance with the Phase I permit is infeasible, the NPDES authority should issue an enforceable schedule, in concert with the Phase I permit, requiring compliance with the CWA and imposing compliance schedules with dates for each of the nine minimum controls as soon as practicable. All enforcement authorities should require compliance with the nine minimum controls no later than January 1, 1997. Where the NPDES authority is issuing an order with a compliance schedule for the nine minimum controls, this order should also include a schedule for development of the long-term CSO control plan.

If a CSO permittee fails to meet the final compliance date of the schedule, the NPDES authority should initiate appropriate judicial action.

2. Enforcement for Compliance With Phase II Permits

The main focus for enforcing compliance with Phase II permits will be to incorporate the long-term CSO control plan through a civil judicial action, an administrative order, or other enforceable mechanism requiring compliance with the CWA and imposing a compliance schedule with appropriate milestone dates necessary to implement the plan.

In general, a judicial order is the appropriate mechanism for incorporating the above provisions for Phase II. Administrative orders, however, may be appropriate for permittees whose longterm control plans will take less than five years to complete, and for minors that have complied with the final date of the enforceable order for compliance with their Phase I permit. If necessary, any of the nine minimum controls that have not been implemented by this time should be included in the terms of the judicial order.

D. Penalties

EPA is prepared not to seek civil penalties for past CSO violations, if permittees have no discharges during dry weather and meet the objectives and schedules of this Policy. Notwithstanding this, where a permittee has other significant CWA violations for which EPA or the State is taking judicial action, penalties may be considered as part of that action for the following:

- 1. CSOs during dry weather;
 - 2. Violations of CSO-related requirements in NPDES permits; consent decrees or court orders which predate this policy; or
 - 3. Other CWA violations.

EPA will not seek penalties for past CSO violations from permittees that fully comply with the Phase I permit or enforceable order requiring compliance with the Phase I permit. For permittees that fail to comply, EPA will exercise its enforcement discretion in determining whether to seek penalties for the time period for which the compliance schedule was violated. If the milestone dates of the enforceable schedule are not achieved and penalties are sought, penalties should be calculated from the last milestone date that was met.

At the time of the judicial settlement imposing a compliance schedule implementing the Phase II permit requirements, EPA will not seek penalties for past CSO violations from permittees that fully comply with the enforceable order requiring compliance with the Phase I permit and if the terms of the judicial order are expeditiously agreed to on consent. However, stipulated penalties for violation of the judicial order generally should be included in the order, consistent with existing Agency policies. Additional guidance on stipulated penalties concerning long-term CSO controls and attainment of WQS will be issued.

Paperwork Reduction Act

The information collection requirements in this policy have been approved by the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq and have been assigned OMB control number 2040-0170.

This collection of information has an estimated reporting burden averaging 578 hours per response and an estimated annual recordkeeping burden averaging 25 hours per recordkeeper. These estimates include time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Chief, Information Policy Branch; EPA; 401 M Street SW. (Mail Code 2136); Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and

Budget, Washington, DC 20503, marked ``Attention: Desk Officer for EPA."

Subchapter 12. Effluent Standards Applicable to Direct Discharges to Surface Water and Indirect Discharges to Domestic Treatment Works

7:14A-12.1 Purpose and Scope

(a) This subchapter specifies Federal and State effluent standards which may be incorporated into a permit as an effluent limitation for direct discharges to surface water including those discharges conveyed to surface water via storm sewers and indirect discharges to DTWs.

- (b) The effluent standards contained in this subchapter are applicable as follows:
 - 1. Regarding stormwater discharges:
 - i. Any discharge of stormwater authorized by a general permit is exempt from the requirements of this subchapter unless such general permit provides otherwise;
 - Any stormwater discharge shall be subject to one or more requirements of this subchapter when the effluent standard in question is achievable by stormwater treatment processes using commercially available technology and is not achievable using other practicable BMPs, and the fact sheet or statement of basis for the draft permit provides the basis for the inclusion of such requirement(s).
 - 2. Regarding discharges from combined sewer overflows:
 - i. Any discharge from a combined sewer overflow authorized by a general permit is exempt from the requirements of this subchapter unless such general permit provides otherwise:
 - ii. Any discharge from a combined sewer overflow shall be subject to one or more requirements of this subchapter when the fact sheet for the draft permit for such discharge provides the basis for the inclusion of such requirement(s).
 - 3. Any discharge other than those identified at (b)1. above shall be exempt from one or more of the requirements in this subchapter as specified in the applicable section.
 - 4. Any discharge of a parameter to which this subchapter applies that is also regulated by another regulatory agency shall meet the more stringent standards of such agency or of this subchapter.

7:14A-12.2 Secondary Treatment Effluent Standards

(a) The requirements of this section shall apply to all direct discharges to surface water from publicly or privately owned domestic treatment works included in a NJPDES permit.

(b) The minimum level of effluent quality attainable by secondary treatment in terms of the parameter BOD₅, except as provided for in N.J.A.C. 7:14A-12.3 is as follows:

- 1. The monthly average value shall not exceed 30 mg/L;
- 2. The weekly average value shall not exceed 45 mg/L; and
- 3. The monthly average value for percent removal shall not be less than 85 percent.

(c) In lieu of the parameter BOD₅ and the levels of the effluent quality specified in (b) above, the parameter CBOD₅ may be substituted as follows:

- 1. The monthly average value shall not exceed 25 mg/L;
- 2. The weekly average value shall not exceed 40 mg/L; and
- 3. The monthly average value for percent removal shall not be less than 85 percent.

(d) Chemical oxygen demand COD or total organic carbon (TOC) may be substituted for BOD5 or CBOD5 when a long-term BOD5 or CBOD5:COD or BOD5 or CBOD5:TOC correlation is demonstrated whereby a permittee submits data which indicates that a different BOD5 or CBOD5:COD or BOD5 or CBOD5:TOC ratio would be more appropriate. In the absence of data to establish a long term correlation, the BOD5:COD ratio shall be assumed to be 1:2 and the BOD5:TOC ratio shall be assumed to be 1:1.

(e) The minimum level of effluent quality attainable by secondary treatment in terms of the parameter TSS, except as provided in N.J.A.C. 7:14A-12.3 is as follows:

1. The monthly average value shall not exceed 30 mg/L;

- 2. The weekly average value shall not exceed 45 mg/L; and
- 3. The monthly average value for percent removal shall not be less than 85 percent.

(f) The pH shall be maintained within the limits of 6.0 to 9.0 standard units unless the facility demonstrates that:

- 1. Inorganic chemicals are not added to the wastestream as part of the treatment process; and
- 2. Contributions from industrial sources do not cause the pH of the effluent to be less than 6.0 or greater than 9.0.

7:14A-12.3 Secondary Treatment Special Considerations

(a) This section identifies special considerations applicable to effluent limitations for BOD₅ or CBOD₅ and TSS percentage removal or, for facilities receiving waste from certain industrial categories, relief in terms of less stringent BOD₅ or CBOD₅ and TSS concentration levels when the level of treatment required is more stringent than the minimum treatment requirements specified in N.J.A.C. 7:14A-12.2.

(b) For domestic treatment works receiving less concentrated influent wastewater from combined sewer systems during wet weather, the Department may remove, or impose a less stringent, BOD₅ or CBOD₅ and TSS percent removal requirement than specified in N.J.A.C. 7:14A-12.2(b)3, (c)3 or (e)3. For such treatment works, any attainable percentage removal level shall be defined on a case-by-case basis.

(c) For domestic treatment works receiving less concentrated influent wastewater from combined sewer systems during dry weather, the Department shall remove, or impose a less stringent, BOD₅ or CBOD₅ and TSS percent removal requirement than specified in N.J.A.C. 7:14A-12.2(b)3, (c)3 or (e)3 if the permittee satisfactorily demonstrates that:

- 1. The treatment works is consistently meeting, or will consistently meet its permit effluent concentration limits, but the percent removal requirements cannot be met due to less concentrated influent wastewater. In such case an applicant shall demonstrate compliance with effluent limitations consistently achievable through proper operations and maintenance, as defined in N.J.A.C. 7:14A-1.2; and
- 2. To meet the percent removal requirements, the treatment works would have to achieve significantly more stringent effluent limitations, as defined in N.J.A.C. 7:14A-1.2, than would otherwise be required by the concentration-based standards and associated loadings; and
- 3. The less concentrated influent wastewater does not result from either excessive infiltration or clear water industrial discharges (for example, non-contact cooling water discharges or other discharges which do not contain pollutants in sufficient quantities to otherwise be of concern) during dry weather periods. If the less concentrated influent wastewater is the result of clear water industrial discharges, then the treatment works must control such discharges in accordance with 40 CFR 403.

(d) For domestic treatment works receiving less concentrated influent wastewater from a separate sewer system, the Department shall remove, or impose a less stringent, BOD₅ or CBOD₅ and TSS percent removal requirement than specified in N.J.A.C. 7:14A-12.2(b)3, (c)3 or (e)3, if the permittee satisfactorily demonstrates that:

- 1. The treatment works is consistently meeting, or will consistently meet, its permit effluent concentration limits but the percent removal requirements cannot be met due to less concentrated influent wastewater. In such case an applicant shall demonstrate compliance with effluent limitations consistently achievable through proper operations and maintenance as defined in N.J.A.C. 7:14A-1.2; and
- 2. To meet the percent removal requirements, the treatment works would have to achieve significantly more stringent limitations as defined in N.J.A.C. 7:14A-1.2, than would otherwise be required by the concentration-based standards; and
- 3. The less concentrated influent wastewater is not the result of excessive inflow/infiltration.

(e) For domestic treatment works receiving industrial waste from certain industrial categories, the average monthly values for BOD₅, or CBOD₅ and TSS specified in N.J.A.C. 7:14A-12.2(b)1, (c)1 or (e)1 shall be made less stringent provided that:

- The permitted discharge of BOD₅ or CBOD₅ and TSS from the domestic treatment works, attributable to the industrial category, would not be greater than that which would be permitted under sections 301(b)(1)(A)(i), 301(b)(2)(E) or 306 of the Federal Act if such industrial category were to discharge directly to surface water; and
- 2. The flow or loading for BOD₅ or CBOD₅ and TSS introduced to the domestic treatment works by the industrial category exceeds 10 percent of the design flow or loading of the domestic treatment works. When such an adjustment is made, the weekly average value for BOD₅ or CBOD₅ and TSS specified in N.J.A.C. 7:14A-12.2(b)2, (c)2 or (e)2 shall be adjusted proportionately.

(f) When requesting special consideration for any of the discharges described in (b), (c) and (d) above, an applicant shall submit, as part of the request, all demonstrations specified in the applicable subsection and, in addition, the following:

- 1. The BOD₅, or CBOD₅, and TSS percent removal requested, as applicable, and whether the request is for seasonal or year round relief;
- 2. If the discharge is also regulated by another regulatory agency (for example, Delaware River Basin Commission, Interstate Environmental Commission), a brief written statement from that regulatory agency that the agency has no objection to the request for special consideration;
- 3. At a minimum, 24 consecutive months of influent and effluent data sampled at monthly intervals for BOD5 or CBOD5 and TSS concentration, as well as percentage removal, presented in summary form. Pollutant data for BOD5 or CBOD5 and TSS shall be sampled in accordance with the methods and procedures described in the applicable permit. Data collected during periods of upsets, bypasses, operational errors or other unusual conditions shall be excluded. The data shall contain, at a minimum, the following information:
- i. Parameter value in mg/L for influent (concentration only) and effluent (concentration and percent removal);
- ii. Date on which each sample was taken;
- iii. Effluent flow at time of each sample;
- iv. Weather conditions at time of each sampling (for example, raining or dry);
- v. Total population served; and
- vi. The total amount of flow attributable to major industrial and commercial users contributing greater than 50,000 gallons per day each.

- 4. All permit limit exceedences;
- 5. For combined sewer systems only, the number of combined sewer overflow points and an estimation, with basis, of what percentage of the total collection system is combined; and
- 6. Any other data that the Department deems appropriate to make an accurate determination on the merits of the request.

(g) When requesting special consideration for the discharge under (e) above, an applicant shall submit all applicable demonstrations specified in (e) 1 and 2, and, in addition, the following:

- 1. If the discharge is also regulated by another regulatory agency (for example, Delaware River Basin Commission, Interstate Environmental Commission,), a brief written statement from that regulatory agency that the agency has no objection to the request for special consideration;
- 2. The adjustment requested; and
- 3. Any other data that the Department deems appropriate to make an accurate determination on the merits of the request.
- (h) The following domestic treatment works are not eligible to request special consideration under this section:
 - 1. Any domestic treatment works which cannot provide satisfactory demonstrations as required pursuant to (b) through (e) above, as applicable; and
 - 2. Any domestic treatment works subject to the requirements of another regulatory agency (for example, Delaware River Basin Commission, Interstate Environmental Commission) that has not received a written statement from that agency that it has no objection to the request.
- 7:14A-12.4 Minimum BOD₅ Effluent Standards

(a) For direct discharges to surface water for which (BOD5 or CBOD5) water quality based effluent limitations based upon water quality studies acceptable to the Department have not been developed but are required under N.J.A.C. 7:9B-1.5 or 1.6, the minimum treatment requirements for BOD5 specified in (b) below shall apply except when more stringent effluent limitations are required by:

- 1. Section 301 or 306 of the Federal Act;
- 2. The Delaware River Basin Commission or the Interstate Environmental Commission, as applicable.
- (b) The minimum BOD₅ treatment requirements are as listed in the following table:

WATERSHED Type	RECEIVING WATER CLASSIFICATION	BOD ₅ Maximum (monthly/weekly avg.)	DISCHARGE
Atlantic Coastal Plain	FW2, SE1 SC	15/22.5 mg/L 30/45 mg/l	All Domestic or Domestic combined with industrial
Delaware River Basin	Tributaries Classified as FW2, SE1, SE2 Main stem all zones	25/37.5 mg/L As set forth in the Water Quality Standards for the Delaware River Basin; Resolution 67-7 of the DRBC; April 26, 1967 and subsequent revisions	All All
Hackensack River Basin	FW2, SE1, SE2, SE3	30/45 mg/L	All

Passaic River Basin	FW2	25/37.5 mg/L	All
(including Newark Bay)	SE2, SE3	30/45 mg/L	All
Wallkill River Basin	FW2	15/22.5 mg/L	All

(c) In applying the minimum treatment requirements contained in (b) above, the following substitutions may be made:

- For industrial treatment works, TOC or COD may be substituted for BOD5 when a long-term BOD5:COD or BOD5:TOC correlation has been demonstrated. In the absence of data (to establish a long term correlation), the BOD5:COD ratio shall be assumed to be 1:2 and the BOD5:TOC ratio shall be assumed to be 1:1. If subsequent data are submitted which indicate that a different BOD5:COD or BOD5:TOC ratio would be more appropriate, a written request shall be submitted to the Department; and
- 2. For industrial or domestic treatment works, CBOD₅ may be substituted for BOD₅ as follows:
- i. With prior approval of each regulatory agency with jurisdiction over the discharge, when applicable, if the effluent standard for BOD5 is 30/45 mg/L, a CBOD5 effluent standard of 25/40 mg/L, as allowed for in N.J.A.C. 7:14A-12.2(c)1 and 2, may be substituted; or
- With prior approval of each regulatory agency with jurisdiction over the discharge, when applicable, if the effluent standard for BOD5 is other than 30/45 mg/L, CBOD5 may be substituted for BOD5 when a long term BOD5:CBOD5 correlation has been demonstrated. When a request for a substitution of CBOD5 for BOD5 is made, the applicant shall submit data demonstrating the appropriate BOD5:CBOD5 correlation. The correlation demonstration shall consist of a minimum of 12 BOD5 and CBOD5 analyses of split samples obtained at a frequency of twice per month, subject to the following restrictions:
 - (A) For limitations applicable year round, or for limitations applicable during warm weather (for example, May through October), the samples shall be obtained during the months of May through October.
 - (B) For limitations applicable during cold weather (for example, November through April), the samples shall be obtained during the months of November through April.
 - (C) The monthly and weekly BOD₅ effluent limitations shall be recalculated as CBOD₅ monthly and weekly effluent limitations using the approved correlation factor.

(d) Direct discharges to surface water from industrial treatment works shall be exempt from the minimum BOD₅ effluent standards in (b) above, when:

- i. Statistically valid data indicate that the maximum projected BOD₅ concentration is consistently below the applicable effluent standard; or
- ii. The Department determines that, based on wastewater generating activities, no potential exists for the discharge to add BOD₅. COD or TOC.

7:14A-12.5 Disinfection

(a) All wastewater that could contain pathogenic organisms such as fecal coliform and/or enterococci organisms shall be subject to continuous year round disinfection prior to discharge into surface waters.

(b) The State effluent standard for fecal coliform organisms is as follows:

- 1. The monthly geometric mean shall not exceed 200 colonies/100 mL; and
- 2. The weekly geometric mean shall not exceed 400 colonies/100 mL.

7:14A-12.6 Foam

- (a) DSW dischargers are prohibited from discharging foam or causing foaming of the receiving water that:
 - 1. Forms objectionable deposits on the receiving water;
 - 2. Forms floating masses producing a nuisance;
 - 3. Produces objectionable color or odor; or
 - 4. Interferes with a designated use of the waterbody.
- (b) Foaming of the receiving waterbody caused by natural conditions shall not be considered a violation of the standard in (a) above.

(c) For discharges with submerged outfalls, the Department may take into consideration the location, depth and the dispersion characteristics of the discharge in deciding whether or not to include the provisions of (a) above in the permit.

7:14A-12.7 Phosphorus effluent standards

(Reserved.)

7:14A-12.8 Oil and grease effluent standards

(a) The requirements of N.J.A.C. 7:14A-12.8 through 12.10 apply to direct discharges of oil and grease to surface water, and indirect discharges of petroleum based oil and grease to a domestic treatment works, except as specifically exempted in N.J.A.C. 7:14A-12.10. Indirect users shall comply with any local agency standards for nonpetroleum based oil and grease.

(b) (Reserved.)

(c) Direct dischargers to surface waters shall limit the oil and grease effluent content so that such effluent does not:

- 1. Exhibit a visible sheen;
- 2. Exceed an average monthly discharge limitation of 10 mg/L; and
- 3. Exceed a concentration of 15 mg/L in any single sample.

(d) Indirect users discharging petroleum based oil and grease shall meet the following petroleum hydrocarbon effluent standards except where the control authority has determined that more stringent effluent limitations apply:

1. The average monthly discharge limitation shall not exceed 100 mg/L; and

2. The concentration in any single sample shall not exceed 150 mg/L.

(e) (Reserved.)

(f) If a direct discharger only discharges petroleum based oil and grease, the Department may specify in the permit that compliance with the oil and grease effluent standards in 12.8(c) above may be monitored using the petroleum hydrocarbons analytical method.

7:14A-12.9 (Reserved.)

7:14A-12.10 Petroleum Hydrocarbon Exemptions

(a) Indirect users shall be exempted from the petroleum hydrocarbon standards specified at N.J.A.C. 7:14A-12.8(d), provided the following requirements are met:

1. The DTW into which the indirect user discharges submits a request for the exemption indicating it meets all of the following criteria:

- i. The discharge from the domestic treatment works has met a 10 mg/L average and 15 mg/L maximum limitation for oil and grease for each of the reporting periods during the preceding 12 months, as determined by the Department;
- ii. The sludge disposal option currently utilized or planned by the domestic treatment works considers petroleum hydrocarbons a beneficial constituent; and
- iii. The DTW shows that the costs for oil and grease removal at its plant are in proportion to the other operation and maintenance costs of the plant.
- 2. The Department shall have 90 days to review the request for the exemption and make a tentative decision to approve or deny the request. If additional information from the applicant is required, the 90 day period may be extended. The Department shall public notice the tentative decision.

7:14A-12.11 Toxic Effluent Standards

(a) (Reserved.)

(b) (Reserved.)

(c) (Reserved.)

(d) For discharges to surface water from site remediation projects, the chemical specific toxic pollutant effluent standards are set forth in N.J.A.C. 7:14A-12 Appendix B.

(e) For new sources, new discharges or expanded direct discharges to surface water, the chemical specific toxic pollutant effluent standards are set forth in N.J.A.C. 7:14A-12 Appendix C.

7:14A-12 Appendix A (Reserved.)

7:14A-12: Appendix B	Effluent Standards for Site Remediation Projects
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		EFFLUENT	STANDARDS			
PARAMETER	FW-2	WATERS	SC, SE WATERS			
	monthly average	daily maximum	monthly average	daily maximum		
VOLATILE COMPOUNDS						
Acrolein		100		100		
Acrylonitrile		50		50		
Benzene		7	37	136		
Bromoform		8.6	29	58		
Carbon Tetrachloride		6		8.8		
Chlorobenzene	15	28	15	28		
Chlorodibromomethane		8.2		14		
Chloroethane	104	268	104	268		
Chloroform		11.4	21	46		
Dichlorobromomethane		5		12		
1,1-Dichloroethane	22	59	22	59		
1,2-Dichloroethane		3	68	211		
1,1-Dichloroethylene		6	16	25		
1,2-Dichloropropane	153	230	153	230		

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1,3-Dichloropropylene	10	20	29	44
Ethylbenzene	32	108	32	108
Methyl Bromide	20	40	20	40
Methyl Chloride	86	190	86	190
Methylene Chloride		9.4	40	89
1,1,2,2-Tetrachloroethane		10		10
Tetrachloroethylene		16	22	56
Toluene	26	80	26	80
1,2-Trans-Dichloroethylene	21	54	21	54
1,1,1-Trichloroethane	21	54	21	54
1,1,2-Trichloroethane		12	21	54
Trichloroethylene		5.4	21	54
Vinyl Chloride		10	104	268
ACID COMPOUNDS				
2-Chlorophenol	31	98	31	98
2,4-Dichlorophenol	39	112	39	112
2,4-Dimethylphenol	18	36	18	36
4,6-Dinitro-O-Cresol		60	78	277
2,4-Dinitrophenol	71	123	71	123
2-Nitrophenol	41	69	41	69
4-Nitrophenol	72	124	72	124
Pentachlorophenol		30		30
Phenol	15	26	15	26
2,4,6-Trichlorophenol		20		20

all units in ug/L

1 -for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum

		Effluent	STANDARDS		
PARAMETER	FW-2	WATERS	SC, SE WATERS		
	monthly average	daily maximum	monthly average	daily maximum	
BASE NEUTRAL COMPOUNDS			_		
Anthracene	22	59	22	59	
Benzidine		50		50	
Benzo (a) Anthracene		10		10	
Benzo (a) Pyrene		20		20	
Benzo(b)fluoranthene		10		10	
Benzo (k) Fluoranthene		20		20	
Bis (2-Chloroethyl) Ether		10		10	
Bis (2-Chloroisopropyl) Ether	301	757	301	757	
Bis (2-Ethylhexyl) Phthalate		36	59	118	
Butyl Benzyl Phthalate		24		24	
Chrysene		20		20	
Dibenzo (a,h) Anthracene		20		20	
1,2-Dichlorobenzene	77	163	77	163	
1,3-Dichlorobenzene	31	44	31	44	
1,4-Dichlorobenzene		28		28	
3,3'-Dichlorobenzidine		60		60	
Diethyl Phthalate	81	203	81	203	
Dimethyl Phthalate	19	47	19	47	
Di-N-Butyl Phthalate	27	57	27	57	
2,4 Dinitrotoluene		10		18.2	
2,6-Dinitrotoluene	255	641	255	641	
Fluoranthene	25	68	25	68	
Fluorene	22	59	22	59	
Hexachlorobenzene		10		10	
Hexachlorobutadiene		10	20	49	
Hexachlorocyclopentadiene	240	480		1800	
Hexachloroethane	19	38	21	54	
Indeno (1,2,3-cd) Pyrene		20		20	
Isophorone		20		20	
Naphthalene	22	59	22	59	
Nitrobenzene	17	34	27	68	

all units in ug/L

^{1 -}for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum

N-Nitrosodimethylamine		20		20
N-Nitrosodiphenylamine		20		20
Phenanthrene	22	59	22	59
Pyrene	25	67	25	67
1,2,4-Trichlorobenzene	68	140	68	140

all units in ug/L 1 -for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum

		EFFLUENT	STANDARDS			
PARAMETER		WATERS	SC, SE WATERS			
	monthly average	daily maximum	monthly average	daily maximum		
PESTICIDES						
Aldrin ²		0.04		0.04		
Alpha-BHC		0.02		0.02		
Beta-BHC	0.137	0.274	0.46	0.92		
Gamma-BHC (Lindane)		0.08		0.03		
Chlordane		0.2		0.2		
4,4'-DDT ²		0.06		0.06		
4,4'-DDE ²		0.04		0.04		
4,4'-DDD ²		0.04		0.04		
Dieldrin ²		0.03		0.03		
Alpha-Endosulfan		0.02		0.02		
Beta-Endosulfan		0.04		0.04		
Endosulfan Sulfate	0.93	1.86	2	4		
Endrin ³		0.04		0.04		
Endrin Aldehyde	0.76	1.52	0.81	1.62		
Heptachlor		0.02		0.02		
Heptachlor Epoxide		0.4		0.4		
Toxaphene ³		1		1		
METALS AND CYANIDE						
Arsenic	50	100	50	100		
Cadmium	50	100	50	100		
Chromium	50	100	50	100		
Copper	50	100	50	100		
Iron	1000	2000	1000	2000		
Lead	50	100	50	100		
Mercury		1		1		
Nickel	72	144	50	100		
Selenium	50	100	50	100		
Silver	25	50	25	50		
Zinc	100	200	100	200		
Cyanide	100	200	100	200		
DIOXIN	<u>.</u>		<u>.</u>	1		

all units in ug/L 1 -for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum

2,3,7,8-Tetrachlorodibenzo		
-p-Dioxin	0.01	0.01
PCBs ²		
PCBs-1242, 1254, 1221,		
1232, 1248, 1260, 1016	0.5	0.5

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all units in ug/L

- 1 -for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum
- 2 for manufacturers and formulators discharge prohibited
 3 for manufacturers: 1.5 ug/L daily maximum, 7.5 ug/L instantaneous maximum for formulators: discharge prohibited

7:14A-12: Appendix C

Effluent Standards for New Sources, New Discharges or Expanded Direct Discharges

	FACILITY	FLOW < 7Q	10 & Larg	e Tidal	FACILITY H	FACILITY FLOW > 7Q 10 & SMALL TIDAL			
PARAMETER	FW2 WATERS		,	WATERS		WATERS	,	SE, SC WATERS	
	monthly average	daily maximum	monthly average	daily maximum	monthly average	daily maximum	monthly average	daily maximum	
VOLATILE COMPOUNDS			0		0		8		
Acrolein		100		100		100		100	
Acrylonitrile		50		50		50		50	
Benzene		24	37	136		7	37	136	
Bromoform	29	58	29	58		8.6	29	58	
Carbon Tetrachloride		6	18	38		6		8.8	
Chlorobenzene	15	28	15	28	15	28	15	28	
Chlorodibromomethane		14		14		8.2		14	
Chloroethane	104	268	104	268	104	268	104	268	
Chloroform	21	46	21	46		11.4	21	46	
Dichlorobromomethane		5.4		12		5		12	
1,1-Dichloroethane	22	59	22	59	22	59	22	59	
1,2-Dichloroethane		7.6	68	211		3	68	211	
1,1-Dichloroethylene	16	11.4	16	25		6	16	25	
1,2-Dichloropropane	153	230	153	230	153	230	153	230	
1,3-Dichloropropylene	29	44	29	44		20	29	44	
Ethylbenzene	32	108	32	108	32	108	32	108	
Methyl Bromide	20	40	20	40	20	40	20	40	
Methyl Chloride	86	190	86	190	86	190	86	190	
Methylene Chloride	40	89	40	89		9.4	40	89	
1,1,2,2-Tetrachloroethane		10		10		10		10	
Tetrachloroethylene	22	56	22	56		16	22	56	
Toluene	26	80	26	80	26	80	26	80	
1,2-Trans-Dichloroethylene	21	54	21	54	21	54	21	54	
1,1,1-Trichloroethane	21	54	21	54	21	54	21	54	
1,1,2-Trichloroethane	21	54	21	54		12	21	54	
Trichloroethylene	21	54	21	54		5.4	21	54	
Vinyl Chloride	20	40	104	268		10	104	268	
ACID COMPOUNDS									
2-Chlorophenol	31	98	31	98	31	98	31	98	

all units in ug/L

1 -for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum

Administrative Code.	-							
2,4-Dichlorophenol	39	112	39	112	39	112	39	112
2,4-Dimethylphenol	18	36	18	36	18	36	18	36
4,6-Dinitro-O-Cresol	78	277	78	277		60	78	277
2,4-Dinitrophenol	71	123	71	123	71	123	71	123
2-Nitrophenol	41	69	41	69	41	69	41	69
4-Nitrophenol	72	124	72	124	72	124	72	124
Pentachlorophenol		30		30		30		30
Phenol	15	26	15	26	15	26	15	26
2,4,6-Trichlorophenol		42	65	130		20		20

all units in ug/L

- 1 -for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum
- 2 for manufacturers and formulators discharge prohibited
- 3 for manufacturers: 0.1 ug/L daily maximum, 0.5 ug/L instantaneous maximum for formulators: discharge prohibited

					FACILITY FLOW > 7Q 10 & SMALL TIDAL			
PARAMETER	FW2 WATERS		/	WATERS	FW2 WATERS			WATERS
	monthly average	daily maximum	monthly average	daily maximum	monthly average	daily maximum	monthly average	daily maximum
BASE NEUTRAL Compounds								
Anthracene	22	59	22	59	22	59	22	59
Benzidine ¹		50		50		50		50
Benzo (a) Anthracene		10		10		10		10
Benzo (a) Pyrene		20		20		20		20
Benzo(b)fluoranthene		10		10		10		10
Benzo (k) Fluoranthene		20		20		20		20
Bis (2-Chloroethyl) Ether		10	14	28		10		10
Bis (2-Chloroisopropyl) Ether	301	757	301	757	301	757	301	757
Bis (2-Ethylhexyl) Phthalate	103	279	103	279		36	59	118
Butyl Benzyl Phthalate		24		24		24		24
Chrysene		20		20		20		20
Dibenzo (a,h) Anthracene		20		20		20		20
1,2-Dichlorobenzene	77	163	77	163	77	163	77	163
1,3-Dichlorobenzene	31	44	31	44	31	44	31	44
1,4-Dichlorobenzene		28		28		28		28
3,3'-Dichlorobenzidine		60		60		60		60
Diethyl Phthalate	81	203	81	203	81	203	81	203
Dimethyl Phthalate	19	47	19	47	19	47	19	47
Di-N-Butyl Phthalate	27	57	27	57	27	57	27	57
2,4 Dinitrotoluene		10	91	182		10		18.2
2,6-Dinitrotoluene	255	641	255	641	255	641	255	641
1,2-Diphenylhydrazine	0.4	0.8	5.4	10.8	0.04	0.08	0.54	1.08
(as Azobenzene)								
Fluoranthene	25	68	25	68	25	68	25	68
Fluorene	22	59	22	59	22	59	22	59
Hexachlorobenzene		10		10		10		10
Hexachlorobutadiene	20	49	20	49		10	20	49
Hexachlorocyclopentadiene		1800		1800	240	480		1800
Hexachloroethane	21	54	21	54	19	38	21	54
Indeno (1,2,3-cd) Pyrene		20		20		20		20

all units in ug/L

1 -for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum

Isophorone		20		20		20		20
Naphthalene	22	59	22	59	22	59	22	59
Nitrobenzene	27	68	27	68	17	34	27	68
N-Nitrosodimethylamine		20	73	146		20		20
N-Nitrosodiphenylamine		20		20		20		20
Phenanthrene	22	59	22	59	22	59	22	59
Pyrene	25	67	25	67	25	67	25	67
1,2,4-Trichlorobenzene	68	140	68	140	68	140	68	140

all units in ug/L

- 1 -for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum
- 2 for manufacturers and formulators discharge prohibited
 3 for manufacturers: 0.1 ug/L daily maximum, 0.5 ug/L instantaneous maximum for formulators: discharge prohibited

P A R A M E T E R	FACILITY F	TLOW < 7Q			FACILITY F	TLOW > 7Q	10 & SMAI	0 & SMALL TIDAL	
		FW2 WATERS		SE, SC WATERS		FW2 WATERS		SE, SC WATERS	
	monthly average	daily maximum	monthly averageg	daily maximum	monthly average	daily maximum	monthly average	daily maximum	
PESTICIDES		T	T		H	1		1	
Aldrin ²		0.04		0.04		0.04		0.04	
Alpha-BHC	0.0391	0.0782	0.131	0.262		0.02		0.026	
Beta-BHC	1.4	2.8	4.6	9.2		0.28	0.46	0.92	
Gamma-BHC (Lindane)		0.38		0.32		0.037		0.125	
Chlordane		0.2		0.2		0.2		0.2	
4,4'-DDT ²		0.06		0.06		0.06		0.06	
4,4'-DDE ²		0.04		0.04		0.04		0.04	
4,4'-DDD ²		0.04		0.04		0.04		0.04	
Dieldrin ²		0.03		0.03		0.03		0.03	
Alpha-Endosulfan	0.22	0.44		0.068		0.092		0.02	
Beta-Endosulfan	0.22	0.44		0.068		0.092		0.02	
Endosulfan Sulfate	9.3	18.6	20	40	0.93	1.86	2	4	
Endrin ³		0.04		0.04		0.04		0.04	
Endrin Aldehyde	7.6	15.2	8.1	16.2		1.52		1.62	
Heptachlor		0.02		0.02		0.02		0.02	
Heptachlor Epoxide		0.4		0.4		0.4		0.4	
Toxaphene ³		1		1		1		1	
METALS			1	T	N	1	T	1	
Antimony	140	280				28			
Arsenic		8		8		8		8	
Cadmium		4	43	86		4		15.2	
Chromium, hexavalent	50	100	50	100	50	100	50	100	
Chromium, total		32	409	818		16	41	82	
Copper		18.4		10		10		10	
Iron	1500	3000	1500	3000	1000	2000	1500	3000	
Lead		21	69.5	139		10		13.9	
Mercury		1		1		1		1	
Nickel	720	1440	67.9	136	72	144		13.6	
Selenium	20	40	300	600		10			
Silver		2.4		4.6		2		2	
Thallium	17	34	62.2	124.4		10		12.4	

all units in ug/L

1 -for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum

Zinc	65	130	95	190		65	47.5	95
Cyanide		44		40		40		40
Total PCB's ²		0.5		0.5		0.5		0.5
DIOXIN								
2,3,7,8-Tetrachlorodibenzo								
-p-Dioxin		0.01		0.01		0.01		0.01
WHOLE EFFLUENT								
Chronic IC ₂₅ (% effluent)		>=50		>=50		>=100		>=100

all units in ug/L

- 1 -for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum
- 2 for manufacturers and formulators discharge prohibited
 3 for manufacturers: 0.1 ug/L daily maximum, 0.5 ug/L instantaneous maximum for formulators: discharge prohibited

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- all units in ug/L 1 -for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum 2 for manufacturers and formulators discharge prohibited
- 3 for manufacturers: 0.1 ug/L daily maximum, 0.5 ug/L instantaneous maximum for formulators: discharge prohibited

Subchapter 13:Effluent Limitations for DSW Permits

7:14A-13.1. Purpose and Scope

This subchapter sets forth the procedures the Department will use in imposing numeric or non-numeric effluent limitations in DSW permits.

7:14A-13.2. Types of Effluent Limitations

(a) Each DSW permit shall include conditions meeting the following requirements, as applicable:

- Technology based limitations determined in accordance with N.J.A.C. 7:14A-13.3 and 13.4. Technology based limitations include secondary treatment standards for DTWs, effluent limitations guidelines, and case-bycase limitations developed through a best professional judgment analysis. Applicability criteria are at N.J.A.C. 7:14A-13.3(b);
- i. For DTWs, effluent limitations based on secondary treatment as defined at 40 CFR 133 and incorporated into N.J.A.C. 7:14A-12;
- ii. For dischargers other than DTWs, effluent limits requiring:
 - (1) Effluent limitations based on the best practicable control technology currently available (BPT);
 - (2) For conventional pollutants, effluent limitations based on the best conventional pollutant control technology (BCT);
 - (3) For all toxic pollutants, effluent limitations based on the best available technology economically achievable (BAT);
 - (4) For pollutants which are neither toxic nor conventional pollutants, effluent limitations based on BAT.
- Water quality based limitations determined in accordance with N.J.A.C. 7:14A-13.6 when the Department has determined that the discharge causes, has the reasonable potential to cause, or contributes to an excursion above the SWQS. Water quality based limitations include limitations based on a TMDL adopted in accordance with N.J.A.C. 7:15-7. Applicability criteria are at N.J.A.C. 7:14A-13.3(a);
- 3. Limitations based on a WQM Plan adopted in accordance with N.J.A.C. 7:15. Applicability criteria are at N.J.A.C. 7:14A-13.3(d);
- Limitations based on State effluent standards in accordance with N.J.A.C. 7:14A-12 and N.J.A.C. 7:14A-5.3. Applicability criteria are at N.J.A.C. 7:14A-13.3(c); and
- Limitations based on existing effluent quality and determined in accordance with N.J.A.C. 7:14A-13.8 when the Department determines that such limitations are necessary. Applicability criteria are at N.J.A.C. 7:14A-13.3(e).

7:14A-13.3 Applicability of Effluent Limitations

(a) DSW permits shall include water quality based effluent limitations or requirements where the Department determines that effluent limitations, guidelines or standards established pursuant to (b) through (e) below are not sufficient to achieve surface water quality standards established pursuant to N.J.A.C. 7:9B, or to attain and maintain a specified water quality through water quality related effluent limitations established pursuant to Section 302 of the Federal Act. In addition:

- 1. Where the Department determines that a discharge may adversely impact a waterbody with a higher use classification or antidegradation designation downstream of the discharge location, water quality based effluent limitations shall be developed and included in the discharge permit to ensure that the water quality standards applicable to the higher classification or antidegradation designation of the downstream waterbody shall be attained and maintained; and
- 2. Where the Department determines that a discharge may cause, contribute, or have the reasonable potential to cause an excursion above the surface water quality standards of another state, water quality based effluent limitations shall be developed and included in the discharge permit to ensure that the water quality standards for the affected waters of the other state shall be attained and maintained.
- (b) DSW permits issued for direct discharges of industrial wastewater shall include technology based effluent limitations and standards promulgated under Section 301 of the Federal Act (33 U.S.C. §1311), new source performance standards promulgated under Section 306 of the Federal Act (33 U.S.C. §1316), or case-bycase effluent limitations determined under Section 402(a)(1) of the Federal Act (33 U.S.C. §1342(a)(1)), or N.J.A.C. 7:14A-13.4, or a combination, in accordance with N.J.A.C. 7:14A-13.4.
 - 1. Technology based treatment requirements under section 301(b) of the Federal Act represent the minimum level of control that shall be imposed in a permit. Where such technology based limitations are more stringent than other applicable limitations listed at N.J.A.C. 7:14A-13.2, the technology based limitations shall be included in the permit.
 - 2. Technology based treatment requirements may be imposed through one of the following methods:
 - i. Application of USEPA promulgated effluent limitations developed under section 304 of the Federal Act (33 U.S.C. §1314) to dischargers by category or subcategory. A permittee may seek fundamentally different factors variances from these effluent limitations under N.J.A.C. 7:14A-11.7(b)1.
 - ii. On a case-by-case basis under section 402(a)(1) of the Federal Act, to the extent that USEPA promulgated effluent limitations are inapplicable. The Department shall apply the appropriate factors listed in N.J.A.C. 7:14A-13.4 and shall consider:

- (1) The appropriate technology for the category or class of point sources of which the applicant is a member, based on available information; and
- (2) Any unique factors relating to the applicant.
- iii. Through a combination of the methods in (b)2i and ii above. Where promulgated effluent limitations or guidelines apply only to certain aspects of the discharger's operation, or to certain pollutants, other aspects or activities are subject to regulation on a case-by-case basis in order to carry out the provisions of the Federal or State Act.
- iv. Limitations developed under (b)2ii above may be expressed, where appropriate, in terms of toxicity (that is, LC_{50} or IC_{25}), provided the fact sheet demonstrates that the limits reflect the appropriate requirements.
- 3. Technology based limitations for new sources may be imposed through one of the following methods:
- i. Application of USEPA promulgated new source standards developed under section 304 of the Federal Act to dischargers by category or subcategory.
- ii. On a case-by-case basis to the extent that USEPA promulgated effluent limitations are inapplicable or are not available, the Department shall apply the appropriate factors listed in N.J.A.C. 7:14A-13.4 and shall consider:
 - (1) The appropriate technology for the category or class of point sources of which the applicant is a member, based on available information; and
 - (2) Any unique factors relating to the applicant.

(c) DSW permits shall include State effluent standards at N.J.A.C. 7:14A-12 and N.J.A.C. 7: 14A-5.3 as follows:

- 1. Secondary treatment standards at N.J.A.C. 7:14A-12.2 are the minimum treatment standard applicable to DTWs for BOD₅, total suspended solids, and pH;
- State effluent standards at N.J.A.C. 7:14A-12.5 for disinfection, N.J.A.C. 7:14A-12.6 for foam, N.J.A.C. 7:14A-12.8 for oil and grease, and N.J.A.C. 7: 14A-5.3 for whole effluent toxicity and phosphorus are the minimum treatment standard;
- 3. State BOD₅ effluent standards at N.J.A.C. 7:14A-12.4 shall be incorporated into DSW permits for discharges into the named waterbodies where the Department has not adopted a TMDL for the waterbody;

- 4. The Department shall include effluent limitations for site remediation activities equal to the remediation effluent standards listed in N.J.A.C. 7:14A-12 Appendix B for any pollutant or pollutant parameter which either results from any remedial action or is present on-site at a concentration greater than the applicable Surface Water Quality Standards, unless it has been demonstrated to the Department's satisfaction that the pollutant, upon discharge, will not cause, have the reasonable potential to cause, or contribute to an excursion above any applicable Surface Water Quality Standards. The Department may include limitations for additional pollutants or pollutant parameters provided the statement of basis or the permit fact sheet includes a specific rationale for the requirement.
- 5. State effluent standards for the toxic effluent standards at N.J.A.C. 7:14A-12 Appendix C will be included in a discharge permit for a new source, a new discharge, or an expanded direct discharge in accordance with (c)5i through v below only if the permittee requests such limitations in accordance with N.J.A.C. 7:14A-4.4. A request shall specifically list each pollutant or pollutant parameter for which a limitation based on N.J.A.C. 7:14A-12 Appendix C is requested. The applicant shall not be required to submit a water quality study for any pollutant or pollutant parameter for which the Department determines that limitations based on N.J.A.C. 7:14A-12 Appendix C, when imposed on the discharge, are anticipated to ensure that the surface water quality standards, including antidegradation requirements, will be attained.
- i. Limitations based on N.J.A.C. 7:14A-12 Appendix C shall not be used to relax a more stringent existing effluent limitation or standard, including limitations to be applied to the expansion of an existing discharge.
- Limitations based on N.J.A.C. 7:14A-12 Appendix C shall be used on a site-specific basis and consideration of the factors listed at (c)5ii(1) through (3) below only for discharges to waterbodies with the following classifications and antidegradation designations as defined in the Surface Water Quality Standards: FW2-NT (Category 2); FW2-TM (Category 2); SE1 (Category 2); SE2 (Category 2); SE3 (Category 2); or SC (Category 2). In no case shall N.J.A.C. 7:14A-12 Appendix C limitations be included in a discharge permit for a discharge to waters classified as FW1; FW2-TP; PL; any Category 1 water; any water with existing active shellfish harvesting activities, any intermittent stream, or immediately upstream or directly into any impoundment.
 - Limitations based on N.J.A.C. 7:14A-12 Appendix C shall be used for discharges to FW2-TM (Category 2) waters only when the Department determines that all Surface Water Quality Standards, including antidegradation requirements, will be attained;

- (2) Limitations based on N.J.A.C. 7:14A-12 Appendix C shall be used for new sources or expanded direct discharges discharging to a waterbody only after consideration by the Department of the basis for any effluent limitations in place for existing discharges to the waterbody; and
- (3) Limitations based on N.J.A.C. 7:14A-12 Appendix C shall be used for new sources or expanded direct discharges discharging to a waterbody only after consideration by the Department of the potential effects of the discharge on downstream high quality waters or rare or endangered species habitat, the effective dilution at the point of discharge, or any other appropriate site specific factors.
- iii. Limitations based on N.J.A.C. 7:14A-12 Appendix C shall not be used where the Department determines that insufficient assimilative capacity is available in the receiving waterbody to allow the proposed discharge and to ensure that the Surface Water Quality Standards will be attained.
- iv. When limitations based on N.J.A.C. 7:14A-12 Appendix C are requested by an applicant, the Department shall evaluate existing data to determine, if possible, whether the receiving waterbody is currently attaining the Surface Water Quality Standards. Where the waterbody is not currently attaining the SWQS, for the pollutants for which the N.J.A.C. 7:14A-12 Appendix C effluent limitations are requested, such, effluent limitations shall not be used.
- v. Effluent limitations developed in accordance with N.J.A.C. 7:14A-13.4 or 13.6 which are more stringent than the limitations based on N.J.A.C. 7:14A-12 Appendix C shall be imposed when such limitations are developed. Limitations based on N.J.A.C. 7:14A-12 Appendix C which have been imposed on each discharge shall be evaluated as a part of the TMDL process for each pollutant or pollutant parameter.

(d) DSW permits shall include effluent limitations based on a WQM Plan adopted in accordance with N.J.A.C. 7:15 unless limitations based on (a), (b), (c)1, or (c)2 above are more stringent.

(e) DSW permits shall include effluent limitations based on existing effluent quality when the Department determines that an effluent limitation is appropriate for the pollutant or pollutant parameter of interest and a limitation has not been established in accordance with (a) through (d) above.

7:14A-13.4. Establishment of technology based limitations

(a) The discharge permit shall include technology based effluent limitations to control all toxic pollutants which the Department determines are or may be discharged at a level

greater than the level which can be achieved by the technology-based requirements appropriate to the permittee under N.J.A.C. 7:14A-13.3(b)2.

(b) The Department may determine that surrogate limitations established in accordance with N.J.A.C. 7:14A-13.10 will provide controls for one or more of the pollutants identified under (a) above.

(c) In setting case-by-case technology based limitations, the following factors shall be considered:

- 1. For best practicable control technology (BPT) requirements:
- i. The total cost of application of technology in relation to the effluent reduction benefits to be achieved;
- ii. The age of the equipment and facilities involved;
- iii. The process employed;
- iv. The engineering aspects of the application of various types of control techniques;
- v. Process changes; and
- vi. Non-water quality environmental impacts, including energy requirements.
- 2. For best conventional pollutant control technology (BCT) requirements:
- i. The reasonableness of the relationship between the costs of attaining a reduction in the pollutant(s) and the benefits derived from the pollutant reduction;
- ii. Cost and level of treatment comparisons between DTWs and a class or category of industrial sources;
- iii. The age of the equipment and facilities involved;
- iv. The process employed;
- v. The engineering aspects of the application of various types of control techniques;
- vi. Process changes; and
- vii. Non-water quality environmental impacts, including energy requirements.
- 3. For best available technology (BAT) requirements for toxic pollutants and non-conventional pollutants:
- i. The age of the equipment and facilities involved;

- ii. The process employed;
- iii. The engineering aspects of the application of various types of control techniques;
- iv. Process changes; and
- v. Non-water quality environmental impacts, including energy requirements.

(d) The Department shall set a permit limit for a conventional pollutant at a level more stringent than the best conventional pollutant control technology, or a limit for a nonconventional pollutant which shall not be subject to modification under Section 301(c) or (g) of the Federal Act, where either (d)1 or 2 below apply. The permit fact sheet required by N.J.A.C. 7:14A-15.8 shall set forth the basis for the limitation, including a finding that compliance with the limitation will result in the BAT level of control of the toxic or hazardous pollutant discharges identified, and a finding that it would be economically or technically infeasible to directly limit the toxic or hazardous pollutant(s).

- 1. Effluent limitations guidelines specify the pollutant as a surrogate for a toxic or hazardous pollutant; or
- 2. The limitation reflects the BAT level of control of the discharge of one or more toxic or hazardous pollutants which are present in a waste stream, and a specific BAT limitation upon the toxic or hazardous pollutant(s) is not feasible for economic or technical reasons. The permit shall identify which toxic or hazardous pollutants are intended to be controlled by the use of the limitation.

(e) The Department shall set a permit limit for a conventional pollutant at a level more stringent than best conventional pollutant control technology when:

- 1. Effluent limitations guidelines specify the pollutant as an indicator for a hazardous substance; or
- 2. The limitation reflects best available technology level of control of the discharge of one or more hazardous substances which are present in a waste stream, and a specific best available technology limitation upon the hazardous substance(s) is not feasible for economic or technical reasons. The permit shall identify which hazardous substances are intended to be controlled by the use of the limitation. The statement of basis under N.J.A.C. 7:14A-15.7 or the permit fact sheet required by N.J.A.C. 7:14A-15.8 and 40 CFR Part 124.56 shall set forth the basis for the limitation, including a finding that compliance with the limitation will result in the best available technology level of control of the hazardous substances identified in the discharge, and a finding that it would be economically or technically infeasible to directly limit the hazardous substance(s).

(f) The Department shall not set a more stringent limit under (d) or (e) above if the method of treatment required to comply with the limit differs from that which would be required if the toxic pollutants or hazardous substances controlled by the limitation were limited directly.

(g) Toxic pollutants identified under (d) above shall be subject to the provisions of N.J.A.C. 7:14A-11.2 concerning establishing permit conditions.

(h) (Reserved)

(i) Technology based treatment requirements shall be applied prior to or at the point of discharge.

(j) Technology based treatment requirements cannot be satisfied through the use of non-treatment techniques such as flow augmentation and instream mechanical aerators. However, these techniques may be considered as an acceptable method of achieving ambient water quality standards on a case-by-case basis when:

- 1. The technology based treatment requirements applicable to the discharge are not sufficient to meet the ambient water quality standards;
- 2. The discharger waives any opportunity to request a variance under section 301(c), (g), or (h) of the Federal Act; and
- 3. The discharger demonstrates that such a technique is the preferred environmental and economic method to achieve the ambient water quality standards after consideration of alternatives such as advanced waste treatment, recycle and reuse, land disposal, changes in operating methods, and other available options.

(k) Except as provided below, technology based effluent limitations imposed in permits shall not be adjusted for pollutants in the intake water.

- 1. Upon request of the discharger, technology based effluent limitations or standards shall be adjusted to reflect credit for pollutants in the discharger's intake water if:
- i. The applicable effluent standards specifically provide that they may be applied on a net basis; or
- ii. The discharger demonstrates that the control system it proposes or uses to meet applicable technology based limitations and standards would, if properly installed and operated, meet the effluent limitations and standards in the absence of pollutants in the intake water;
- 2. The permit includes conditions requiring:
- i. The permittee to conduct additional monitoring (for example, for flow and concentration of pollutants) as necessary to determine continued eligibility for and compliance with any such adjustments; and
- ii. The permittee to notify the Department if eligibility for an adjustment under this section may no longer be applicable. In that case, the permit shall be modified accordingly under N.J.A.C. 7:14A-16.4(b)8;
- 3. Credit for generic pollutants such as biochemical oxygen demand (BOD) or total suspended solids (TSS) shall not be granted unless the permittee demonstrates that the constituents of the generic measure in the effluent are substantially similar to the constituents of the generic measure in the intake water or unless appropriate additional limits are placed on process water pollutants either at the outfall or elsewhere;

- 4. Credit shall be granted only to the extent necessary to meet the applicable limitation or standard, up to a maximum value equal to the influent value. Additional monitoring may be necessary to determine continued eligibility for credits and compliance with permit limits;
- 5. Credit shall be granted only if the discharger demonstrates that the intake water is drawn from the same body of water into which the discharge is made. For the purposes of this provision, same body of water means any hydrologically connected waterbody provided chemical characteristics are essentially identical. Chemical characteristics may be evaluated on a parameter by parameter basis; and
- 6. The discharge of raw water clarifier sludge generated from the treatment of intake water shall not be adjusted for pollutants in the intake water.

(l) The development of technology based effluent limitations shall incorporate alternative effluent limitations or standards where warranted by fundamentally different factors under N.J.A.C. 7:14A-11.7(b)1.

(m) Technology based effluent limitations shall be established under this section for solids, sludges, filter backwash, and other pollutants removed in the course of treatment or control of wastewaters in the same manner as for other pollutants.

7:14A-13.5. Determination of the Reasonable Potential to Cause an Excursion above the SWQS as a Basis for Requiring Inclusion of Water Quality Based Effluent Limitations

(a) Water quality based effluent limitations shall control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants, including whole effluent toxicity) which are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above the Surface Water Quality Standards.

(b) When determining whether a discharge causes, has the reasonable potential to cause, or contributes to an instream excursion above any Surface Water Quality Standard the Department shall evaluate and consider existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the test species to toxicity testing (when evaluating whole effluent toxicity), and, where appropriate, the available dilution of the effluent in the receiving water.

(c) The dilution of the effluent in the receiving water shall be determined in accordance with N.J.A.C. 7:9B-1.5(c)4.

(d) A separate determination of reasonable potential shall be made for each pollutant or pollutant parameter of interest (either conventional, nonconventional, or toxic pollutants, including acute and chronic whole effluent toxicity) that is or may be discharged from the facility. These determinations shall be based on a WLA or site specific allocation.

(e) The discharge shall be determined to cause an excursion above the Surface Water Quality Standards if the maximum reported effluent concentration, considering the criteria averaging period, for the pollutant of interest is greater than the WLA or the site specific allocation for that pollutant.

(f) The discharge shall be determined to contribute to an excursion above the the Surface Water Quality Standards if the maximum reported effluent concentration, considering the criteria averaging period, for the pollutant of interest when considered collectively with other discharges to the receiving water is greater than the WLA determined for that pollutant.

(g) The discharge shall be determined to have the reasonable potential to cause an excursion above the Surface Water Quality Standards if the maximum projected effluent concentration is greater than the WLA or site specific allocation determined for that discharge for that pollutant or pollutant parameter. The maximum projected effluent concentration shall be calculated in accordance with the USEPA TSD, as amended and/or supplemented, unless the permittee demonstrates for a given pollutant of interest that none of the methods in the TSD are applicable and that an alternative statistical method more accurately estimates the maximum projected effluent concentration.

(h) Where an effluent concentration is directly caused by a documented facility upset, or other unusual event which has been identified and appropriately remedied by the permittee, data collected during the period of upset may be eliminated when making a determination of reasonable potential. Data no longer representative of effluent quality because of process modification or pollution prevention activities undertaken shall not be used when making a determination of reasonable potential.

- (i) (Reserved)
- (j) (Reserved)

(k) When the Department determines that a discharge does not cause, have reasonable potential to cause, or contribute to an excursion above the water quality standards for a specific pollutant or pollutant parameter; or that data are insufficient to make such a determination:

- 1. Except as specified in (k)1i through iii below, water quality based effluent limitations shall not be required for that pollutant or pollutant parameter.
- i. Where the discharge is in compliance with an existing water quality based effluent limitation and the permittee provides treatment for the limited pollutant or pollutant parameter, the reissued permit shall include a water quality based effluent limitation for the affected pollutant or pollutant parameter unless the permittee demonstrates to the satisfaction of the Department that a water quality based limitation is no longer required and that the existing effluent quality is anticipated to be maintained.
- ii. When the Department determines in accordance with (k)1i above that a water quality based effluent limitation is not required for the reissued permit, the fact sheet for the reissued permit shall include a summary of effluent data for the pollutant or pollutant parameter, a justification for eliminating the effluent limitation, and a determination that eliminating the effluent limitation is not anticipated to cause or contribute to an exceedance of the surface water quality standards.
- iii. When the Department determines in accordance with (k)1i above that a water quality based effluent limitation is not required for the reissued permit, the discharge permit shall be reopened and modified to include water quality based effluent limitations if the effluent quality changes so as to cause, contribute, or have the reasonable

potential to cause or contribute to an excursion above the Surface Water Quality Standards.

- iv. The Department shall consider the following factors when making a determination regarding reasonable potential for discharges with existing water quality based effluent limitations:
 - (1) The permit compliance history for the facility, including the compliance history for the specific pollutant or pollutant parameter and any permit conditions related to the pollutant or pollutant parameter;
 - (2) The reliability of the treatment process; and
 - (3) The ratio between the permitted or actual effluent flow and the base flow of the receiving water;
- 2. Effluent limitations other than water quality based limitations may be required for the pollutant or pollutant parameter in accordance with N.J.A.C. 7:14A-13.3; and
- 3. The Department may determine that monitoring for specific pollutant or pollutant parameters shall be included in the permit.

(1) When the Department is unable to determine for one or more pollutants or pollutant parameters of interest whether the discharge from a particular facility will cause, have the reasonable potential to cause, or contribute to an excursion above a Surface Water Quality Standard, the permit for that facility shall include effluent monitoring requirements for each pollutant or pollutant parameter where such a determination cannot be made. The discharge permit shall be reopened and modified to include water quality based effluent limitations if subsequent monitoring demonstrates that the discharge causes, contributes, or has the reasonable potential to cause or contribute to an excursion above the Surface Water Quality Standards.

(m) For a facility that discharges any pollutant which is present in the process intake water, the Department may, on a site specific basis, determine that the discharge does not cause, have reasonable potential to cause, or contribute to an excursion above the water quality standards in accordance with the following:

- 1. (Reserved)
- 2. (Reserved)
- 3. The discharge shall meet the following conditions:
- i. The source for all of the intake water shall be the receiving water body. Hydrologically connected waterbodies may be determined to be the same waterbody if the water is completely mixed within a reasonable distance of the outfall location and if the chemical characteristics of the waterbodies are essentially identical. Chemical characteristics may be evaluated on a parameter by parameter basis. For discharges where the intake water is attributed to more than one source, this condition may be applied to the proportion of the intake

water attributable to the receiving water or hydrologically connected waterbody;

- The discharge shall not contribute any additional mass of the ii. pollutant of interest to the process intake water. This determination shall be based on a statistically rigorous analysis of intake water and outfall data that is representative of various operating conditions and influences over time and demonstrates that there is no significant difference at the 99th percent probability level between the intake concentrations and loadings and the outfall concentrations and loadings. For a DTW, this condition shall be deemed to be met if there is no significant difference at the 99th percent probability level between the intake concentrations and loadings of the public drinking water supply in the area served and the effluent concentrations and loadings. Where the source water is attributed to more than one water supply source, this condition may be applied to the proportion of the source water attributable to the receiving water or hydrologically connected waterbody;
- iii. The discharger shall not chemically or physically alter the intake water to cause an adverse impact to the receiving stream for any pollutant of interest in the process intake water;
- iv. The pollutant shall not accumulate at the outfall location or at the edge of the mixing zone in such a way as to increase the concentration of the pollutant. The Department may require submission of an acceptable mixing zone study to satisfy this requirement; and
- v. The timing and/or location of the discharge shall not cause adverse impacts in the receiving waterbody that would not have occurred if the pollutant had remained in the waterbody.
- 4. The permit shall include the necessary monitoring conditions to ensure continuing compliance with the conditions listed in (m)3 above.
- 5. The discharge permit shall be reopened and modified to include water quality based effluent limitations if subsequent monitoring demonstrates that the discharge causes, contributes, or has the reasonable potential to cause or contribute to an excursion above the surface water quality standards at N.J.A.C. 7:9B.
- 6. The permit fact sheet shall include a description of the treatment process and specific reasons for making the determination that the discharge does not cause, have reasonable potential to cause or contribute to an excursion above the water quality standard for the pollutants or pollutant parameters subject to this subsection.

- 7. For any pollutant or pollutant parameter where the conditions listed in (m)3 above cannot be met, reasonable potential shall be determined in accordance with (d) through (k) above.
- 8. For site remediation projects, reasonable potential shall be determined in accordance with this subsection only for pollutants not subject to remediation.

7:14A-13.6. Calculation of Water Quality Based Limitations

(a) When the Department determines pursuant to N.J.A.C. 7:14A-13.5 that a discharge causes, has the reasonable potential to cause, or contributes to an excursion above a Surface Water Quality Standard, a water quality based effluent limitation for each pollutant or pollutant parameter including WET, shall be determined in accordance with the USEPA TSD, as amended and/or supplemented, unless the permittee demonstrates that none of the methods in the TSD are applicable and that an alternative method will result in a water quality based effluent limitation that ensures compliance with the Surface Water Quality Standards.

7:14A-13.7. Determination of Water Quality Based Effluent Limitations Based on Narrative Criteria

(a) Where the Department has not established a numerical water quality criterion for a specific chemical pollutant but has determined that such a pollutant is present in an effluent at a concentration that causes, has the reasonable potential to cause, or contributes to an excursion or potential excursion above a narrative criterion in the Surface Water Quality Standards, the Department shall:

- 1. Establish effluent limitations using a calculated numeric criterion utilizing the best available scientific information and developed in accordance with N.J.A.C. 7:9B-1.6(c)4iii; or
- 2. Establish effluent limitations on a surrogate parameter (for example, whole effluent toxicity) for the pollutant of interest, in accordance with N.J.A.C. 7:14A-13.10, provided:
- i. The permit identifies which pollutants are intended to be controlled by the use of the effluent limitation;
- ii. The fact sheet sets forth the basis for the limit, including a finding that compliance with the effluent limit on the surrogate parameter will result in controls on the pollutant of concern which are sufficient to attain and maintain applicable Surface Water Quality Standards;
- iii. The permit requires the effluent and ambient monitoring necessary to show that during the term of the permit the limit on the surrogate parameter continues to attain and maintain applicable Surface Water Quality Standards; and
- iv. The permit shall be reopened and limitations on the base parameters included therein if the limits on the surrogate parameter no longer attain and maintain applicable Surface Water Quality Standards.
- 7:14A-13.8. Calculation of Effluent Limitations using Existing Effluent Quality

(a) Effluent limitations based on existing effluent quality shall be calculated according to the following procedure:

- 1. The maximum projected effluent concentration shall be calculated in accordance with the statistical method contained in the USEPA TSD, as amended and/or supplemented, unless the permittee demonstrates that the method in the TSD is not applicable and that an alternative statistical method more accurately estimates the maximum projected effluent concentrations.
- i. The following conditions apply:
 - (1). If at least 10 data points are available, a site specific coefficient of variation shall be determined.
 - (2). If fewer than 10 data points are available, the permit shall require monitoring and include a reopener clause to include existing effluent quality limitations based on 10 or more data points.
 - (3). The 95 percent confidence interval and the 95 percent probability basis shall be used.
- ii. Effluent data generated during a documented facility upset, or other unusual event which has been identified and appropriately remedied by the permittee, may be eliminated when determining effluent limitations based on existing effluent quality;
- 2. The maximum daily limitation shall be set equal to the maximum projected effluent concentration; and
- 3. The average monthly limitation shall be calculated from the maximum daily limitation according to the procedure described in N.J.A.C. 7:14A-13.6, using the sampling frequency required in the discharge permit. If the required sampling frequency is once per month or less, an average monthly limitation may be eliminated for that pollutant or pollutant parameter.

(b) Where an interim effluent limitation is required in accordance with N.J.A.C. 7:14A-13.11 for the time period prior to the effective date of a final effluent limitation, limitations reflecting existing effluent quality shall be calculated in accordance with (a) above.

7:14A-13.9 Seasonal Effluent Limitations

(a) Seasonal water quality based effluent limitations for continuous discharges may be developed in accordance with the following:

- 1. The permittee shall submit the necessary water quality studies that address any effects or potential effects on nutrient cycling and potential or actual adverse biological impacts in other waterbody segments related to nutrients.
- 2. The seasonal limitations shall be developed from a seasonal TMDL or a seasonal site specific allocation for the specific pollutant(s) or pollutant parameter(s) which addresses critical conditions applicable to each season for which an effluent limitation is requested.

- 3. Seasonal water quality based effluent limitations shall be developed only for the following parameters and groups of parameters and only insofar as the warm weather limitations cannot be achieved due to decreases in biological treatment efficiency during cold weather:
- i. Parameters affecting dissolved oxygen dynamics in the receiving stream;
- ii. Nutrients, including phosphorus and nitrogen; and
- iii. Ammonia-N, to protect against toxic effects in the receiving water.
- 4. Except as specified at (a)5 below, seasonal water quality based effluent limitations shall be developed for two seasons in each year.
- 5. Seasonal WLAs or site specific allocations may be developed for shorter periods of time including more than two seasons when the United States Geological Survey provides a reliable estimate of applicable stream design flows from a gauging station located in the vicinity of the discharge location.

7:14A-13.10 Surrogate Effluent Limitations

(a) Surrogate limitations may be included in a discharge permit in accordance with the following:

- 1. The permittee shall submit a written request to the Department which includes the specific parameter(s) to be used as a surrogate and specifically lists the base parameter(s) for which the surrogate parameter is requested;
- 2. The request shall include a detailed report demonstrating that the requested surrogate parameter is a reliable, precise and accurate surrogate. This report shall include, at a minimum, effluent data demonstrating the relationship, including the value(s) of the surrogate parameter(s) corresponding to the limitation(s) for the base parameter(s), between the proposed surrogate(s) and the parameters for which the surrogate is requested;...
- 3. Where the Department approves the use of a surrogate, the fact sheet for the draft permit shall set forth the basis for the limit, including a finding that compliance with the effluent limit for the surrogate parameter shall result in controls on the pollutant of interest which are sufficient to attain the applicable effluent limitations. The permit shall identify which pollutants are intended to be controlled by the use of the surrogate limitation;
- 4. If the permit includes a limitation for the surrogate parameter(s) with a basis separate from the use of the parameter as a surrogate, the surrogate limitation(s) may be included in addition to any limitation for the surrogate parameter based on technology, water quality concerns, or effluent standards;
- 5. Where an effluent limitation is being imposed on a delegated local agency in accordance with N.J.S.A. 58:10A-7b(3) for categorical or other pollutants, the permittee may request the use of surrogate parameters in accordance with the following additional requirements:
- i. Where a delegated local agency has requested that whole effluent toxicity be considered as the surrogate parameter for a limitation

calculated for a toxic pollutant, the Department may presume that, subsequent to the effective date of the whole effluent toxicity limitation, compliance with the water quality based whole effluent toxicity limitation satisfies the report submittal requirements specified in (a)2 above;

- Upon its determination that the requested surrogate parameter is an appropriate and reliable surrogate, the Department shall include in the discharge permit effluent limitations for both the surrogate parameter(s) and the base parameter(s). Compliance with the base parameter(s) shall be determined based on compliance with the surrogate parameter; and
- iii. The permit shall require that, if the surrogate parameter is exceeded, the effluent limitations covered by the surrogate shall become effective upon notification by the Department, unless the permittee demonstrates that the base parameters were not exceeded at the time that the surrogate parameter was exceeded. The permit may also include procedures for re-establishment of the use of a surrogate parameter;
- 6. The permit shall require the monitoring necessary to demonstrate that during the term of the permit the limit on the surrogate parameter continues to attain and maintain applicable effluent limitations. The permit shall require monitoring of the surrogate parameter and may also require monitoring of the base parameter(s) covered by the surrogate parameter;
- 7. The permit shall be reopened and modified to include limitations on the base parameter(s) if the Department determines that the surrogate parameter(s) no longer ensure attainment of the applicable effluent limitations for the base parameter(s); and
- 8. The Department, upon its own initiative, may include a limitation for a surrogate parameter irrespective of a request by the affected permittee provided the fact sheet sets forth the basis for the limit, including a finding that compliance with the effluent limit on the surrogate parameter will result in controls on the pollutant of concern that are sufficient to attain the applicable effluent limitations and the permit conditions in (a)5 and 6 above are satisfied.

7:14A-13.11 Interim Effluent Limitations

(a) Interim limits may be established for any pollutant or pollutant parameter where a final limit is required in accordance with N.J.A.C. 7:14A-13.6 and where a compliance schedule is included in the discharge permit to allow the permittee to come into compliance with the effluent limitation.

(b) If the Department determines that interim limits are appropriate, the limits shall be determined in accordance with N.J.A.C. 7:14A-12, 13.4, or 13.8 so as to ensure that the current effluent quality of the discharge shall be maintained.

7:14A-13.12 Wet Weather Effluent Limitations

(a) An applicant or permittee may request effluent limitations less stringent than those required by N.J.A.C. 7:14A-13.3, 13.4 or 13.6, which are applicable only during periods of excessive effluent flow due to precipitation events, provided one or more of the following criteria is met:

- 1. The facility receives excessive infiltration and inflow. In such cases the permit shall include the following conditions:
- i. For effluent flows up to and including the hydraulic capacity of the facility, the effluent quality shall comply with applicable effluent limitations determined in accordance with N.J.A.C. 7:14A-13.3, 13.4 or 13.6;
- For effluent flow in excess of the hydraulic capacity of the facility, the quantity of flow greater than the hydraulic capacity shall receive treatment consisting of, at a minimum, screening and disinfection. Wherever practicable, treatment shall also include settling and, if applicable, dechlorination;
- iii. A schedule in the permit addressing elimination of the excess inflow and/or infiltration; and
- iv. The permittee shall consent to the provisions incorporating the permit conditions imposed in accordance with (a)1i through iii above prior to the issuance of the final discharge permit;
- The facility qualifies for special consideration in accordance with N.J.A.C. 7:14A-12.3. In such cases the modification of effluent limitations and permit conditions shall be limited to that available in accordance with N.J.A.C. 7:14A-12.3; or
- 3. The facility receives flow from combined sewers. In such cases the permittee shall be required to maximize the flow to the treatment facility and minimize the flow through the combined sewer overflow. The permittee shall evaluate and implement options for eliminating the extraneous flow. The options to be explored shall include, but shall not be limited to, reducing or eliminating one or more overflows, providing a reduced level of treatment for a portion of the flow, and, in some cases, separation of the sanitary and storm sewers. The permit shall include a schedule addressing reduction or elimination of the excess flow as appropriate. Any discharge from combined sewer overflows shall be consistent with the USEPA final policy for combined sewer overflows. See 59 Fed. Reg. 18688 (April 19, 1994), which is incorporated at N.J.A.C. 7:14A-11 Appendix C.

(b) An applicant or permittee may request less stringent effluent limitations than those required by N.J.A.C. 7:14A-13.6, which are applicable only during periods of excessive precipitation, if the applicant or permittee completes a water quality study which demonstrates to the satisfaction of the Department that the effluent limitations will ensure attainment of the Surface Water Quality Standards at N.J.A.C. 7:9B and the discharge permit includes monitoring and/or reporting conditions to verify that modeling assumptions are valid when the wet weather limitations are applicable. At a minimum the water quality study shall be conducted in

accordance with a QA/QC project work plan approved by the Department and shall include the following:

- 1. An evaluation of point and nonpoint sources of pollutants with impacts which overlap with the effects of the permittee's discharge, including the fate of pollutants of interest and cumulative or synergistic effects;
- 2. A statistical analysis of the relationships among hydraulic considerations such as waterbody flow, the quantity and intensity of the storm event, and effluent flow, influent water quality, effluent water quality, and ambient water quality;
- 3. The magnitude and duration of storm events which statistically correspond to the hydraulic capacity of the facility; and
- 4. The extent of effluent and receiving water mixing over the range of stream and effluent flows for which wet weather effluent limitations are requested.
- 7:14A-13.13 Quantity of Flow Used in the Determination of Effluent Limitations

(a) Effluent flows used for the determination of effluent limitations, standards, or prohibitions shall be established as described below:

- 1. Permit limitations for continuous discharges shall be determined as follows:
- i. For DTWs, the design flow for the facility shall be used when determining permit effluent limitations.
- ii. For non-DTWs, a reasonable measure of actual production of the facility, unless otherwise required by an effluent guideline or effluent standard, shall be used when determining effluent limitations. For new sources or new dischargers, actual production shall be estimated using projected production. The time period of the measure of production shall correspond to the time period of the calculated permit limits (for example, monthly production shall be used to calculate average monthly discharge limitations).
- iii. The permit may include interim permitted flows that are less than the final design flow to reflect the anticipated effluent flow for the duration of the permit. The projected fifth year flow may be used for DTWs in the determination of water quality based effluent limitations applicable during periods prior to the facility utilizing the full design flow.
- 2. Effluent flow restrictions shall be included in discharge permits as permit conditions, rather than as numerical effluent limitations, unless the Department determines on a site specific basis that the quantity of effluent flow is of concern and shall be included as a permit limitation. The Department shall state in the permit fact sheet the reason(s) for such determination. The Department may incorporate flow-related requirements necessary to implement the capacity assurance or Treatment Works Approvals programs at N.J.A.C. 7:14A-22 and the Statewide Water Quality Management Planning process at N.J.A.C. 7:15.

- 7:14A-13.14 Expression of Effluent Limitations
 - (a) Effluent limitations shall be expressed as described below:
 - 1. Water quality based effluent limitations shall be expressed as both concentration and mass loading, except as listed in (a)1i through iv below:
 - i. For parameters such as pH, temperature, radiation, or other pollutants, which cannot be appropriately expressed in terms of concentration and mass, the effluent limitations shall be expressed in units appropriate to the parameter;
 - ii. Water quality based limitations for whole effluent toxicity shall be expressed as the LC_{50} or No Observed Adverse Effect Concentration, as appropriate, and equivalent acute toxic units for acute whole effluent toxicity limitations and as the IC_{25} and equivalent chronic toxic units for chronic whole effluent toxicity limitations;
 - iii. If the ratio of the receiving stream flow within the mixing zone to the total effluent flow is greater than 100:1, the effluent limitations shall be expressed only as mass loading without an effluent limitation for concentration, provided that no specific regulatory requirement is applicable which would require limitations on effluent concentration;
 - iv. Water quality based limitations determined from a TMDL/WLA may be expressed as either concentration or mass loading if:
 - (1) The TMDL has been adopted in accordance with N.J.A.C. 7:15-7; and
 - (2) The TMDL specifically states that the associated water quality based effluent limitations shall be expressed only as either concentration or mass loading.
 - 2. Limitations which are based on N.J.A.C. 7:14A-13.2(a)1 or (a)5 shall be expressed as concentration and mass loading for DTWs and as mass loading for all other dischargers, except as provided below:
 - i. For parameters such as pH, temperature, radiation, or other pollutants, which cannot be appropriately expressed in terms of concentration and mass, in which case the effluent limitations shall be expressed in units appropriate to the parameter;
 - ii. When applicable standards and limitations are expressed in terms of other units of measurement. For example, limitations for whole effluent toxicity shall be expressed as the LC_{50} or No Observed Adverse Effect Concentration, as appropriate, and equivalent acute toxic units for acute whole effluent toxicity limitations and as the IC₂₅

and equivalent chronic toxic units for chronic whole effluent toxicity limitations;

- iii. When limitations are developed on a case-by-case basis and expression of the limitation as mass is infeasible because the mass of the pollutant discharged cannot be related to a measure of operation;
- 3. (Reserved)
- 4. Limitations based on the effluent standards for site remediation projects at N.J.A.C. 7:14A-12 Appendix B shall be expressed as concentration;
- 5. Limitations based on the effluent standards for new source and expanded discharges at N.J.A.C. 7:14A-12 Appendix C shall be expressed as mass and concentration, unless the discharge meets the qualifications at (a)1iii above; and
- 6. Limitations may be expressed as concentration or mass, or as concentration and mass, when such expression is required by authority or rules adopted by another regulatory agency. Other regulatory agencies include the Pinelands Commission, the Delaware River Basin Commission, or the Interstate Environmental Commission.

(b) All permit effluent limitations, effluent standards, or prohibitions for a metal shall be expressed in terms of total recoverable metal unless:

- 1. An applicable effluent standard or limitation has been promulgated under the Federal Act and specifies the limitation for the metal in the dissolved, valent or total form;
- In establishing permit limitations on a case-by-case basis under N.J.A.C. 7:14A-13.4, it is necessary to express the limitation on the metal in the dissolved, valent, or total form to carry out the provisions of the Federal Act; or
- 3. Approved analytical methods for the metal inherently measure only its dissolved form (for example, hexavalent chromium).

7:14A-13.15 Permit Averaging Periods

(a) Permit averaging periods for continuous discharges shall be determined as

follows:

- 1. Limitations on industrial treatment works for conventional, nonconventional, and toxic pollutants shall, unless impracticable, be stated as maximum daily and average monthly discharge limitations;
- 2. Limitations for conventional and non-conventional pollutants discharged from a DTW shall, unless impracticable, be stated as average weekly and average monthly discharge limitations. Limitations on toxic pollutants discharged from a DTW shall, unless impracticable, be stated as maximum daily and average monthly discharge limitations;
- 3. Limitations on any pollutant or pollutant parameter where the monitoring frequency is once per month or less may be stated as a maximum daily limitation. Average monthly limitations may also be included on a site

specific basis if the Department determines that such limitations are necessary to adequately regulate the discharge of pollutants from the facility;

- 4. For whole effluent toxicity where the effluent monitoring frequency is once per month or less, the maximum daily effluent limitation shall be stated as the No Observed Adverse Effect Concentration or minimum LC_{50} (for acute whole effluent toxicity) or minimum IC_{25} (for chronic whole effluent toxicity) and as a maximum acute or chronic toxic units. Average monthly limitations may also be included on a site specific basis if the Department determines that such limitations are necessary to adequately regulate the discharge of pollutants from the facility;
- 5. For limitations other than water quality based limitations which may be imposed on DTWs, where the average weekly limitation is calculated from the average monthly limitation, or the reverse, the Department may use a factor of 1.5 to calculate the average weekly limitation from the average monthly limitation or, alternatively, may, at the request of the applicant, use the statistical procedures at N.J.A.C. 7:14A-13.6 to determine the appropriate average weekly limitation; and
- 6. For intermittent flows, the maximum limitation shall be applicable during periods of actual discharge.
- 7:14A-13.16 Point of Compliance for Effluent Limitations
 - (a) The point of compliance for each outfall shall be established as follows:
 - 1. Permit effluent limitations, standards, prohibitions, and monitoring requirements shall be established for each outfall or discharge point of the permitted facility, except as provided under N.J.A.C. 7:14A-6.2(b) (BMPs where limitations are infeasible), (a)2 below (limitations on internal waste streams), (a)6 below (alternate monitoring point for whole effluent toxicity), and (a)7 below (discharges into storm sewers);
 - 2. Effluent limitations or standards for discharges of pollutants may be imposed on internal waste streams before mixing with other waste streams or cooling water streams when:
 - i. Permit effluent limitations for the final effluent are impracticable or infeasible to calculate; or
 - ii. Monitoring of the final mixed effluent or point of discharge is impracticable or infeasible;
 - 3. Internal monitoring points shall be established in cases where two or more different types of wastewater (for example, process waste, domestic waste, stormwater, non-contact cooling water) mix prior to entering the receiving water, unless such monitoring points are deemed to be unnecessary by the Department;
 - 4. When the point of compliance is an internal waste stream, the monitoring required by N.J.A.C. 7:14A-14.2 shall be applied to the internal waste stream;

- 5. When the point of compliance is an internal waste stream, the fact sheet under N.J.A.C. 7:14A-15.8 shall set forth the circumstances which make such limitations necessary, such as that the final discharge point is inaccessible, the wastes at the point of discharge are so diluted as to make monitoring impractical, the interferences among pollutants at the point of discharge would make detection or analysis impracticable, or two or more waste streams are mixed prior to discharge;
- 6. For whole effluent toxicity, an alternate point of compliance may be established prior to chlorination if either of the following applies:
- i. The whole effluent toxicity limitation is based on N.J.A.C. 7: 14A-5.3; or
- ii. The permit includes water quality based limitations for chlorine produced oxidants and the following conditions are met:
 - The discharge is in compliance with the water quality based effluent limitations for chlorine produced oxidants at the point of discharge or such limitations have been determined to be unneccessary;
 - (2) A dechlorination treatment step is not required to attain the water quality based limitations for chlorine produced oxidants;
 - (3) Establishment of a monitoring point after chlorination at the point of discharge is impracticable or infeasible;
 - (4) Samples collected after chlorination are not able to attain the water quality based effluent limitation for whole effluent toxicity; and
 - (5) The permittee demonstrates to the Department's satisfaction that the failure to attain the water quality based limitation in samples collected post-chlorination is due to the presence of chlorine produced oxidants in the effluent sample;
- 7. For discharges into stormwater conveyances, the point of compliance shall be established prior to the discharge into the stormwater conveyance, unless the Department determines on a site specific basis that an alternate point of compliance is appropriate.

7:14A-13.17 Toxicity Reduction Evaluations

(a) Toxicity reduction requirements shall be included in discharge permits which include a whole effluent toxicity limitations as follows:

1. When a minimum of two tests out of six consecutive whole effluent toxicity tests demonstrate that the effluent does not comply with the effluent limitation, the permittee shall initiate toxicity reduction implementation requirements.

- 2. Where an exceedance of the permit limit is directly caused by a documented facility upset, or other unusual event which has been identified and appropriately remedied by the permittee, test data collected during the period of upset may be eliminated when determining the necessity of initiating the following toxicity reduction implementation requirements.
- 3. Toxicity reduction requirements apply to limitations that are in effect or become effective during the term of the permit.
- 4. The permittee shall conduct a tiered investigation as specified below:
- i. Within 30 days of the close of the monitoring period which contained the second violation specified in (1) above, the permittee shall initiate the toxicity characterization phase of monitoring consisting of increased monitoring frequency for a total of 12 additional tests, as follows:
 - (1) For major facilities, monthly effluent monitoring; and
 - (2) For minor facilities, semi-monthly effluent monitoring.
- ii. Upon the third exceedance of the toxicity limit for a major facility or upon the fourth exceedance of the toxicity limit for a minor facility of the tests conducted during the characterization phase, a preliminary toxicity identification shall be conducted, which includes (a)4ii(1) through (5) below as applicable to a specific facility. This preliminary toxicity identification shall be completed within 15 months of completing the toxicity characterization phase:
 - (1) Treatment plant performance evaluation;
 - (2) Pretreatment program information;
 - (3) Evaluation of levels of ammonia-N and chlorine produced oxidants and their effect on the toxicity of the discharge;
 - (4) Evaluation of chemical use and processes at the facility; and
 - (5) Evaluation of incidental facility procedures (such as washing of floors and chemical spill disposal) which may contribute to effluent toxicity.
- 5. Where the data collected during the Toxicity characterization phase indicate consistent compliance with the whole effluent toxicity limit for four (4) consecutive tests, the toxicity reduction implementation requirements are deemed complete and the permittee may return to the monitoring frequency for WET specified in the discharge permit.
- 6. Where a preliminary toxicity identification has not resulted in compliance with the final effluent limitation, the permittee shall initiate a comprehensive

toxicity investigation phase within six months of the completion of the preliminary investigation.

- 7. Within three months of the demonstration that a comprehensive toxicity investigation is necessary, the permittee shall submit a project study plan. The project study plan shall identify the party or parties responsible for the conduct of the comprehensive evaluation, establish a schedule for completion of the study, and identify and describe the technical approach which the study will utilize. The schedule for completion of the toxicity reduction evaluation is subject to Departmental approval.
- i. Quarterly progress reports shall be submitted during the term of the toxicity reduction implementation requirements. The reports shall include a summary of data collected and actions taken during the applicable quarter. A copy of the transmittal letter for each quarterly report shall be forwarded to the applicable regional Enforcement Bureau; and
- ii. A final report shall be submitted which identifies the specific actions taken by the permittee to achieve compliance, describes and identifies the pollutants or groups of pollutants contributing to or causing the whole effluent toxicity exceedances, and describes the final corrective actions taken to achieve compliance and the outcome of the study.
- 8. The permittee may elect to complete an instream verification study prior to the initiation of the comprehensive toxicity identification/reduction phase specified in (a)6 above. If the permittee selects this option, a project work plan approved by the Department shall be submitted in lieu of the project work plan specified in (a)7 above. This option shall be limited to permittees with discharges to non-tidal, freshwater receiving waters where a regulatory mixing zone of a defined size and shape has been established for the discharge. The study shall be completed and submitted to the Department for evaluation within two years of selecting this alternative.
- i. Where the results of an instream verification study definitively demonstrate that there are no existing or potential adverse impacts from the discharge, the Department shall determine that the permittee is exempt from the requirements of (a)6 above.
- ii. If the data submitted for this study are deemed insufficient by the Department to make a determination that there are no existing or potential adverse impacts from the discharge, the permittee shall initiate the comprehensive toxicity identification and reduction evaluation requirements of (a)6 above within 90 days of notification by the Department that the instream verification study was insufficient to make a determination.

iii. The instream verification study shall be completed in accordance with the approved project work plan. Evaluation of the instream data may also require completion of a mixing zone study.

7:14A-13.18. Inclusion of Action Levels for Water Quality Based Effluent Limitations

(a) Where the Department has developed water quality based effluent limitations utilizing a chemical equilibrium which includes non-limited pollutants or pollutant parameters which control the chemical equilibrium, action levels for the controlling pollutants or pollutant parameters equal to the values used in the chemical equilibrium calculation shall be included in the permit as permit monitoring conditions.

(b) For ammonia-N limitations, action levels shall be determined and included for pH and may be included for temperature, alkalinity or hardness.

(c) For those metals where the applicable criterion is dependent on hardness, an action level shall be included for hardness.

(d) If the discharge is not in conformance with the applicable action level for a period of time not to exceed the duration of the applicable criterion, the permittee shall take the specific actions stipulated in the discharge permit. These actions may require the permittee to:

- 1. Collect the necessary instream data during the period of the nonconformance to determine if the instream criteria were exceeded during the period of non-conformance; and
- 2. Prepare and submit with the monthly DMR, a report which details the frequency and duration of any non-conformance with the action levels as set forth in the permit and includes all instream and effluent data collected during periods of non-conformance.

(e) If the action levels set forth in the permit are exceeded more frequently than once in any monthly monitoring period, the action levels shall be re-evaluated and, if necessary, the effluent limitations associated with those action levels shall be recalculated. The permit shall be reopened and modified to include the updated effluent limitations and the associated action levels. The permit shall be reopened and modified to adjust the action levels and/or the effluent limitations if monitoring data demonstrate that the discharge causes, contributes, or has the reasonable potential to cause or contribute to an exceedance of the surface water quality standards at N.J.A.C. 7:9B.

7:14A-13.19. Antibacksliding

(a) Except as provided for under Section 402(o) of the Federal Act (33 U.S.C. §1342(o)), when a permit is modified, renewed or reissued, all effluent limitations or standards shall be at least as stringent as the final and effective effluent limitations or standards in the previous permit.

7:14A-13.20 Limitations for Non-Continuous Discharges

(a) In addition to applicable requirements specified in N.J.A.C. 7:14A-13.2 through 13.19, discharges which are not continuous shall be specifically described and limited by one or more of the following measures, as appropriate:

1. Frequency (for example, a discharge shall not occur more often than once every three weeks);

- 2. Total mass (for example, a discharge shall not exceed 100 kilograms of zinc and 200 kilograms of copper per batch discharge);
- 3. Maximum rate of discharge of pollutants during the discharge event (for example, the discharge shall not exceed two kilograms of zinc per minute);
- 4. Maximum concentration of pollutants (for example, the concentration shall not exceed one milligram per liter of zinc); and
- 5. Prohibition or limitation of specified pollutants by mass, concentration, or other appropriate measure (for example, a discharge shall not contain more than 0.1 mg/L of zinc at any time or more than 250 grams of zinc in any batch discharge).

7:14A-13.21. Implementation of Water Quality Based Effluent Limitations

(a) The implementation procedures in (b) through (e) below shall be utilized by the Department as a process to incorporate water quality based effluent limitations in discharge permits to ensure compliance with the Surface Water Quality Standards.

(b) Whole effluent toxicity shall be incorporated in discharge permits where a water quality based whole effluent toxicity limitation is required in accordance with N.J.A.C. 7:14A-13.5, water quality based whole effluent toxicity limitations shall be determined and incorporated into the discharge permit in accordance with N.J.A.C. 7:14A-13.6. The permit may include a schedule to achieve compliance with the water quality based limit.

1. Where a water quality based whole effluent toxicity limitation is not required, the discharge permit shall include an acute whole effluent toxicity limitation in accordance with N.J.A.C. 7: 14A-5.3.

(c) Limitations for new sources, new discharges, or expanded direct discharges shall be established as follows:

- 1. Water quality based limitations for chemical specific parameters shall be incorporated into the discharge permit as required by N.J.A.C. 7:14A-13.5. Chemical specific limitations shall become effective on the effective date of the permit.
- If a permittee/applicant qualifies in accordance with N.J.A.C. 7:14A-13.3 for limitations based on N.J.A.C. 7:14A-12 Appendix C for a specific pollutant, limitations for that pollutant may be incorporated into the discharge permit. The limitations shall become effective on the effective date of the permit. The effluent limitations shall be re-evaluated when a TMDL is adopted for the affected waterbody.
- 3. Where a water quality based whole effluent toxicity limitation is required in accordance with N.J.A.C. 7:14A-13.6, the water quality based limitation shall be incorporated into the discharge permit. The Department may include a compliance schedule not to exceed three years for water quality based whole effluent toxicity limitations.
- 4. Where a water quality based whole effluent toxicity limitation is not required, the discharge permit shall include an acute whole effluent toxicity limitation in accordance with N.J.A.C. 7: 14A-5.3.

(d) For site remediation discharges, the site remediation effluent standards at N.J.A.C. 7:14A-12 Appendix B shall be incorporated into the discharge permit unless a water

quality based effluent limit is determined in accordance with N.J.A.C. 7:14A-13.5 and 13.6 or the discharge qualifies in accordance with N.J.A.C. 7:14A-13.3(c)5 for limitations based on N.J.A.C. 7:14A-12 Appendix C. The limitations shall become effective on the effective date of the permit unless the Department determines that a compliance schedule is appropriate and is included in the permit. The site remediation limitations may be re-evaluated in conjunction with the TMDL process for the affected waterbody.

(e) For existing discharges, water quality based effluent limitations shall be incorporated into discharge permits in accordance with the following schedule:

- All water quality based effluent limitations that have been previously included in the discharge permit shall be included in the renewal or reissuance of the discharge permit, unless the Department makes a determination that the discharge does not have the reasonable potential to cause or contribute to an excursion above the Surface Water Quality Standards, or that modification of the limitation is consistent with N.J.A.C. 7:14A-13.16 and 13.19.
- 2. Whenever appropriate, water quality based effluent limitations for conventional and non-conventional pollutants, including, but not limited to biochemical oxygen demand (BOD) (or any parameter serving as a surrogate for BOD), nitrogen compounds including ammonia-N, chlorine produced oxidants, total dissolved solids, and dissolved oxygen, shall be included in the discharge permit upon renewal or reissuance.
- i. When a water quality based limitation is required to control dissolved oxygen dynamics in the receiving stream, the effluent limitations shall control both the carbonaceous and nitrogenous forms of BOD as necessary based on an evaluation of the reasonable potential of the discharge to cause or contribute to an exceedance of the water quality standards.
- ii. Whenever possible, carbonaceous BOD (CBOD) shall be controlled through effluent limitations on $CBOD_5$ or $CBOD_{20}$. Limitations on both $CBOD_5$ and $CBOD_{20}$ may be imposed to ensure consistency with water quality management plans and/or the requirements of other agencies.
- iii. Nitrogenous BOD (NBOD) shall be controlled through effluent limitations on NBOD, ammonia-N, total N, or a combination of these measures.
- 3. When insufficient data are available to determine water quality based limitations for any conventional or non-conventional pollutant at the time of permit renewal or issuance, the permittee may be required to complete a water quality study to determine appropriate water quality based effluent limitations. In certain cases, the permittee may elect to participate in a watershed-based TMDL study, if the time frame for such study is determined to be acceptable by the Department.

SUBCHAPTER 14. MONITORING FREQUENCY REQUIREMENTS APPLICABLE TO DSW AND SIU PERMITS

7:14A-14.1 PURPOSE AND SCOPE

- (a) This subchapter sets forth the monitoring frequency requirements for parameters included in DSW and SIU permits that are either monitored and limited, or monitored only.
- (b) The Department shall specify alternative monitoring requirements in a permit, other than specified in this subchapter, for cause, provided the Department justifies such alternative monitoring requirements in the fact sheet for the draft permit.
- (c) All monitoring shall be performed in accordance with the monitoring requirements contained in N.J.A.C. 7:14A-6.5 and monitoring results submitted to the Department on forms as specified by and available from the Department.

7:14A-14.2 MONITORING FREQUENCY REQUIREMENTS FOR DIRECT SURFACE WATER DISCHARGES

(a) A monitoring schedule for parameters included in a DSW permit shall be established as provided in Tables 14-1 through 14-4 below. Tables 14-2 and 14-4 establish monitoring frequencies for parameters in DSW permits that are either monitored and limited, or monitored only. Tables 14-1 and 14-3 establish monitoring frequencies in DSW permits that are monitored and limited.

Parameter	All Major Facilities	All Minor Facilities		
Toxic Metals ⁽²⁾ and Cyanide	1/Month ((G) for cyanide) ((C) for toxic metals) ⁽¹⁾	1/Month ((G) for cyanide) ((C) for toxic metals ⁽¹⁾		
Toxic Organic Compounds ⁽³⁾	1/Month ((G) for volatile organic compounds) ((C) for all other compounds) ⁽¹⁾	1/Quarter ((G) for volatile organic compounds) ((C) for all other compounds) ⁽¹⁾		
Whole Effluent Toxicity	1/Quarter	1/Quarter		

TABLE 14-1.TOXIC METALS AND ORGANIC COMPOUNDS AND WHOLE EFFLUENT
TOXICITY MONITORING FREQUENCY REQUIREMENTS APPLICABLE TO
INDUSTRIAL FACILITIES

Footnotes:

C = Composite sample.

G = Grab sample.

(1) For composite sampling, the applicable composite time period will be specified in the permit.

(2) A full listing of all toxic metals can be found in N.J.A.C. 7:14A-4, Appendix A, Table III.

(3) A full listing of all toxic organic compounds can be found in N.J.A.C. 7:14A-4, Appendix A, Table II.

TABLE 14-2. CONVENTIONAL AND NON-CONVENTIONAL PARAMETERS MONITORING FREQUENCY REQUIREMENTS APPLICABLE TO INDUSTRIAL FACILITIES

Parameter	All Major Facilities	All Minor Facilities		
COD, DOC, TOC, BOD, CBOD, NBOD,	1/Month (G) ⁽¹⁾	$1/Month (G)^{(1)}$		
Dissolved Oxygen, TSS, TDS, FSOD,				
Settleable Solids				
Phosphorus, Nitrogen (all forms), Oil and	$2/Month (C \text{ or } G)^{(1, 2)}$	$1/Month (G)^{(1, 2)}$		
Grease and/or Petroleum Hydrocarbons,				
Alkalinity, Hardness				
pH, Temperature	2/Month (G)	1/Month (G)		
CPO: (if used or added)	1/Week (G)	1/Month (G)		
(if not used or added)	1/Month (G)	1/Quarter (G)		
Bacterial Indicators	1/Month (G)	1/Month (G)		

Footnotes:

C = Composite sample.

G = Grab sample.(1) Grab sample

Grab samples shall be collected for the parameters listed below except that composite samples shall be collected when the frequency of monitoring is greater than 1/month. When composite samples are required, the composite time period will be specified in the permit.

i. Chemical oxygen demand (COD);

- ii. Biochemical oxygen demand (BOD), including CBOD, NBOD, and FSOD;
- iii. Total or dissolved organic carbon (TOC or DOC);
- iv. Solids, including total suspended solids (TSS) and total dissolved solids (TDS);
- v. All nutrients, including ammonia-N, total kjeldhal nitrogen, nitrite, nitrate, and phosphorus fractions; and
 vi. Alkalinity or hardness.
- (2) Grab samples shall be collected for the following parameters:
 - i. Temperature;
 - ii. pH;
 - iii. Chlorine produced oxidants (CPO);
 - iv. Dissolved oxygen;
 - v. Settleable solids;
 - vi. Oil and grease and/or petroleum hydrocarbons; and
 - vii. Bacterial indicators, including fecal coliform, total coliform, streptococci, or enterococci.

TABLE 14-3.TOXIC METALS AND ORGANIC COMPOUNDS AND WHOLE EFFLUENT
TOXICITY MONITORING FREQUENCY REQUIREMENTS APPLICABLE TO
DOMESTIC TREATMENT WORKS

Parameter	All Major Facilities	All Minor Facilities			
Toxic Metals ⁽¹⁾ and Cyanide	1/Month ((G) for cyanide) (24 hr (C) for Toxic Metals)	1/Month ⁽³⁾			
Toxic Organic Compounds ⁽²⁾	1/Month ((G) for volatile organic compounds) (24 hr (C) for all other compounds)	1/Quarter ((G) for volatile organic compounds) ⁽³⁾			
Whole Effluent Toxicity	1/Quarter	1/Quarter			

Footnotes:

C = Composite sample.

G = Grab sample.

(1) A full listing of all toxic metals can be found in N.J.A.C. 7:14A-4, Appendix A, Table III.

(2) A full listing of all organic toxic compounds can be found in N.J.A.C. 7:14A-4, Appendix A, Table II.
 (3) For cyanide sampling, grab samples shall be taken. The required sample type(based on flow in MGD) for toxic metals and all toxic organic compounds, except volatile organic compounds, for minor facilities is:

i. Grab sample for a flow less than 0.05 MGD;

ii. Four-hour composite sample for a flow of 0.05 up to and including 0.1 MGD;

iii. Six-hour composite sample for a flow greater than 0.1 up to and including 1.0 MGD.

TABLE 14-4.	CONVENTIONAL AND NONCONVENTIONAL PARAMETERS MONITORING
	FREQUENCY REQUIREMENTS APPLICABLE TO DOMESTIC TREATMENT
	WORKS

	NNS			T.C.	Elem	(MGD)		
Parameter				Effluent	Flow	(MGD)		
	<0.05	0.05 - 0.1	>0.1 - 0.5	>0.5 - 1.0	>1.0 - 5.0	>5.0 - 10	>10 - 15	> 15.00
BOD, CBOD, NBOD, FSOD, TOC, COD, TSS, TDS, Phosphorus, Nitrogen (all forms), Alkalinity, Hardness, Color, and any other parameter that can be composite sampled	1 / month (G)	2 / month 4hr (C)	2 / month 6 hr (C)	3 / month 6 hr (C)	1 / week 24 hr (C)	2 / week 24 hr (C)	3 / week 24 hr (C)	1 / day 24 hr (C)
Dissolved Oxygen	1 / month (G)	2 / month (G)	2 / month (G)	3 / month (G)	1 / week (G)	2 / week (G)	3 / week (G)	1 / day (G)
pH, CPO, Settleable solids, Temperature	1 / day (G)	1 / day (G)	1 / day (G)	1 / day (G)	2 / day (G)	3 / day (G)	3 / day (G)	6 / day (G)
Bacterial Indicator (limit imposed)	1 / month (G)	1 / month (G)	2 / month (G)	2 / month (G)	4 / month (G)	8 / month (G)	8 / month (G)	1 / day (G)
Bacterial Indicator (no limit imposed)	1 / month (G)	1 / month (G)	1 month (G)	1 month (G)	1 month (G)	1 month (G)	1 month (G)	1 month (G)
Oil and Grease (any petroleum based component)	1 / month (G)	1 / month (G)	2 / month (G)	2 / month (G)	1 / week (G)	2 / week (G)	2 / week (G)	2 / week (G)
Oil and Grease (no petroleum based component)	1 / quarter (G)	1 / quarter (G)	1 / quarter (G)	1 / quarter (G)	1 / month (G)	1 / month (G)	2 / month (G)	2 / month (G)

Footnotes: C = Composite sample. G = Grab sample.

- (b) The monitoring frequency for any parameter or group of parameters will be increased for a specific discharger if the Department determines that increased monitoring frequency is appropriate based on factors such as effluent variability, non-compliance history, or other site specific factors. The Department shall describe the reasons for the increased monitoring in the draft permit fact sheet.
- (c) The monitoring frequency for any parameter or group of parameters will be decreased when:
 - 1. An existing discharge permit specifies less frequent monitoring than is specified in this section, the reduced monitoring frequency will be continued in the renewed permit provided the discharger has demonstrated consistent compliance with the specified parameters;
 - 2. A permit specifies conditions for monitoring frequency reduction and the permittee complies with all conditions; or
 - 3. A permittee requests a reduction in compliance monitoring frequency during the time that the permittee is engaged in a watershed TMDL study in cooperation with the Department and/or other dischargers and the Department considers the change warranted. The monitoring frequency reduction will be effected as a major modification of the discharge permit

in accordance with N.J.A.C. 7:14A-16.4(b)20. This provision does not affect the Department's authority to require ambient monitoring as part of the permit application or as a permit condition.

- (d) Notwithstanding any reduction in monitoring frequency established pursuant to
 (c) above, whenever a Discharge Monitoring Report shows that an effluent limitation has been exceeded, the applicable monitoring frequency shall be adjusted as follows:
 - 1. A permittee shall adjust monitoring to monthly for serious violations in accordance with N.J.A.C. 7:14A-6.5(d).
 - 2. For violations which are not serious violations the permittee shall, upon written notice from the Department, resume the monitoring frequency established immediately preceding the frequency reduction and reporting schedule unless the permittee can demonstrate to the satisfaction of the Department that the exceedence was caused by an upset, bypass or laboratory error as provided for in N.J.A.C. 7:14A-6.11.
- (e) General permits and individual stormwater discharge permits are exempt from the requirements of this section unless the fact sheet for the draft general or stormwater discharge permit contains a summary of the basis for imposing monitoring in accordance with N.J.A.C. 7:14A-15.8(c)4.

7:14A-14.3. MONITORING FREQUENCY REQUIREMENTS FOR NJPDES-SIU PERMITS

- (a) This section establishes monitoring requirements for SIU permits issued by the Department. Monitoring frequency for each parameter shall be determined based on the following factors:
 - 1. The permittee's compliance history;
 - 2. The impact of the discharge on the receiving local agency's treatment process, discharge and/or sludge quality or potential for endangerment to public health or to the local agency employee's health or safety;
 - 3. The volume (or mass) of the discharge(s);
 - 4. Production variations (variability of the discharge); and
 - 5. Any Federal or local requirements regarding significant indirect users.
- (b) Monitoring frequency shall be reduced if a permittee submits a written request to the Department demonstrating that compliance for the affected parameter(s) has been achieved for a minimum period of one year. Monitoring frequency shall be reduced as follows:
 - 1. From weekly to monthly;

- 2. From twice monthly to monthly;
- 3. From monthly to quarterly; or
- 4. From quarterly to semi-annually.
- (c) Notwithstanding (b) above, in accordance with 40 CFR 403.12(g), whenever a permittee becomes aware of a permit violation, the permittee shall resample within one month unless the monitoring schedule established in the permit requires sampling sooner, in which case the permittee shall resample in accordance with such monitoring schedule. Upon written notice from the Department, the permittee shall resume the former, more frequent monitoring and reporting schedule unless the permittee demonstrates that the exceedence was caused by an upset, bypass or laboratory error as provided for in N.J.A.C. 7:14A-6.11.

7:14A-14.4 MONITORING FREQUENCY REQUIREMENTS FOR POLYCHLORINATED BIPHENYLS (PCBS) EFFLUENT CHARACTERIZATION.

- (a) This section establishes the monitoring frequencies for conducting effluent characterization for PCBs if required by N.J.A.C. 7:14A-11.13.1.
- 1. The monitoring frequency for the PCB effluent characterization will be up to six samples during a period of 24 months, not to exceed three dry samples and/or three wet samples. All samples shall be performed using a 24-hour composite sample type, with the exception of short-term wet weather discharges, which shall be performed using a grab sample.
- 2. If monitoring under N.J.A.C. 7:14A-11.13 demonstrates non-detectable levels in the effluent utilizing Method 1668A, the permittee may request a frequency reduction in accordance with this subchapter.
- 3. If, based in part on the PCB monitoring required under N.J.A.C. 7:14A-11.13, the Department determines that a permittee is required to develop and implement a Pollutant Minimization Plan (PMP) in accordance with N.J.A.C. 7:14A-11.13, the Department may suspend, reduce, or eliminate the remaining PCB monitoring.

SUBCHAPTER 15. PROCEDURES FOR DECISION MAKING - NJPDES PERMIT PROCESSING REQUIREMENTS

7:14A-15.1 PURPOSE AND SCOPE

This subchapter sets forth the procedural stages that the Department shall follow when processing an individual NJPDES permit and, as applicable, a general NJPDES permit. These procedural stages include conducting a permit preapplication conference when requested, receiving a permit application, performing an administrative and technical review of the application, preparing a draft permit, issuing a public notice, inviting public comment, holding a public hearing on a draft permit as applicable, issuing a final permit decision, responding to comments and establishing an administrative record for the permit action. The procedural stages of the NJPDES permit application and decision process are outlined in Appendix A of this subchapter as a guide for permit applicants.

7:14A-15.2 PROCEDURAL STAGES FOR INDIVIDUAL PERMIT PROCESSING (RESERVED)

7:14A-15.3 PREAPPLICATION CONFERENCES, PERMIT CHECKLISTS AND TECHNICAL MANUALS

- (a) The Department shall convene a preapplication conference within 30 days of receipt of a written request for such a conference submitted pursuant to (b) below. The purpose of the preapplication conference is to discuss general program requirements and their application to the proposed project or activity.
- (b) A prospective applicant seeking a preapplication conference shall submit to the address below a completed preapplication conference request form and a conceptual plan of the proposed project for which permit approval is sought. Preapplication conference request forms may be obtained from the Department by writing or calling:

New Jersey Department of Environmental Protection Office of Permit Coordination and Environmental Review PO Box 423 401 East State Street Trenton, NJ 08625-0423 (609) 292-3600

- (c) Upon receipt of a written request sent to the address listed in (b) above, the Department shall provide a prospective applicant with a permit application checklist to identify those items required to be submitted in order for a permit application to be declared administratively complete, including:
 - 1. The application form(s) required for an administratively complete

application;

- 2. Any documents or other written submissions required to be filed with the application under this chapter; and
- 3. Any filing, notice, hearing or other requirement that is a precondition for review and processing of an application, including any required certification of compliance.
- (d) A prospective applicant may also obtain a technical manual prepared by the Department in accordance with N.J.S.A. 13:1D-111 for a specified class or category of permit by writing to:

Maps and Publications Sales Office Bureau of Revenue PO Box 417 Trenton, NJ 08625-0417

- (e) The policies and interpretations contained in a technical manual in force on the date that an administratively complete application for a permit subject to that technical manual has been filed shall be binding on both the Department and the applicant, except as otherwise required under Federal or State law, or rule or regulation promulgated thereunder, or an order of the court. However, if an application is determined to be administratively incomplete, the date of filing shall be the date that the information required for an administratively complete application is filed with the Department. Any revision to a technical manual shall have no effect upon a permit application that was submitted to the Department prior to the date of the revision. Nothing in this subsection shall be construed to:
 - 1. Exempt an applicant from complying with all Federal and State laws, or rules or regulations adopted thereunder, including compliance with the requirements of a permit issued by the Department; or
 - 2. Compromise any enforcement action available to the Department pursuant to law.

7:14A-15.4 PROCEDURES FOR DEPARTMENT REVIEW OF INDIVIDUAL NJPDES PERMIT APPLICATIONS

- (a) The procedures for review of an application for an individual NJPDES permit application are as follows:
 - 1. An applicant shall comply with the permit application requirements contained in N.J.A.C. 7:14A-4 and any specific permit application requirements for the particular type of discharge as outlined elsewhere in this chapter before the Department begins the processing of an individual permit application.

- 2. Within 30 days of receipt of an application, the Department shall send written notice to the applicant and, if other than the applicant, to the person(s) who prepared the application as to whether the application and supporting documentation constitutes an administratively complete application for the purpose of commencing a technical review of the application. The notice shall specify if the application lacks a submission identified in the permit application checklist obtained pursuant to N.J.A.C. 7:14A-15.3(c) or if any particular submission is incomplete.
- 3. Within 20 days after an application is determined to be administratively complete the Department shall send written notice to the applicant and, if other than the applicant, to the person(s) who prepared the application specifying the name of the individual(s) assigned to review the application.
- 4. If an application, including all necessary documentation, is determined to be administratively complete, the application shall be deemed complete for the purposes of commencing technical review thereof, and any applicable time period established for completing a review of the application and taking final action thereon shall, notwithstanding any other provisions of law to the contrary, commence on the 31st day following the date of filing of the administratively complete application.
- 5. If an application is determined to be not administratively complete and the Department fails to issue written notice to an applicant pursuant to (a)2 above, the application shall be deemed administratively complete for the purposes of commencing a technical review, and any applicable time period established to complete a review of the application and take final action shall, notwithstanding any other provisions of law to the contrary, commence on the 31st day following the date of filing of the administratively complete application.
- 6. Commencement of a technical review of the application shall not be delayed because of the failure of an applicant to file a submission not specifically identified on the checklist for that application that was in effect as of the date of the filing of the application.
- 7. If an application is deemed not administratively complete for the purposes of commencing a technical review, the Department shall provide the applicant with written notice of the information necessary to make the application complete. The Department shall specify in the notice of deficiency a date for submitting the necessary information. The applicant may request an extension for any such submittal.
- 8. If the application is deemed administratively complete for the purposes of commencing a technical review but is subsequently deemed technically incomplete, the Department shall provide the applicant with written notice

of the information necessary to make the application technically complete. The Department shall specify in the notice of deficiency a date for submitting the necessary technical information. The applicant may request an extension for any such submittal.

- 9. The permit application will be inactivated and the applicant notified if the applicant fails or refuses to correct deficiencies to the satisfaction of the Department within the time frames established pursuant to (a)7 or 8 above.
- 10. Within 30 days of a written request by an applicant, the Department shall notify an applicant of the status of the application and of any outstanding issues relating to review of the application.
- 11. Nothing in this subsection shall be construed to:
 - i. Limit the authority of the Department to request at any time a submission that was not identified on the checklist for an application if the submission is required by State or Federal law, or rule or regulation promulgated in accordance therewith, except that such additional submission shall not affect any applicable time period established for the Department to review and take final action on a completed application;
 - ii. Diminish the responsibility of an applicant to comply with all applicable requirements of State or Federal law, or any rule or regulation promulgated in accordance therewith, or an order issued thereunder;
 - iii. Compromise or limit any enforcement action available to the Department pursuant to law; or
 - iv. Exempt an applicant from complying with all applicable provisions of Federal and State laws, or rules or regulations promulgated pursuant thereto.
- (b) A final permit decision shall not be issued until the permit is determined to be consistent with the applicable water quality management plan in accordance with N.J.A.C. 7:15. An applicant may submit the permit application and plan amendment application concurrently pending the Department's determination of consistency of the permit application with the water quality management plan in accordance with the following terms and conditions:
 - 1. The applicant shall state in the NJPDES permit application that it is submitting concurrent permit and water quality management plan amendment applications and shall request administrative and technical application review of the permit application;

- 2. The NJPDES permit application shall be deemed to be administratively incomplete in the absence of a determination of consistency with the applicable water quality management plan but the Department will continue to review the permit application for technical sufficiency;
- 3. The applicant bears the risk of incurring any cost associated with preparing the NJPDES permit and water quality management plan amendment application submittals whether or not the Department subsequently determines that the permit application is consistent with the water quality management plan; and
- 4. In accepting and reviewing the concurrently submitted NJPDES permit and water quality management plan amendment applications under this section, the Department does not implicitly or expressly commit itself to approving either or both applications.
- (c) Notice of NJPDES permit applications and/or draft permits shall be sent by the Department to the Regional Administrator in accordance with 40 C.F.R. 123 and the Memorandum of Agreement.

7:14A-15.5 CONSOLIDATION OF PERMIT PROCESSING

- (a) Whenever an applicant proposes or requests a permit or permit renewal for more than one type of discharge covered by this chapter, the applicant, to the extent practicable, shall submit applications for all required permits to discharge concurrently and, to the extent practicable, the Department shall consolidate the processing of the permit applications.
- (b) Whenever draft permits are concurrently prepared, the statements of basis (see N.J.A.C. 7:14A-15.7) or fact sheets (see N.J.A.C. 7:14A-15.8), administrative records (see N.J.A.C. 7:14A-15.9), public comment periods (see N.J.A.C. 7:14A-15.10), and any public hearings (see N.J.A.C. 7:14A-15.12) on those permits shall be consolidated. The final permits, to the extent practicable, shall be concurrently issued except where, in the judgment of the Department, joint processing will result in unreasonable delay in the issuance of one or more approval(s) for the discharge.
- (c) Whenever an existing facility or activity requires additional permits covered by this chapter, the Department shall, to the extent practicable, coordinate the expiration date(s) of the new permit(s) with the expiration date(s) of the existing permit(s) and make necessary adjustments of these dates so that all permits expire simultaneously. Subsequent renewal applications shall also be similarly consolidated.

7:14A-15.6 DRAFT PERMITS

(a) After review of a complete permit application, the Department shall take one of

the following actions:

- 1. For a modification, revocation and reissuance, renewal or new permit, issue a draft permit which includes a fact sheet in accordance with N.J.A.C. 7:14A-15.8;
- For the suspension or revocation of an existing permit or the denial of an application for a new permit or permit renewal, issue a notice of intent to suspend, revoke or deny, as applicable, in accordance with N.J.A.C. 7:14A-15.7(a) setting forth the basis for the permit action; or
- 3. For the denial of an application for a modification, revocation and reissuance, suspension, or revocation of a permit, send the applicant a response letter stating the reason(s) for the denial in accordance with N.J.A.C. 7:14A-16.3.
- (b) All draft permits and general permits, with the exception of draft permits issued pursuant to (a)2 above, shall include the following information:
 - 1. Applicable conditions under N.J.A.C. 7:14A-6.3;
 - 2. Applicable compliance schedules under N.J.A.C. 7:14A-6.4;
 - 3. Applicable monitoring requirements under N.J.A.C. 7:14A-6.5;
 - 4. For UIC permits, permit conditions under N.J.A.C. 7:14A-8.10; and
 - For NJPDES permits, effluent limitations, standards, prohibitions, standards for residual use or disposal, and conditions under N.J.A.C. 7:14A-11.2 and 11.3 and all applicable variances under N.J.A.C. 7:14A-11.7.
- (c) All draft permits prepared under this section shall be:
 - 1. Accompanied by a statement of basis (see N.J.A.C. 7:14A-15.7) or fact sheet (see N.J.A.C. 7:14A-15.8);
 - 2. Based on the administrative record (see N.J.A.C. 7:14A-15.9); and
 - 3. Subject to public notice (see N.J.A.C. 7:14A-15.10) and made available for public comment (see N.J.A.C. 7:14A-15.11).
- (d) If there are no changes to the renewed permit, other than changes which would constitute minor changes under N.J.A.C. 7:14A-16.5, the existing permit and fact sheet may serve as the draft permit for the renewed permit.
- (e) After the close of the public comment period, the Department shall issue a final permit decision pursuant to N.J.A.C. 7:14A-15.15 including a response to

comments document pursuant to N.J.A.C. 7:14A-15.16.

7:14A-15.7 STATEMENT OF BASIS

- (a) The Department shall prepare a statement of basis when:
 - 1. It suspends or revokes an existing permit pursuant to N.J.A.C. 7:14A-16.6; or
 - 2. It denies an application for a new permit or permit renewal.
- (b) The statement of basis shall briefly describe:
 - 1. The type of facility or activity which is the subject of the permit application;
 - 2. The type and quantity of wastes, fluids, or pollutants which are proposed to be or are being treated, stored, disposed of, injected, emitted, or discharged; and
 - 3. The reasons supporting the decision to suspend or revoke a permit, or to deny an application for a new permit or permit renewal.
- (c) The Department shall send the statement of basis to the applicant, to the persons identified in N.J.A.C. 7:14A-15.10(e)1ii through v and, upon request, to any other person.

7:14A-15.8 FACT SHEET

- (a) The Department shall prepare a fact sheet for every general permit, new permit, permit renewal, permit revocation and reissuance or major permit modification.
- (b) The fact sheet shall briefly set forth the principal facts and the significant factual, legal, methodological, and policy considerations examined during preparation of the draft permit. The Department shall send this fact sheet to the applicant, to the persons identified in N.J.A.C. 7:14A-15.10(e)1ii through v, and upon written request, to any other person.
- (c) The fact sheet shall include, when applicable:
 - 1. A brief description of the type of facility or activity which is the subject of the draft permit;
 - 2. The type and quantity of wastes, fluids, or pollutants which are proposed to be or are being treated, stored, disposed of, injected, emitted, or discharged;
 - 3. A sketch or detailed description of the location of the discharge(s) or

regulated activity described in the application or, for general permits, a map or description of the area;

- 4. A brief summary of the basis for the draft permit conditions, including references to applicable statutory or regulatory provisions and appropriate supporting references to the administrative record required by N.J.A.C. 7:14A-15.17;
- 5. A summary of the Department's determination whether to include any requested variances or alternatives to permit conditions;
- 6. The name and telephone number of a Department staff person to contact for additional information;
- 7. Any calculations or other necessary explanation, or a reference where calculations or explanations can be found, of the derivation of specific effluent limitations and conditions or standards for residual use or disposal, including a citation to the applicable effluent limitation guideline or performance standard or standard for residual use or disposal as required under N.J.A.C. 7:14A-13 or 20. The fact sheet shall also state the reasons why they are applicable or provide an explanation of how the alternate effluent limitations were developed. When the draft permit contains any of the following conditions, an explanation of the reasons why such conditions are applicable:
 - i. Limitations to control toxic pollutants under N.J.A.C. 7:14A-13;
 - ii. Limitations on internal wastestreams under N.J.A.C. 7:14A-13.16;
 - iii. Limitations on indicator pollutants under 40 CFR 125.3(g) or surrogate parameters under N.J.A.C. 7:14A-13.7 or 13.10; or
 - iv. Limitations set on a case-by-case basis under 40 CFR 125.3(c)(2) or (c)(3), or pursuant to N.J.A.C. 7:14A-20.5; and
- 8. For permits that include a notification plan under N.J.A.C. 7:14A-20.7(a)3, a brief description of the conditions of the permit that address approval of residual land application sites not identified at the time of permit issuance.

7:14A-15.9 Administrative Record for the Draft Permit

- (a) The provisions of a draft permit shall be based on the administrative record as defined in this section.
- (b) For preparing a draft permit under N.J.A.C. 7:14A-15.6, the administrative record shall consist of:

- 1. The application, if required, and any supporting data furnished by the applicant;
- 2. The draft permit;
- 3. The statement of basis pursuant to N.J.A.C. 7:14A-15.7 or fact sheet pursuant to N.J.A.C. 7:14A-15.8;
- 4. All documents cited in the statement of basis or fact sheet; and
- 5. Other documents contained in the supporting file for the draft permit.
- (c) Any of the materials described at (b) above that are readily available in the offices of the Department or are published and generally available need not be physically included in the administrative record provided a specific reference to such materials is made in the fact sheet or statement of basis.

7:14A-15.10 PUBLIC NOTICE OF PERMIT ACTIONS AND PUBLIC COMMENT PERIOD

- (a) The Department, or the applicant upon authorization by the Department, shall publish public notice pursuant to (e) below for the following:
 - 1. Issuance of a draft permit under N.J.A.C. 7:14A-15.6;
 - 2. Scheduling of a public hearing under N.J.A.C. 7:14A-15.12; and
 - Reopening or extension of the public comment period under N.J.A.C. 7:14A-15.14, except that when the comment period is extended for 15 days or less, public notice of the extension shall be limited to an oral or written notice to the applicant and to those persons who commented on the draft permit.
- (b) The Department shall not publish a public notice seeking public comment for the following:
 - 1. Denial of request for permit modification, revocation and reissuance, suspension, or revocation under N.J.A.C. 7:14A-16.3(c). Written notice of the denial shall be provided to the applicant and to the permittee;
 - 2. Issuance of a minor permit modification under N.J.A.C. 7:14A-16.5; or
 - 3. Activation of the terms and conditions of a suspended permit previously subject to public notice in accordance with this section.
- (c) The Department, or the applicant upon authorization by the Department, shall publish pursuant to (e) below public notice, as approved by the Department, according to the following schedule:

- 1. For draft permits and reopening or extension of the public comment period under (a)1 and 3 above, at least 30 days prior to the end of the public comment period. When public notice is published in:
 - i. One or more newspapers and the DEP Bulletin, the comment period shall close no sooner than 30 days after the last newspaper publication; or
 - ii. Only the DEP Bulletin, the comment period shall close no sooner than 30 days after publication.
- 2. For a public hearing under (a)2 above, 30 days prior to the public hearing.
- (d) The Department may describe more than one type of discharge or permit action in a public notice. Public notice of the public hearing and draft permit may be combined and published concurrently.
- (e) To publish public notice of the activities described in (a) above, the Department or the applicant authorized by the Department pursuant to (c) above shall:
 - 1. Mail a copy of the approved public notice to the following persons:
 - i. The applicant (except for those general permits for which there is no applicant);
 - ii. Federal and State agencies that have issued or are required to issue a RCRA, UIC, Prevention of Significant Deterioration (or other permit under the Clean Air Act), NJPDES, Section 404 of the Federal Act, or residual management permit;
 - iii. Federal and State agencies that have jurisdiction over fish, shellfish, wildlife resources, coastal zone management plans, the State Advisory Council on Historic Preservation, State Historic Preservation Officers, and other appropriate government authorities, including any affected states;
 - iv. Any State agency responsible for areawide waste management or water quality plan development under Sections 208(b)(2), 208(b)(4), or 303(e) of the Federal Act and the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service;
 - v. Any State or local agency having authority under State law with respect to construction or operation of the facility;
 - vi. Any user identified in the permit application of a privately owned

treatment works;

- vii. The mayor and governing body of the municipality where the facility is located or proposed to be located and with a request that the mayor or governing body distribute copies of the public notice to other appropriate governmental units;
- viii. Sewerage entity (or local agency for an SIU permit); and
- ix. Persons on a mailing list that:
 - (1) Includes those who request to be on such mailing list; and
 - (2) Includes those persons affected by the permit action.
- 2. For a facility classified as major, a general permit or a permit for land application of residuals which includes a notification plan pursuant to N.J.A.C. 7:14A-20.7(a)3, in addition to (e)1 above, publish the approved public notice in a daily or weekly newspaper within the area affected by the facility or activity; and
- 3. The Department shall publish notice of all permit modifications in the DEP Bulletin as follows:
 - i. For a major modification to permits classified as minor or significant minor, the public notice shall contain the information in (f) below;
 - For a major modification to a permit classified as major, the notice shall consist of only the facility name and NJPDES permit number, the proposed modification(s), the name of the newspaper(s) where the public notice will appear and the name and telephone of the Department staff person assigned to the permit action; and
 - iii. For a minor modification to a permit for a facility classified as major, minor or significant minor, the notice shall consist of only the information required in (e)3ii above except for providing the name of the newspaper(s) where the public notice will appear.
- (f) The approved public notice shall include the following information:
 - 1. The name and address of the applicant or permittee and, if different, of the facility and/or activity regulated by the permit, except for those general permits for which there is no applicant;
 - 2. A brief description of the business conducted at the facility or activity described in the permit, permit application, or draft permit;
 - 3. A general description of the location of each existing or proposed

discharge point, the name of the receiving water and, where applicable, a general description of the residual use and/or disposal practice(s) and the location of each treatment works treating domestic sewage, and residual use or disposal sites known at the time of permit application. For draft general permits, this requirement may be satisfied by a map or description of the permit area;

- 4. The name and address of the office within the Department to which a person can make a written request to view the administrative record and the times and place at which the record will be open for public inspection, and the name of the Department staff person who is processing the permit action to whom a person can make a written request for copies;
- 5. A brief description of the comment procedures required by N.J.A.C. 7:14A-15.11 and 15.12 including:
 - i. The date, time and place of any scheduled public hearing;
 - ii. A statement of the procedures by which to request a hearing (unless a hearing has already been scheduled) and other procedures by which a person may participate in the final permit decision process; and
 - iii. The opening and closing date of the comment period, including a statement that comments shall be postmarked by the closing date; and
- 6. Any additional information considered by the Department to be necessary or appropriate.
- (g) In addition to the information described at (f) above, the Department shall include the following information in the public notice for a public hearing scheduled pursuant to N.J.A.C. 7:14A-15.12:
 - 1. The date of any previous public notice relating to the permit;
 - 2. The date, time and place of the public hearing; and
 - 3. A brief description of the nature and purpose of the public hearing, including the applicable rules and procedures.
- (h) In addition to the public notice described in (f) above, the Department shall mail to all persons identified in (e)1i through v above a copy of the fact sheet or statement of basis, and, upon written request, the permit application and the draft permit.

7:14A-15.11 PUBLIC COMMENTS AND REQUESTS FOR PUBLIC HEARING

(a) During the public comment period established under N.J.A.C. 7:14A-15.10, any person may submit written comments on a draft permit based upon significant

and relevant issues and data .

(b) If a public hearing has not already been scheduled, a person may request a public hearing on a draft permit for which public notice has been published pursuant to N.J.A.C. 7:14A-15.10. A request for a public hearing shall be in writing and shall state the nature of the significant and relevant issues proposed to be raised in the hearing and why these issues cannot be adequately expressed other than at a public hearing.

7:14A-15.12 PUBLIC HEARINGS

- (a) The Department shall hold a public hearing if there is or may be a significant degree of public interest in favor of holding a public hearing. The Department may hold a public hearing if it determines that a hearing is likely to clarify one or more legal and/or factual issues on a draft permit and that oral testimony is essential to adequately express all issues and concerns.
- (b) Public hearings shall be conducted in a non-adversarial manner wherein a person shall be afforded an opportunity to submit oral or written statements and data concerning the draft permit.
- (c) The Department may set reasonable limits upon the time allowed for oral comments at the public hearing and may also require the submission of written statements.
- (d) The Department shall extend the public comment period established pursuant to N.J.A.C. 7:14A-15.10 to the close of any public hearing held pursuant to this section. The Department may also extend the comment period beyond the public hearing by so stating at the hearing.
- (e) If a permittee has requested to arrange for a public hearing and the Department determines that a public hearing is warranted based on (a) above, it shall be the sole responsibility of the applicant to secure the use of an adequate facility to hold the public hearing and to obtain any ancillary services associated with the public hearing including, but not limited to, a stenographer and/or tape recording. The location, time and date of the public hearing shall be mutually acceptable to the Department and the applicant.
- (f) When a permittee arranges the public hearing, it shall provide the Department with two copies of the public hearing transcript at no charge to the Department.
- (g) The Department shall make available for public inspection a written transcript of the public hearing. A copy of the transcript will be sent, on request, for a reasonable fee for copying.

7:14A-15.13 Obligation to Raise Issues and Provide Information During the Public Comment Period

(a) Any applicant or permittee or person interested in being considered a party to an action pursuant to N.J.A.C. 7:14A-17.3 who believes that any action under N.J.A.C. 7:14A-15.10(a) is inappropriate shall raise all reasonably ascertainable issues and submit, in writing to the Department by certified mail (return receipt requested), or by other means which provides verification of the date of delivery to the Department all such reasonably ascertainable arguments and factual grounds supporting them, including all supporting materials, by the close of the public comment period. If an applicant or permittee or any person fails to raise any reasonably ascertainable issues within the public comment period, the right to raise or contest any such issues in any subsequent adjudicatory hearing or appeal shall be deemed to have been waived. All supporting materials shall be included in full and may not be incorporated by reference, unless they are already part of the administrative record in the same proceeding, or consist of State or Federal statutes and regulations, USEPA documents of general applicability, or other generally available reference materials. Commenters shall make any supporting material incorporated by reference available at the request of the Department.

7:14A-15.14 REOPENING OF THE PUBLIC COMMENT PERIOD

- (a) Upon its determination that any data, information or argument submitted during the comment period raises significant legal and/or factual issues that are likely to affect the final decision on the permit, the Department shall take one or more of the following actions:
 - 1. Prepare a new draft permit, appropriately modified, pursuant to N.J.A.C. 7:14A-15.6;
 - 2. Prepare a revised statement of basis under N.J.A.C. 7:14A-15.7, or a revised fact sheet pursuant to N.J.A.C. 7:14A-15.8, and reopen the comment period under (a)3 below; or
 - 3. Reopen or extend the comment period to give a person the opportunity to comment on the data, information or arguments so submitted.
- (b) Comments filed during the reopened or extended comment period shall be limited to the relevant legal and/or factual issues that prompted the reopening or extension of the comment period. The public notice under N.J.A.C. 7:14A-15.10 shall define the scope of the reopened or extended comment period.
- (c) The Department shall publish public notice of any of the actions specified at (a) above in accordance with N.J.A.C. 7:14A-15.10, except when the comment period is reopened or extended for 15 days or less, in which case, the Department shall provide only the applicant and all persons who commented on

the draft permit with oral or written notice of the reopened or extended public comment period.

7:14A-15.15 FINAL PERMIT DECISION, AND ISSUANCE AND EFFECTIVE DATE OF A PERMIT

- (a) The Department shall issue a final permit decision after the close of the public comment period. The Department also shall notify, in writing, the applicant or permittee and each person who submitted written comments or requested notice of the final permit decision. This notification shall include reference to the procedures provided to the applicant or permittee and persons other than the applicant or permittee for contesting the Department's decision on a permit.
- (b) A final permit shall not become effective until 30 days from receipt by the permittee of the permit except when:
 - 1. An effective date is not specified in the permit but the permit specifies that the permittee may request the establishment of the effective date at a subsequent time;
 - 2. A later effective date is specified in the permit; or
 - 3. The Department has received no comment from persons other than the permittee on the draft permit and an immediate effective date is requested by the permittee, in writing, and the Department concurs.
- (c) After the issuance of a final permit decision:
 - 1. A treatment works approval, if required by N.J.A.C. 7:14A-22.3, shall be obtained.
 - 2. The permittee or any other person considered a party to the action under N.J.A.C. 7:14A-17.3 may request an adjudicatory hearing to contest the final permit decision in accordance with N.J.A.C. 7:14A-17.2.

7:14A-15.16 Response to Comments

- (a) The Department shall specifically respond to comments concerning draft permits from persons, including comments from affected states, by issuing a response to comments document at the time that a final permit decision is issued. The document shall:
 - 1. State what action the Department has taken on the final permit or permit decision;
 - 2. Specify which provisions, if any, of the draft permit have been changed in the final permit, and the reasons for the change. The Department shall make only those changes which do not destroy the value of the original

fact sheet or statement of basis; and

- 3. Briefly describe and respond to all significant and relevant comments on the draft permit raised during the public comment period, or during any public hearing.
- (b) A person may arrange to review the response to comments document by telephoning the Department's Bureau of Central Services and Property Management at (609) 292-0400.

7:14A-15.17 Administrative Record for the Final Permit

- (a) The Department shall base final permit decisions made pursuant to N.J.A.C. 7:14A-15.15 on the administrative record, which shall consist of the following:
 - 1. The administrative record for the draft permit under N.J.A.C. 7:14A-15.9;
 - 2. All comments received during the public comment period established under N.J.A.C. 7:14A-15.10 including any extension or reopening under N.J.A.C. 7:14A-15.14;
 - 3. The tape or transcript of any public hearing(s) held under N.J.A.C. 7:14A-15.12;
 - 4. Any written materials submitted at any public hearing held under N.J.A.C. 7:14A-15.12;
 - 5. The response to comments document prepared under N.J.A.C. 7:14A-15.16 and any new material placed in the record under that section;
 - 6. Other documents contained in the supporting file for the permit; and
 - 7. The final permit.
- (b) Any of the materials described at (a) above that are readily available in the offices of the Department or are published and generally available need not be physically included in the administrative record provided a specific reference to such materials is made in the fact sheet or statement of basis.
- (c) A person may arrange to review the administrative record by telephoning the Department's Bureau of Central Services and Property Management at (609) 292 - 0400.

N.J.A.C. 7:14A-15: APPENDIX A GUIDE TO THE NJPDES PERMIT PROCESSING REQUIREMENTS

Appendix A is designed to assist a new applicant, or permittee in following the permit procedural requirements set out in this chapter. An applicant should read the full text of the regulations before applying for a permit.

The flow chart outlines a sequence of events directed by arrows and is divided into two sections as follows:

SECTION 1 - APPLICATION PROCEDURES

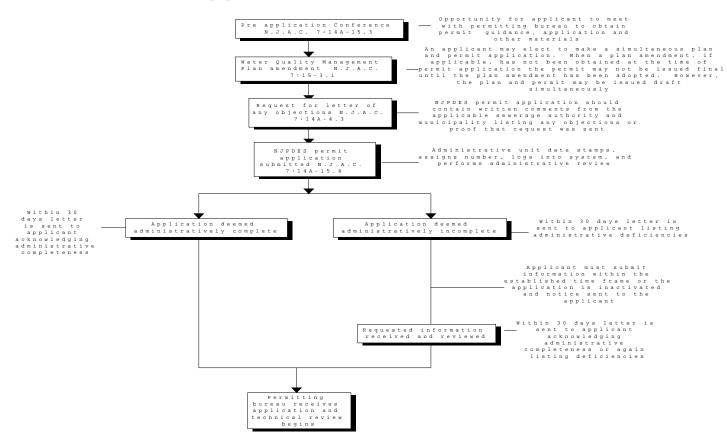
Section 1 outlines the actions leading to a permit application and the Department's administrative review of the application. The key items in this section are that prior to a permit application an applicant shall have:

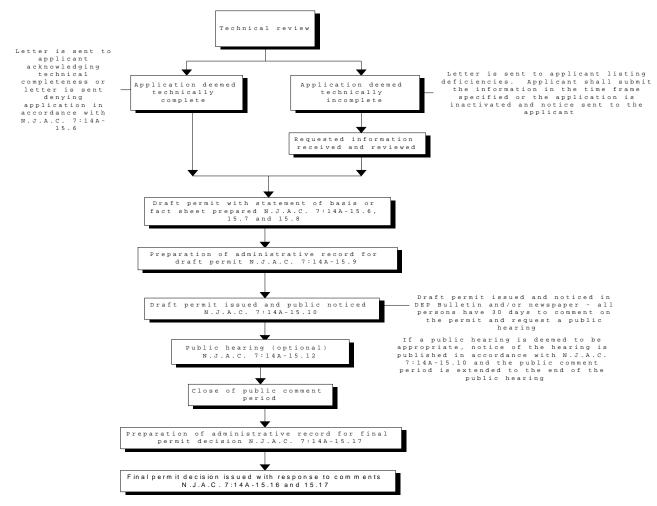
- Received a determination of consistency (unless submitting a concurrent permit and plan amendment application) pursuant to N.J.A.C. 7:14A-15.4(b) in accordance with the Statewide Water Quality Management Planning Rules at N.J.A.C. 7:15; and
- 2. Requested a letter of comment or objections from the municipality or sewerage authority pursuant to N.J.A.C. 7:14A-4.3(a)13.

SECTION 2 - PERMIT DECISION PROCESS

Section 2 outlines the steps in the technical review of the permit application, how a permit will be prepared and publicly noticed for comment, and how a final permit decision will be issued. The key item in this section is the public comment period (N.J.A.C. 7:14A-15.10). Unless issues are raised during this period they may not be adjudicated during the hearing process if the applicant appeals the Department's final decision on the permit.

A pplication Procedures





Permit Decision Process

SUBCHAPTER 16. TRANSFER, MODIFICATION, REVOCATION AND REISSUANCE, RENEWAL, SUSPENSION, AND REVOCATION OF EXISTING PERMITS

7:14A-16.1 Purpose and scope

This subchapter sets forth the causes for and the procedures governing the transfer, modification, revocation and reissuance, renewal, suspension, and revocation of existing NJPDES permits. Specific procedures governing authorizations issued under general permits are set forth at N.J.A.C. 7:14A-6.13.

7:14A-16.2 Transfer of a permit

- (a) A permittee shall not transfer a NJPDES permit to any person except after due notice to the Department in accordance with (b) or (d) below.
- (b) To identify a new owner or operator, a permit may be transferred:
 - 1. As a major modification or revocation and reissuance if one or more causes at N.J.A.C. 7:14A-16.4 are identified;
 - 2. As a minor modification with changes identified at N.J.A.C. 7:14A-16.5; or
 - 3. As an automatic transfer under (d) below.
- (c) (Reserved.)
- (d) Any permit shall be automatically transferred to a new permittee if:
 - 1. The current permittee provides written notice to the Department by certified mail or by other means which provides verification of the date of delivery to the Department of the proposed transfer at least 30 days prior to the proposed transfer date. This notice shall include the following:
 - i. The name of the current owner and the address of facility;
 - ii. The name and address of the new owner or owners and operator;
 - iii. The permit number;
 - iv. The names of the principal officer or officers responsible for the facility operation and maintenance under the new operator identified under (d)1ii above;
 - v. The names and current telephone numbers of persons upon whom

legal process can be served;

- vi. A notarized statement signed by the new principal officer identified in (d)1iv above stating that he or she has read the permit and certifies, pursuant to N.J.A.C. 7:14A-4.9, that he or she shall abide by all the conditions of the permit and that production levels, products generated, rates of discharge, and discharge characteristics shall remain unchanged; and
- vii. A written agreement between the current permittee and new permittee which includes a specific date for transfer of permit responsibility between the current permittee and new permittee; and
- 2. The Department does not issue a response letter in accordance with N.J.A.C. 7:14A-16.3(c) to notify the current permittee and the new permittee, within 30 days of receipt of notice of the proposed transfer provided the permittee complies with the requirements in (d)1 above. The Department shall incorporate the name of the new permittee into the permit as a minor modification in accordance with N.J.A.C. 7:14A-16.5.

7:14A-16.3 Procedures for the modification, revocation and reissuance, renewal, suspension, or revocation of a permit

- (a) An existing permit shall be modified, revoked and reissued, renewed, suspended, or revoked for cause as specified at N.J.A.C. 7:14A-16.4 through 16.6, as applicable, either at the request of the permittee, or a person, or upon the Department's initiative.
- (b) Any request under (a) above shall be submitted in accordance with the following procedures:
 - 1. The request shall be in writing;
 - 2. The request shall contain facts and reasons supporting the request, including a specific reference to the applicable cause(s) under N.J.A.C. 7:14A-16.4 through 16.6;
 - 3. A person submitting the request shall also identify the environmental, aesthetic, or recreational interest which is or may be affected by the permit action;
 - 4. A permittee requesting a modification for a less stringent effluent limitation or standard shall comply with any outstanding fee, penalty or fine requirements contained in N.J.S.A. 58:10A-6(k); and
 - 5. The Department shall request additional information that is necessary to process the request as follows:

- i. For a permit modification, the submission of an updated permit application to support the request for modification in accordance with N.J.A.C. 7:14A-4.2.
- ii. For a renewal or revocation and reissuance, submission of a new permit application in accordance with N.J.A.C. 7:14A-4.2 except for applicants for renewals issued a notice of eligibility for expedited renewal in accordance with (h) below.
- (c) In response to a request submitted under (a) above, or upon its own initiative, the Department shall take action as follows:
 - 1. For a request for a major modification or revocation and reissuance for one or more of the causes listed in N.J.A.C. 7:14A-16.4, the Department shall either:
 - i. Issue a draft permit in accordance with N.J.A.C. 7:14A-15.6 which shall include a fact sheet in accordance with N.J.A.C. 7:14A-15.8; or
 - ii. Deny the request for a major modification or revocation and reissuance. The Department shall issue the requester a response letter stating the reason for the denial. This decision is a final agency action.
 - 2. For a request for a permit renewal, the Department shall either:
 - i. Issue a draft permit in accordance with N.J.A.C. 7:14A-15.6 which shall include a fact sheet in accordance with N.J.A.C. 7:14A-15.8; or
 - ii. Deny the request for a permit renewal for one or more causes listed at N.J.A.C. 7:14A-16.6. The Department shall issue a notice of intent to deny, which is a type of draft permit in accordance with N.J.A.C. 7:14A-15.6 which includes only a statement of basis in accordance with N.J.A.C. 7:14A-15.7.
 - 3. For a request for a permit suspension or revocation for one or more causes listed at N.J.A.C. 7:14A-16.6, the Department shall either:
 - i. Issue a draft permit under N.J.A.C. 7:14A-15.6, which includes only a statement of basis in accordance with N.J.A.C. 7:14A-15.7; or
 - ii. Deny the request for a suspension or revocation. The Department shall issue the requester a response letter stating the reasons for the denial. This decision is a final agency action.
 - 4. For a request for a minor modification, the Department shall either:
 - i. Issue a minor modification in accordance with N.J.A.C. 7:14A-16.5;

or

- ii. Deny the request for a minor modification. The Department shall issue the requester a response letter stating the reasons for the denial. This decision is a final agency action.
- (d) (Reserved.)
- (e) When the Department issues a draft permit for a major modification, only those conditions that are being modified shall be reopened for notice and comment. Where a permit is renewed or revoked and reissued, the entire permit shall be reopened for notice and comment.
- (f) The permittee shall comply with all conditions of the existing permit while a request for modification, revocation and reissuance, renewal, suspension or revocation is being processed by the Department unless the conditions of the existing permit are stayed in accordance with N.J.A.C. 7:14A-17.6.
- (g) (Reserved.)
- (h) Procedures for expedited permit renewal are as follows:
 - 1. A permittee shall be eligible for an expedited permit renewal when the Department reviews the existing permit and determines that no change to the permit is needed other than changes which would constitute a minor modification under N.J.A.C. 7:14A-16.5. The Department may determine eligibility on its own initiative or a permittee may request that the Department consider issuing an expedited permit renewal by submitting a request for consideration for an expedited permit renewal at least 270 days prior to the permit expiration date. The Department shall notify permittees as to their eligibility for an expedited renewal 210 days before the permit expiration date.
 - 2. A permittee notified of eligibility for an expedited permit renewal pursuant to (h)1 above shall, at least 180 days prior to the permit expiration date, either submit a written request for the expedited renewal or, if not interested in expedited permit renewal and the discharge will continue after the permit expiration date, submit a renewal application in accordance with N.J.A.C. 7:14A-4.
 - 3. When issuing an expedited permit renewal:
 - i. In accordance with N.J.A.C. 7:14A-15.10(d), the Department shall provide a consolidated public notice in the DEP Bulletin and appropriate newspaper(s) for those facilities classified as major facilities, listing those permits it plans to renew. Such public notice shall include the opportunity for public comment and the procedure

for requesting a public hearing in accordance with N.J.A.C. 7:14A-15.11; and

- ii. Issue a final permit to each permittee after the close of the public comment period which shall include the same terms and conditions as the existing permit, with the exception of changes that constitute minor modifications pursuant to N.J.A.C. 7:14A-16.5 unless the Department determines, based on issues raised during the public comment period, to prepare a new draft permit pursuant to N.J.A.C. 7:14A-15.14(a).
- (i) When taking any permit action pursuant to (c) above for two or more similar permits, the Department may consolidate the procedures listed in N.J.A.C. 7:14A-15.7, 15.8 and 15.10, such that one statement of basis or fact sheet, as appropriate, and one public notice for all of the permits are prepared for publication.
- (j) When a proposed rule change affects multiple permits, the Department may modify the affected permits through a rule proposal.
 - 1. The permit modification may be done through a rule proposal provided the Department:
 - i. Identifies the affected permits in the rule proposal; and
 - ii. Provides the affected permittees with a copy of the rule proposal as published in the New Jersey Register.
 - 2. When a permit is modified through a rule proposal, the rule proposal shall serve as the draft permit for the purposes of N.J.A.C. 7:14A-15.6 and fact sheet for the purposes of N.J.A.C. 7:14A-15.8.
 - 3. The affected permit(s) will be finalized simultaneously on adoption of the rule proposal and constitute a final permit decision.

7:14A-16.4 Causes for major modification or revocation and reissuance of a permit

- (a) The Department shall issue a major modification or revoke and reissue a permit only for one or more of the causes set forth at (b) below.
- (b) The following constitute cause for major modification or revocation and reissuance of a permit:
 - 1. Any material and substantial alteration or addition to the permitted facility, activity, or discharge (including one or more changes in the permittee's residual use or disposal practices) which occurred after permit issuance and which justifies the application of permit conditions that are

different or absent from those in the existing permit. A request for a permit modification under this paragraph shall include all information demonstrating that the alterations or additions occurred after permit issuance and therefore this information was not available at the time of permit issuance or renewal;

- 2. New information which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of different permit conditions at the time of issuance. A request for consideration under this paragraph shall include all information demonstrating that the information was not available at the time of permit issuance. Such information includes, but is not limited to, the following:
 - i. Information showing a need for additional flow;
 - ii. Effluent testing indicating that the cumulative effects on the environment are unacceptable or are in violation of applicable standards; or
 - iii. Any toxic pollutant that a permittee begins or expects to begin to use or manufacture as an intermediate or final product or by-product which was not reported in the permit application under N.J.A.C. 7:14A-4.2. A permittee subject to this subparagraph shall amend its permit application to list those pollutants;
- 3. A change in the regulation or standard on which the issued permit was based by subsequent rule amendment or by judicial decision upon which no further appeals may be taken. The Department may provide for a schedule of compliance in accordance with N.J.A.C. 7:14A-6.4 in order for the permittee to meet such regulations or standards;
- 4. An act of God, strike, flood, or other events over which the permittee has little or no control and for which there is no reasonably available remedy which the Department has determined warrants the modification of a compliance schedule. However, in no case shall a compliance schedule be modified to extend beyond an applicable State or Federal statutory deadline;
- 5. A complete and timely request filed by the permittee for any of the variances listed in N.J.A.C. 7:14A-11.7;
- 6. Incorporation of an applicable toxic effluent standard or prohibition under Section 307(a) of the Federal Act (see N.J.A.C. 7:14A-13.2 through 13.4);
- 7. Inclusion or modification of an effluent limitation or parameter pursuant to a permit "reopener" condition as follows:

- i. For effluent limitations, including those limitations necessary to implement a TMDL or watershed management plan adopted in accordance with N.J.A.C. 7:15-7, pursuant to N.J.A.C. 7:14A-6.2(a)10;
- ii. For surrogate parameters, pursuant to N.J.A.C. 7:14A-13.7 or 13.10;
- iii. For making a determination of reasonable potential to cause or contribute to an exceedance of the Surface Water Quality Standards, pursuant to N.J.A.C. 7:14A-13.5;
- iv. For action levels associated with a specific effluent limitation that have been exceeded, pursuant to N.J.A.C. 7:14A-13.18;
- v. For limitations based on narrative Surface Water Quality Standards, pursuant to N.J.A.C. 7:14A-13.7;
- vi. For residual use or disposal, pursuant to N.J.A.C. 7:14A-20.5;
- vii. (Reserved.)
- viii. For modification of effluent standards when Whole Effluent Toxicity data obtained by the Department shows toxicity at levels that exceed applicable effluent standards, as specified in N.J.A.C. 7:9-5.7(a); or
- ix. For issuance of a facility wide permit, requiring pollution prevention at a facility, to incorporate a pollution prevention plan or to require more stringent effluent levels based on pollutant prevention strategies or technologies applicable to that facility or industry, in accordance with Section 48 of the Pollution Prevention Act, N.J.S.A. 13:1D-35, and its implementing regulations, specifically, N.J.A.C. 7:1K-7.1(c);
- The filing of a complete request from a permittee who qualifies for effluent limitations on a net basis under N.J.A.C. 7:14A-13.4(k) or when a permittee is no longer eligible for net limitations as provided for in N.J.A.C. 7:14A-13.4(k) (see the information requirements contained in 40 CFR 122.45(g));
- 9. Establishment of a compliance schedule for development of a pretreatment program in accordance with N.J.A.C. 7:14A-6.4(c) and N.J.A.C. 7:14A-19;
- 10. Failure of the State to notify, as required by Section 402(b)(3) of the Federal Act, another state whose waters may be affected by a discharge from the State;
- 11. The level of discharge of any pollutant which is not limited in the permit exceeds the level which can be achieved by the technology based

treatment requirements appropriate to the permittee under N.J.A.C. 7:14A-13.2 through 13.4;

- Establishment of a "notification level" as provided in N.J.A.C. 7:14A-6.2(b)2;
- 13. Modification of a schedule of compliance to reflect the time lost during construction of an innovative or alternative facility, in the case of a POTW which has received a grant under Section 202(a)(3) of the Federal Act or public loan moneys for the costs to modify or replace facilities constructed with a grant for innovative and alternative wastewater technology under Section 202(a)(2) of the Federal Act. In no case shall a compliance schedule be modified to extend beyond an applicable State or Federal statutory deadline. For a permit modification under this paragraph a permittee shall submit all information detailing the reasons for time lost during construction and why such loss of time was not the fault of the permittee;
- 14. Correction of technical mistakes, such as errors in calculation, or mistaken interpretations of law or rules, made in determining permit conditions. For a permit modification under this paragraph, when the request is initiated by a permittee, the permittee shall cite the location of the alleged error or interpretation, denote what the correction should be and provide a detailed basis for the correction including any applicable regulatory citations or calculations;
- 15. Inability to achieve effluent limitations when the discharger has installed the treatment technology considered by the Department in setting effluent limitations imposed under section 402(a)(1) of the Federal Act and has properly operated and maintained the facilities. The limitations in the modified permit shall reflect the level of pollutant control actually achieved but shall not be less stringent than required by a subsequently promulgated effluent limitations guideline;
- 16. Inclusion of a plan or compliance schedule for the management of septage or sludge in accordance with the Statewide Sludge Management Plan;
- 17. Existence of cause for revocation under N.J.A.C. 7:14A-16.6 where the Department determines that modification or revocation and reissuance is instead appropriate;
- 18. When the proposed automatic transfer of a permit includes one or more of the causes for a major modification under this section;
- 19. For changes in permit issuance and renewal schedules to better manage the Department's workload and optimize its resource and to facilitate issuing permits on a watershed basis;

- 20. For substitution of ambient monitoring for compliance monitoring in order to gather data for issuing permits on a watershed basis; or
- 21. For a small MS4, to include an effluent limitation requiring implementation of one or more control measures (or component(s) thereof) when:
 - i. The permit recognizes under N.J.A.C. 7:14A-25.7(b) that another governmental entity or the Department was responsible for implementing the measure(s), or component(s) thereof; and
 - ii. The other governmental entity or the Department does not implement the measure(s), or component(s) thereof.

7:14A-16.5 Minor modification of a permit

- (a) The Department shall, with the consent of the permittee and without following the procedures set forth in N.J.A.C. 7:14A-15, modify a permit to make any of the following changes:
 - 1. Correct typographical errors and make language changes that have no legal or substantial effect or correct technical or administrative errors which do not result in changes to the permit effluent limitations;
 - 2. Require more frequent monitoring or reporting by the permittee;
 - 3. Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date;
 - 4. Reflect a change in the owner or operator of a facility where the Department determines that no permit change(s) necessary to accomplish the change in the owner or operator constitutes a major modification under N.J.A.C. 7:14A-16.4, provided that a written agreement containing a specific date for transfer of permit responsibility between the current and new permittees has been submitted to the Department;
 - 5. Change the construction schedule for a discharger which is a new source. Such change shall not affect a discharger's obligation to have all pollution control equipment installed and in operation prior to discharge;
 - 6. Delete a point source when the discharge from such point source is terminated and does not result in a change to the characteristics of the effluent from other point sources except in accordance with permit limits;
 - 7. Incorporate the requirements of an industrial pretreatment program in accordance with the procedures in 40 CFR 403.11 as enforceable

conditions of the permit; or

8. Substitute the parameter CBOD₅ for BOD₅ and revise the effluent limitations consistent with the secondary treatment provisions specified at N.J.A.C. 7:14A-12.2(c).

7:14A-16.6 Causes for suspension or revocation of a permit or denial of a permit renewal

- (a) The following are causes for suspending or revoking a permit during its term, or for denying a permit renewal application:
 - 1. Noncompliance by the permittee with any condition of the permit;
 - 2. The permittee's failure in the application or during the permit issuance or treatment works approval process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time;
 - 3. A determination by the Department that the permitted activity endangers human health or the environment which can be corrected only by suspension or revocation;
 - 4. A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or residual use or disposal practice regulated under the permit;
 - 5. For an individual SIU permit with an actual or potential discharge to a nondelegated local agency, information that shows that a permittee has ceased to meet all criteria under which an individual SIU permit is required pursuant to N.J.A.C. 7:14A-2;
 - 6. The nonconformance of the discharge with any applicable facility, basin or areawide plans;
 - 7. Inconsistency of the permit with any duly promulgated effluent limitation, permit, regulation, statute, or other applicable State or Federal law; or
 - 8. Failure to pay applicable permit fees.

SUBCHAPTER 17. PROCEDURES FOR DECISION MAKING - ADJUDICATORY HEARINGS AND STAYS OF PERMIT CONDITIONS

7:14A-17.1 Purpose and scope

- (a) This subchapter sets forth the procedures for requesting an adjudicatory hearing and a stay of permit conditions and for the Department's evaluation and processing of such requests. The procedural stages for requesting an adjudicatory hearing and stay of permit conditions are outlined in Appendix A which is to be used for guidance purposes only and is of no legal effect.
- (b) The Department's decision regarding any adjudicatory hearing request and/or request for a stay shall be considered final agency action.

7:14A-17.2 Request for an adjudicatory hearing

- (a) A permittee or a person who seeks and qualifies to be considered a party to the action pursuant to N.J.A.C. 7:14A-17.3 may submit to the Department a written request, by certified mail, or by other means which provides verification of the date of delivery to the Department_for an adjudicatory hearing to contest the Department's final decision to:
 - 1. Issue a new permit, permit modification, permit revocation and reissuance, permit renewal, permit suspension, or permit revocation;
 - 2. Deny an application for a new permit or a permit renewal; or
 - 3. Deny a variance pursuant to N.J.A.C. 7:14A-11.8.
- (b) In order to request an adjudicatory hearing, a permittee shall submit the request in accordance with the requirements in (e) below within 30 days following receipt of the Department's notification of a final permit decision under N.J.A.C. 7:14A-15.15(a). In addition, the permittee shall provide a copy of its request for an adjudicatory hearing to any other person named on the permit.
- (c) In order to be considered a party to the action for purposes of requesting an adjudicatory hearing under this section, a person shall submit a request in accordance with the requirements in (f) below within 30 days following receipt of the Department's notification of final permit decision under N.J.A.C. 7:14A-15.15(a). In addition, such person shall forward a copy of the request to the permittee.
- (d) The request for an adjudicatory hearing shall be submitted to the Department at the address listed below, and a copy of the request shall be submitted to the permit issuing office:

Office of Legal Affairs

Attention: Adjudicatory Hearing Requests Department of Environmental Protection PO Box 402 Trenton, New Jersey 08625 - 0402

- (e) A permittee shall request an adjudicatory hearing by completing a Department adjudicatory hearing request tracking form which shall contain the following information:
 - 1. For the Office of Legal Affairs only, a copy of the permit clearly indicating the permit number and issuance date;
 - 2. For the permitting office only, the facility name and permit number;
 - 3. The date that the notification of the final permit decision was received by the permittee;
 - 4. A list of the specific contested permit condition(s) and the legal or factual question(s) at issue for each condition, including the basis of any objection;
 - 5. A statement as to whether the permittee raised the legal and/or factual issues during the public comment period in accordance with N.J.A.C. 7:14A-15.13;
 - 6. The relevance of the legal and/or factual issues to the permit decision;
 - 7. Suggested revised or alternative permit conditions and how they meet the requirements of the State or Federal Act;
 - 8. A request, if necessary for a barrier-free hearing location for disabled persons;
 - 9. An estimate of the amount of time required for the hearing;
 - 10. The name, mailing address and telephone number of the person making the request(s);
 - 11. The name(s) and address(es) of the person(s) whom the requester represents; and
 - 12. Information supporting the request or other written documents relied upon to support the request, unless this information is already in the administrative record (in which case, such information shall be specifically referenced in the request).

- (f) A person seeking consideration as a party to the action shall include the following information in such person's request for an adjudicatory hearing:
 - 1. The facility name and permit number;
 - 2. A statement setting forth:
 - i. Each legal or factual question alleged to be at issue;
 - ii. Whether the legal or factual issue was raised by that person during the public comment period in accordance with the provisions of N.J.A.C. 7:14A-15.13;
 - iii. The relevance of the legal or factual issue to the permit decision, together with a designation of the specific factual areas to be adjudicated; and
 - iv. An estimate of the amount of time required for the hearing;
 - 3. The date that notification of the final permit decision was received by the person making the hearing request;
 - 4. The name, mailing address, and telephone number of the person making the request;
 - 5. A clear and concise factual statement of the nature and scope of the interest of the requester which meets the criteria set forth at N.J.A.C. 7:14A-17.3(c)4;
 - 6. The names and addresses of all persons whom the person making the hearing request represents;
 - 7. A request, if necessary, for a barrier-free hearing location for disabled persons;
 - 8. A statement by the person making the hearing request that, upon motion by any party granted by the administrative law judge, or upon order of the administrative law judge's initiative, such person shall make available to appear and testify at the administrative hearing, if granted, the following persons:
 - i. The person making the hearing request;
 - ii. All persons represented by the person making the hearing request; and
 - iii. All officers, directors, employees, consultants, and agents of the person making the hearing request;

- 9. Specific references to the contested permit conditions, as well as suggested revised or alternative permit conditions, including permit denials, which, in the judgment of the person making the hearing request, would be required to implement the purposes of the State Act;
- 10. Identification of the basis for any objection to the application of control or treatment technologies, if identified in the basis or fact sheets, and the alternative technologies or combination of technologies which, in the judgment of the person making the hearing request are necessary to satisfy the requirements of the State Act; and
- 11. A completed Department adjudicatory hearing request tracking form.
- (g) The Department, in its discretion, may extend the time allowed for submission of an adjudicatory request under this section for good cause.

7:14A-17.3 Consideration as a party to the action

- (a) The Department shall determine, or shall refer the determination to an administrative law judge, whether a person, other than an applicant or a permittee, is a party to the action.
- (b) The Department shall determine whether a person is considered to be a party to the action within 30 days of receipt of the request or to refer the request to the administrative law judge. If the request is referred to the administrative law judge, the administrative law judge has an additional 30 days to decide on the request.
- (c) A person shall be considered to be a party to the action only if:
 - 1. The person's objection(s) to the Department's decision as specified in N.J.A.C. 7:14A-17.2(a) were raised by that person in the public hearing and/or in a written submission within the public comment period established pursuant to N.J.A.C. 7:14A-15;
 - 2. The person demonstrates the existence of a significant issue of law or fact;
 - 3. The person shows that the significant issue of law or fact is likely to affect the permit decision;
 - 4. The person can show an interest, including an environmental, aesthetic, or recreational interest, which is or may be affected by the permit decision and that the interest can be fairly traced to the challenged action and is likely to be redressed by a decision favorable to that person. An organization may contest a permit decision on behalf of one or more of its members if the organization's member or members could otherwise be a party to the action in their own right, and the interests the organization

seeks to protect are germane to the organization's purpose; and

- 5. The person submits the information required under N.J.A.C. 7:14A-17.2(f).
- (d) Whenever a person's request to be considered to be a party to the action is granted, the Department or the administrative law judge, as appropriate, shall identify the permit conditions which have been contested by such person for which an administrative hearing will be granted. Permit conditions which are not so contested shall not be affected by, or considered at, the adjudicatory hearing.
- (e) A permittee or applicant shall be allowed to participate in any proceeding where a person, other than the permittee or applicant, is seeking to become a party to the action. All requests by persons seeking to be considered a party to the action for a particular permit shall be combined in a single administrative hearing. When a person's request to be considered a party to the action is granted and a permittee's request for an administrative hearing is granted, the actions may be combined into a single administrative hearing by the Department after consideration of the nature and scope of the issue(s).

7:14A-17.4 Granting or denying an adjudicatory hearing request

- (a) The Department, in its discretion, shall decide the extent to which, if at all, the request for an adjudicatory hearing shall be granted. The Department may grant or deny a request for a hearing in whole or in part.
- (b) The Department shall deny a request for an adjudicatory hearing if:
 - 1. The request does not conform with the information requirements for a permittee or a person as set forth, respectively, in N.J.A.C. 7:14A-17.2(e) and (f);
 - 2. The request does not include genuine issues of material fact or of law which are relevant to the Department's decision as specified in N.J.A.C. 7:14A-17.2(a);
 - 3. The request was not submitted within the time frames specified in N.J.A.C. 7:14A-17.2(b) or (c), as appropriate;
 - 4. The contested legal and/or factual issues were not raised during the public comment period in accordance with N.J.A.C. 7:14A-15.13;
 - 5. The request challenges duly promulgated regulations and not the Department's application of the regulations; or
 - 6. The permittee or applicant is seeking an adjudicatory hearing to contest permit effluent limitations based upon N.J.A.C. 7:14A-12 Appendix C

which were imposed in the permit due to the permittee's or applicant's specific request to impose those limitations.

- (c) The Department, if it grants a request for an adjudicatory hearing in part, shall specifically identify those contested permit conditions for which an adjudicatory hearing has been granted. The issues presented in the adjudicatory hearing shall be limited to those permit conditions contested in a request for an adjudicatory hearing or those specifically identified by the Department in accordance with this section.
- (d) If a request for an adjudicatory hearing is granted, the contested permit conditions shall not be affected unless a stay has been granted pursuant to N.J.A.C. 7:14A-17.6. A request for a hearing and a request for a stay may be combined into one request document.
- (e) The Department, if it denies a hearing request in whole or in part, shall briefly state the reasons for such denial. Such denial shall be considered a final agency action.

7:14A-17.5 Notice for and conduct of an adjudicatory hearing

- (a) The Department shall provide public notice that an adjudicatory hearing has been granted by mailing a copy of the notice to:
 - 1. The applicant(s) or permittee(s);
 - 2. All commenters on the draft permit;
 - 3. All persons who testified at the public hearing, if held; and
 - 4. All persons who requested an adjudicatory hearing or who requested to be considered a party to the action.
- (b) All adjudicatory hearings held pursuant to this subchapter shall be governed by the New Jersey Uniform Administrative Procedure Rules, N.J.A.C. 1:1.

7:14A-17.6 Stays of contested permit conditions

- (a) The Department's grant of a request for an adjudicatory hearing shall not automatically stay any contested permit condition(s). A permittee shall submit a written request to the Department, by certified mail, or by other means which provides verification of the date of delivery to the Department seeking a stay of any of the following:
 - 1. Any permit condition where the permittee has requested an adjudicatory hearing, in accordance with N.J.A.C. 7:14A-17.2(a), to contest the specific permit condition;

- Any permit condition where the permittee has requested a major modification or revocation and reissuance, in accordance with N.J.A.C. 7:14A-16.4, to alter the specific permit condition; or
- 3. The application to the permittee of any condition of a general permit where the permittee has requested to be excluded from that general permit, in accordance with N.J.A.C. 7:14A-6.13(g), to obtain a permit condition different from the specific permit condition.
- (b) A stay shall not be requested or granted for the initial permit issued to a new source, new discharger, or a recommencing discharger. Where such an initial permit is being adjudicated, the permittee shall either discharge in accordance with the initial permit or not discharge until final agency action is taken with respect to the contested conditions of the permit.
- (c) In its request for a stay under (a)1 above, a permittee shall, for each permit condition at issue, submit a written evaluation with appropriate documentation which describes:
 - 1. The permittee's ability to comply with the permit condition(s) using existing treatment facilities. For effluent limitations, the permittee shall summarize the past 24 months of discharge data and indicate the level of pollutant control actually achieved as defined at N.J.A.C. 7:14A-1.2. If no past effluent data are available, the permittee shall procure and submit the results of at least one sample;
 - 2. The permittee's ability to comply with the permit condition(s) by implementing low cost short-term modifications to the existing treatment facility if it is demonstrated in (c)1 above, that the permit conditions cannot be achieved using existing facilities. Examples of short-term modifications include, but are not limited to, treatment process modifications, chemical addition, pollution abatement/ prevention and change of products generated. The evaluation shall also include the cost for the implementation of such short-term modification(s);
 - The level of pollutant control actually achieved as defined at N.J.A.C.
 7:14A-1.2 using short-term modifications if the evaluations in (c)1 and 2 above demonstrate that the permittee is unable to achieve permit compliance. For effluent limitations, the permittee shall indicate the maximum treatment levels consistently achievable;
 - 4. The cost to comply with permit conditions if the evaluations in (c)1 and 2 above demonstrate that the permittee is unable to achieve permit compliance using existing facilities and/or short-term modifications. This evaluation may also include a demonstration of any negative economic impacts that the cost to achieve permit compliance will have on the permittee (for example, the need to close, relocate, or reduce production)

and to the community (for example, the loss of jobs or loss of tax base); and

- 5. Environmental impacts, if any, that granting a stay will have on the receiving waterbody.
- (d) If the Department determines that the information submitted pursuant to (c) above is deficient, it shall inform the permittee of its determination and establish a time limit for resubmission. If the permittee does not submit the information requested or in the time period specified, the Department shall:
 - 1. Deny the stay request; or
 - 2. Make a final decision based upon whatever information has been submitted.
- (e) The Department may grant a stay request, in whole or in part, based upon consideration of the following:
 - 1. For a stay of permit conditions pursuant to (a)1 above, where the permittee has been granted an adjudicatory hearing to contest a specific permit condition(s), the Department, in its evaluation, shall consider:
 - i. The pollution source and its impact upon the affected ecosystem(s);
 - ii. The level of pollutant control actually achieved as defined at N.J.A.C.7:14A-1.2 by the existing treatment facility;
 - iii. The degree and extent that short-term treatment alternatives including their cost may be applied to the existing treatment facility and what treatment level improvements may result from these alternatives; and
 - iv. The cost to achieve total compliance with permit conditions, including the degree and extent of any negative economic impacts on the permittee and the community in relation to the environmental impacts that will result from not achieving compliance with permit conditions.
 - 2. For a stay of permit conditions pursuant to (a)2 above, where the permittee has requested a major modification or a revocation and reissuance of the existing permit to alter a specific permit condition, the Department shall grant a stay, without the need to request an adjudicatory hearing, if it makes a preliminary determination that a major modification or revocation and reissuance of the existing permit is appropriate but the Department cannot process the modification or revocation and reissuance request in a timely manner; and
 - 3. For a stay of the application of conditions of a general permit pursuant to

(a)3 above, where the permittee has requested to be excluded from that general permit to obtain a permit condition different than the specific permit condition, the Department shall grant a stay, without the need to request an adjudicatory hearing, if it makes a preliminary determination that exclusion from that general permit is appropriate but the Department cannot process the request to be excluded from the general permit in a timely manner.

- (f) When a stay is granted, a permittee shall comply with the conditions of the existing permit which are not stayed and all other interim conditions as established in (g) below. The Department reserves the right to withdraw a stay or alter the terms and conditions of a stay at any time for lack of good faith compliance efforts by the permittee or if the Department subsequently determines that the environment is being impacted to such a degree that an alteration(s) to the stayed conditions is necessary.
- (g) Where the Department grants a stay request, the stay decision may include interim conditions, as follows:
 - 1. Interim permit conditions or interim effluent limitations developed in accordance with the considerations in (e) above, or in accordance with N.J.A.C. 7:14A-13.11;
 - 2. Interim conditions by which the stayed permit conditions are phased into effect; and
 - 3. For a stay pending an adjudicatory hearing, the interim conditions shall not be less stringent than the conditions in the existing permit unless it is demonstrated that the existing permit conditions were developed in error and a modification is justified.
- (h) In granting or denying a stay, the Department shall:
 - 1. Detail in writing the specific permit conditions that are stayed, if any; and
 - 2. Include the reasons for granting or denying the stay.
- (i) The Department may, upon its own initiative, issue a stay of a permit condition where it determines based on the considerations in (e) above that a stay is appropriate.
- (j) A person who has requested an adjudicatory hearing in accordance with N.J.A.C. 7:14A-17.2 may also request a stay provided notice of the request is also provided to the permittee. The Department may grant a stay requested by a person if it is demonstrated that issuance of the permit was based upon a substantial error(s) in interpretation of the enabling legislation or interpretation of the applicable rules. The Department shall deny a request for a stay if the

person fails to meet the criteria for consideration as a party to the action under N.J.A.C. 7:14A-17.3.

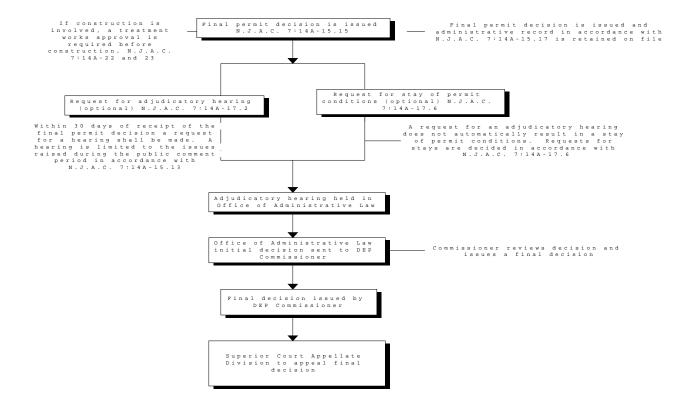
APPENDIX A

GUIDE TO THE NJPDES PERMIT APPEAL AND STAY PROCESS

Appendix A is designed to assist a person in following the permit appeal and stay procedures after a permit is issued. An applicant should consult the full text of the regulations when contemplating an appeal and/or stay.

The flow chart outlines a sequence of events, directed by arrows, of the stay procedures for when a final permit is issued. The key items in this section are:

- 1. A hearing shall be requested within 30 days of receipt of the permit; and
- 2. A request for a stay may be combined with a hearing request but the request for a stay shall be expressly stated.



Perm it Appeal and Stay Process

SUBCHAPTER 18. PUBLIC ACCESS TO INFORMATION AND REQUIREMENTS FOR DETERMINATION OF CONFIDENTIALITY

7:14A-18.1 Public access to information and scope of authority

- (a) Except as otherwise provided in N.J.S.A. 47:1A-1 et seq., any records, reports or information obtained by the Department, or required to be developed and retained by the permittee as a permit condition pursuant to this chapter, the State Act or N.J.S.A. 58:11-53, including all NJPDES permit applications, documented information concerning actual and proposed discharges, comments received from the public, draft and final NJPDES permits, and related correspondence shall be made available to the public for inspection and duplication at the offices of the Department.
- (b) For facilities with NJPDES permits for discharges to ground or surface water but which are otherwise within the jurisdiction of the Resource Conservation and Recovery Act, 42 U.S.C. §6901 and/or the Hazardous and Solid Waste Amendments of 1984 to that Act, public access to information shall be regulated pursuant to N.J.A.C. 7:26G.

7:14A-18.2 Confidentiality

- (a) The Department shall protect from disclosure any information, other than effluent data, upon a satisfactory showing by any person that the information, if made public, would divulge methods or processes entitled to protection as trade secrets of such persons. The Department's decision on the claim of confidentiality shall be made in accordance with the substantive criteria listed in N.J.A.C. 7:14A-18.6. The access to any information deemed to be confidential by the Department shall be limited to authorized officers or employees of the Department and the Federal government. For purposes of this subchapter the term "information" shall include records, reports, and any other documents, writings, photographs, sound or magnetic recordings, drawings, or other similar formats by which information has been retrieved or copied.
- (b) Included among those items for which claims of confidentiality will be denied are the following:
 - 1. The name and address of any permit applicant, permittee or co-permittee;
 - 2. Permits;
 - 3. Effluent data as defined in N.J.A.C. 7:14A-1.2;
 - 4. For permits under the UIC program, information which concerns the existence, absence, or level of contaminants in drinking water; and

5. Information required by NJPDES permit application forms provided by the Department under N.J.A.C. 7:14A-4. This includes information on the forms themselves and any attachments used to supply information required by the forms.

7:14A-18.3 Procedures for asserting confidentiality

- (a) Any person may assert a confidentiality claim regarding information, in whole or in part, by following the procedures set forth in (b) through (f) below.
- (b) Any person submitting information to the Department and asserting a confidentiality claim covering any of the information shall submit two sets of documents to the Department. The first set shall contain all information requested by the Department, including any information which the person alleges to be entitled to confidential treatment. The second set, which will go into the public file, shall be identical to the first set except that it shall not contain information which the person alleges to be entitled to confidential treatment. In order to provide the public notice that information has been omitted from the second set under a claim of confidentiality, the second set shall indicate where such deletions have been made.
- (c) The top of each page of the first set containing the information which the person alleges to be entitled to confidential treatment shall display the heading **"CONFIDENTIAL"** in bold type or stamp.
- (d) All parts of the text of the first set which the person alleges to be entitled to confidential treatment shall be underscored or highlighted in a clear manner. Translucent ink markers are acceptable for this purpose.
- (e) The outside of the envelope containing the first set containing the information which the person alleges to be entitled to confidential treatment shall display the word "**CONFIDENTIAL**" in bold type on both sides.
- (f) The person submitting the sets of information shall send them to the appropriate permitting office by certified mail (return receipt requested), or by other means which provides verification of the date of delivery to the Department.

7:14A-18.4 Fees for a claim of confidentiality

Any person submitting documents to the Department under a claim of confidentiality shall submit a check in the amount of \$250.00 for the first 50 confidential pages and \$1.00 for each page thereafter, to cover the additional costs of processing and protecting the confidential information.

7:14A-18.5 Procedure for confidentiality determinations

(a) Information for which a confidentiality claim has been asserted shall be treated

by the Department as entitled to confidential treatment unless and until the Department determines that the information is not entitled to confidential treatment as provided in this section.

- (b) The Department shall determine whether the information is entitled to confidential treatment whenever the Department:
 - 1. Receives a request under the Open Public Records Act, N.J.S.A. 47:1A-1 et seq., to inspect or copy such information; or
 - 2. Desires to determine whether information in its possession is entitled to confidential treatment, even though no request to inspect or copy such information has been received.
- (c) The initial determination of entitlement to confidential treatment is as follows:
 - 1. If, in connection with any person's claim, the Department makes a preliminary determination that the information may be entitled to confidential treatment, the Department shall:
 - Furnish the notice of opportunity to submit comments as specified in (d) below to the affected person who is known to have asserted an applicable claim and who has not previously been furnished such notice with regard to the information in question; and
 - ii. Furnish, to any person whose request for release of the information is pending under N.J.S.A. 47:1A-1 et seq., a notification that the information may be entitled to confidential treatment under this subchapter, that further inquiry by the Department pursuant to this subsection is required before a final determination on the request can be issued, that the person's request is therefore initially denied, and that after further inquiry a final determination shall be issued by the Department.
 - 2. If, in connection with all applicable claims, the Department determines that the information clearly is not entitled to confidential treatment, the Department shall take the actions required by (g) below.
- (d) The Department shall provide notice to the affected person and an opportunity to comment as follows:
 - 1. Whenever required by (c)1i above, the Department shall promptly furnish the affected person a written notice stating that the Department is in the process of determining under this subchapter whether the information is entitled to confidential treatment, and that the affected person shall substantiate the claim by submitting comments. The notice shall be furnished by certified mail (return receipt requested), or by other means

which provides verification of the date of delivery to the Department. The notice shall state the address of the office to which the affected person's comments shall be addressed, the time allowed for comments, and the method for requesting a time extension under (d)1ii below. The notice shall further state that the Department will construe a person's failure to furnish timely comments as a waiver of the person's claim.

- i. If action under this section is occasioned by a request for the information under N.J.S.A. 47:1A-1 et seq., the period for comment shall be 10 days after the date of the affected person's receipt of the written notice. In other cases, the period for comment shall be 20 days after the person's receipt of the written notice. In all cases, the notice shall reference the provisions of (d)1ii below.
- ii. The period of submission of comments may be reasonably extended if, before comments are due, a request for an extension of the comment period is made by the affected person and approved by the Department. Except in extraordinary circumstances, as determined by the Department, the Department shall not approve such an extension without the consent of any person whose request for release of the information under N.J.S.A. 47:1A-1 is pending.
- The written notice required by (d)1 above shall inform the affected person of the requirement to submit comments on the following points, subject to (d)3 below:
 - i. Measures taken by the person to guard against undesired disclosure of the information to others;
 - ii. The extent to which the information has been disclosed to others, and the precautions taken in connection therewith;
 - iii. Pertinent confidentiality determinations, if any, by the Department, by USEPA or by other agencies, and a copy of any such determination, if available, or reference to it;
 - iv. Whether the person asserts that disclosure of the trade secret information would be likely to result in substantial harmful effects on the person's competitive position, and if so, what those harmful effects would be, why they should be viewed as substantial, and an explanation of the causal relationship between disclosure and such harmful effects; and
 - v. The period of time for which confidential treatment is desired by the person.
- 3. New information, not submitted in the initial claim for confidentiality,

provided it is marked when received in accordance with N.J.A.C. 7:14A-18.3 shall be regarded by the Department as entitled to confidential treatment if in accordance with the criteria listed in N.J.A.C. 7:14A-18.6, the Department determines that the information is entitled to confidential treatment. This new information shall not be disclosed by the Department without the person's consent, unless its disclosure is duly ordered by a court, notwithstanding other provisions of this subchapter to the contrary.

- (e) An affected person shall be determined to have waived his or her claim of confidentiality as follows:
 - 1. If the Department finds that a person has failed to furnish comments as required under this section, it shall determine that the person has waived his or her claim, and that the information is therefore not entitled to confidential treatment under this subchapter and is available to the public.
 - 2. In all other cases, the Department shall determine with respect to each claim whether or not the information is entitled to confidential treatment for the benefit of the affected person.
- (f) If, in accordance with the criteria listed in N.J.A.C. 7:14A-18.6, the Department determines that the information is entitled to confidential treatment, it shall maintain the information in confidence, subject to court order, any applicable court rules, N.J.A.C. 7:14A-18.9, 18.10, 18.12 and 18.13 or other provisions of this subchapter which authorize disclosure in specified circumstances, and the Department shall so inform the affected person. If any person's request for the release of the information is then pending under N.J.S.A. 47:1A-1 et seq., the Department shall issue a determination denying that request, which shall state the basis for the determination and that it constitutes final agency action.
- (g) If, in accordance with the criteria listed in N.J.A.C. 7:14A-18.6, the Department determines that the information is not entitled to confidential treatment, the Department shall so notify the affected person. Such notice of denial, or partial denial, of a confidentiality claim shall be in writing, and shall be furnished by certified mail, return receipt requested or by other means which provides verification of the date of delivery to the Department. The notice shall state the basis for the determination, that it constitutes final agency action concerning the confidential claim, and that the Department shall make the information available to the public 10 days after the date of the affected person's receipt of the notice.
- (h) If the Department finds that disclosure of information covered by a confidentiality claim would serve to alleviate a situation posing an imminent and substantial danger to public health or safety, it may prescribe such shorter comment period as it finds necessary under the circumstances and make such shorter comment period known to affected persons pursuant to (d)1 above or post-determination waiting period pursuant to (g) above, or both; or disclose

confidential information to any person whose role in alleviating the danger to public health or safety necessitates that person's knowing the information. Any such disclosure shall be limited to the minimum information necessary to enable the person to whom it is disclosed to carry out his or her role in alleviating the dangerous situation.

1. Any disclosure made pursuant to this section shall not be deemed a waiver of a confidentiality claim, nor shall it of itself be grounds for any determination that information is no longer entitled to confidential treatment.

7:14A-18.6 Substantive criteria for confidentiality determinations

- (a) A determination made under N.J.A.C. 7:14A-18.5 shall hold that trade secret information is entitled to confidential treatment if:
 - 1. The person has asserted a confidentiality claim;
 - 2. The person has satisfactorily shown that he or she has taken reasonable measures to protect the confidentiality of the information, and that he or she intends to continue to take such measures;
 - 3. The information is not, and has not been, reasonably obtainable, without the person's consent, by other persons (other than governmental bodies) using legitimate means (other than discovery based on a showing of special need in a judicial or quasi-judicial proceeding);
 - 4. No statute requires disclosure of the information; and
 - 5. The person has satisfactorily shown that disclosure of the information would be likely to cause substantial harm to the person's competitive position.

7:14A-18.7 Class determinations

- (a) The Department may make a determination that a certain class of information is or is not entitled to confidential treatment under this section if it finds that:
 - 1. The Department possesses, or is obtaining, related items of information; and
 - 2. One or more characteristics common to all such items of information will necessarily result in identical treatment for each such item, and that it is therefore proper to treat all such items as a class.
- (b) A class determination shall clearly identify the class of information to which it pertains.

- (c) A class determination shall state that all of the information in the class:
 - 1. Fails to satisfy one or more of the applicable criteria in N.J.A.C. 7:14A-18.6, and is therefore ineligible for confidential treatment; or
 - 2. Satisfies the applicable criteria in N.J.A.C. 7:14A-18.6, and is therefore eligible for confidential treatment.

7:14A-18.8 Access to and safeguarding of confidential information

- (a) Unless specifically provided for by Federal law, State law, court order, or applicable court rule, no person shall have access to information which has been determined to be entitled to confidential treatment, other than:
 - 1. The designated Department personnel;
 - 2. Federal or other State agencies, subject to the provisions of N.J.A.C. 7:14A-18.9 or 18.12; or
 - 3. Authorized representatives of the Department, subject to the provisions of N.J.A.C. 7:14A-18.10.
- (b) Each Department officer or employee who has custody or possession of confidential information shall take appropriate measures to properly safeguard such information and to protect against its improper disclosure.
- (c) No Department officer or employee shall disclose, or use for his or her private gain or advantage, any confidential information which came into his or her possession, or to which he or she gained access, by virtue of his or her official position of employment, except as authorized by N.J.A.C. 7:14A-18.10.
- (d) If the Department finds that any person has violated this subchapter, it shall:
 - 1. Commence a civil action in Superior Court for a restraining order and an injunction barring that person from further disclosing confidential information; and/or
 - 2. Pursue any other remedy available to it by law.
- (e) In addition to any other penalty that may be sought by the Department, violation of this subchapter by a Department employee, thereby exceeding the scope of his or her authority, shall constitute grounds for dismissal, suspension, fine or other adverse personnel action.

7:14A-18.9 Disclosure of confidential information to State, Interstate and Federal agencies with the exception of the USEPA and the U.S. Department of Justice

- (a) The Department shall disclose information which has been determined to be entitled to confidential treatment to State, interstate, and Federal agencies, other than the USEPA and U.S. Department of Justice, as provided at N.J.A.C. 7:14A-18.12, if:
 - 1. The Department receives a written request for disclosure of the information from a duly authorized officer or employee of the other agency;
 - 2. The request sets forth the official purpose for which the information is needed;
 - 3. The Department notifies the other agency of its determination that the information is entitled to confidential treatment;
 - 4. The other agency has first furnished to the Department a written opinion from the agency's chief legal officer or counsel stating that under applicable law the agency has the authority to compel the person who submitted the information to the Department to disclose such information to the other agency; and
 - 5. The other agency agrees not to disclose the information further, unless the other agency has statutory authority both to compel production of the information and to make the proposed disclosure.
- (b) Except as provided in N.J.A.C. 7:14A-18.5(h) (emergency disclosure), and N.J.A.C. 7:14A-18.12, the Department shall notify the affected person in writing of its intention to disclose information which has been determined to be entitled to confidential treatment to any other governmental agency at least 10 days in advance of the disclosure.

7:14A-18.10 Disclosure of confidential information to authorized agents

- (a) The Department shall disclose information which has been determined to be entitled to confidential treatment to an authorized agent, under contract with the Department, if:
 - 1. The Department determines that such disclosure is necessary in order for the agent to carry out the work required by the contract;
 - 2. The Department notifies the affected person; and
 - 3. The agent contracts with the affected person to protect the confidentiality of the information.

- (b) No information shall be disclosed under (a) above unless the contract in question provides that the agent and the agent's employees shall use the information only for the purpose of carrying out the work required by the contract, shall refrain from disclosing the information to anyone other than the Department, and shall return to the Department all copies of the information, and any abstracts or extracts therefrom, upon request by the Department or whenever the information is no longer required by the agent for the performance of the work required by the contract.
- (c) Violation of the contractual provisions of (b) above by the agent or the agent's employee in question shall constitute grounds for debarment or suspension as provided under the rules regarding debarment, suspension and disqualification from department contracting, at N.J.A.C. 7:1D-2.

7:14A-18.11 Designation by person of an addressee for notices and inquiries

- (a) Any affected person who wishes to designate a specific person or office as the proper addressee of communications from the Department under this subchapter may do so by furnishing in writing to the Department the following information: the name and address of the person making the designation; the name, address, and telephone number of the designated person or office; and a request that Department inquiries and communications (oral and written) under this subchapter be furnished to the person designated pursuant to this section. Only one person or office may serve at any time as an affected person's designee under this subchapter.
- (b) If an affected person has named a particular designee under this section, the following Department inquiries and notices to the affected person shall be addressed to the designee:
 - 1. Notices to submit comments, under N.J.A.C. 7:14A-18.5(d);
 - 2. Notices of denial of confidential treatment and proposed disclosure of information, under N.J.A.C. 7:14A-18.5(g);
 - 3. Notices concerning shortened comment and/or waiting periods under N.J.A.C. 7:14A-18.5(h); and
 - 4. Notices to affected persons under N.J.A.C. 7:14A-18.9 and 18.10.

7:14A-18.12 Access to information for the USEPA and U.S. Department of Justice

Notwithstanding any other provision of this subchapter, any information obtained or used in the administration of the NJPDES and RCRA programs shall be available to the USEPA and the U.S. Department of Justice upon request without restriction. If the information has been submitted to the Department under a claim of confidentiality, the Department shall submit that

claim to USEPA and the U.S. Department of Justice when providing information as required in this section.

7:14A-18.13 Use of confidential information in rulemaking, permitting, and enforcement proceedings

- (a) Notwithstanding any other provisions of this subchapter, the Department may, subject to the protection from making the information available to the public as provided in N.J.A.C. 1:1, use information determined to be eligible for confidential treatment pursuant to N.J.A.C. 7:14A-18.5 and 18.6 in rulemaking, permitting and enforcement proceedings.
 - 1. Where the Department uses confidential information in any enforcement proceeding, the Department shall indicate that such information has been used.
 - 2. Where the Department uses confidential information in administrative proceedings, the procedures in (b) and (c) below shall apply.
- (b) Where the Department determines that there shall be an adjudicatory hearing, information determined to be eligible for confidential treatment pursuant to N.J.A.C. 7:14A-18.5 and 18.6 may be used in any enforcement and permitting proceeding as provided in N.J.A.C. 1:1.
- (c) Where the Department determines that there shall not be an adjudicatory hearing, information determined to be eligible for confidential treatment pursuant to N.J.A.C. 7:14A-18.5 and 18.6 may be used in any enforcement, permitting, or rulemaking proceeding as provided below:
 - 1. The affected person shall be informed that the Department is considering using the information in connection with the proceeding and shall afford the person a comment period 10 days after the date of the affected person's receipt of written notice from the Department;
 - 2. The Department, after consideration of any timely comments submitted by the affected person, determines that the information is relevant to the subject of the proceeding;
 - 3. The Department determines that the public interest shall be served by use of the information in the proceeding; and
 - 4. The Department shall give the affected person at least five days notice prior to using the information which may result in the information being made available to the public.

N.J.A.C. 7:14A-19.1 et seq.

SUBCHAPTER 19. PRETREATMENT PROGRAM REQUIREMENTS FOR LOCAL AGENCIES

Statutory authority: N.J.S.A. 13:1B-3 et seq., 13:1D-1 et seq., 131D-125 through 133, 13:1E-1 et seq., 26-2C-1 et seq., 58:10-23.11 et seq., 58:10A-1 et seq., 58:11-49 et seq., 58:11-64 et seq., 58:11A-1 et seq., and 58:12A-1 et seq.

Date last amended: August 6, 2007

For regulatory history and effective dates see the New Jersey Administrative Code

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SUBCHAPTER 19. PRETREATMENT PROGRAM REQUIREMENTS FOR LOCAL AGENCIES

SUBCHAPTER 19. PRETREATMENT PROGRAM REQUIREMENTS FOR LOCAL AGENCIES

7:14A-19.1 Purpose and scope

- (a) This subchapter establishes requirements to:
 - 1. Prevent the introduction of pollutants into a local agency's treatment works which may:
 - i. Interfere with the operation of the local agency's treatment works;
 - ii. Pass through or would otherwise be incompatible with the local agency's treatment works; or
 - iii. Interfere with the local agency's chosen method of sludge management;
 - 2. Set forth the minimum requirements for all local agencies to control the discharge of pollutants by indirect users of the agencies' treatment works; and
 - 3. Set forth the minimum requirements for the establishment and implementation of an approvable industrial pretreatment program (IPP) by local agencies. Such a program shall require the local agency to establish a regulatory program with adequate legal authority contained in IPP regulations which allows that agency to deny or permit contributions of pollutants to the treatment works, as well as enforce the applicable pretreatment program requirements.
- (b) The Department adopts and incorporates herein by reference the General Pretreatment Regulations for Existing and New Sources of Pollution, 40 CFR Part 403, and the National Pretreatment Standards in 40 CFR chapter I, subchapter N, as amended and supplemented.
- Nothing in this subchapter shall preclude or deny the right of a local agency to independently implement an IPP or adopt any pretreatment requirements or standards which are more stringent than the requirements in 40 CFR Part 403, 40 CFR chapter I, subchapter N, or the requirements in this subchapter.

7:14A-19.2 Industrial pretreatment program development by local agencies

(a) Any local agency, or combination of treatment works operated by the same local agency, which meets the following criteria shall establish an IPP unless the Department exercises its option to implement the IPP:

- 1. The treatment works total design flow is greater than five million gallons per day (MGD); and
- 2. The treatment works receives pollutants from indirect users which pass through or interfere with the operation of the treatment works or are otherwise subject to pretreatment standards.
- (b) The Department shall require a local agency, or combination of treatment works operated by the same local agency, with a design flow of five MGD or less to establish an IPP if the nature or volume of industrial influent, treatment process upsets, violations of effluent limitations, contamination of municipal sludge, or other circumstances warrant the establishment of an IPP in order to prevent interference with the treatment works or pass through.
- (c) Any local agency required to establish an IPP pursuant to (a) or (b) above shall develop and submit to the Department for approval an IPP in accordance with the requirements of 40 CFR Part 403 and the additional requirements of this subchapter. The local agency required to develop an IPP shall have a pretreatment program compliance schedule incorporated into the NJPDES permit at the time of issuance, re-issuance, or modification of the permit. The compliance schedule shall require the development and submission of an IPP which addresses the requirements of this subchapter no later than one year after receipt of written notification from the Department that such an IPP is required.

7:14A-19.3 Industrial pretreatment program requirements for all local agencies

- (a) As specified at N.J.A.C. 7:14A-16.3 and 16.4, the Department may reissue or modify a local agency's NJPDES permit to include IPP requirements as set forth in this subchapter.
- (b) All local agencies, including those not required by N.J.A.C. 7:14A-19.2(a) and (b) to establish an IPP, shall comply with the following IPP requirements:
 - 1. All local agencies shall submit a copy of the local sewer use ordinance or rules and regulations, including any amendments, to the Bureau of Pretreatment and Residuals in the Department at 401 East State Street, CN-029, Trenton, N.J. 08625;
 - 2. All local agencies shall identify and locate indirect users as specified below:
 - i. All delegated local agencies shall update their inventory of indirect users at a frequency and diligence adequate to ensure proper identification of indirect users subject to pretreatment standards, appropriate characterization of the nature of their discharges, and correct designation of indirect users as

categorical, significant/major, or other regulated. This update shall be completed at a minimum frequency of once per year, and shall be included in the 40 CFR 403 Annual Report required under N.J.A.C. 7:14A-19.6(f).

- ii. Non-delegated local agencies shall submit an annual report, which consists of a listing of all indirect users which meet the significant indirect user definition in N.J.A.C. 7:14A-1.2;
- 3. All local agencies shall develop local limits or demonstrate that such limits are not necessary in accordance with N.J.A.C. 7:14A-19.7;
- 4. Of the amount of any penalty assessed and collected pursuant to an action brought by a local agency in accordance with N.J.S.A. 58:10A-10, 10 percent shall be deposited in the Wastewater Treatment Operators' Training Account established in accordance with N.J.S.A. 58:10A-14.5 and used to finance the cost of training operators of municipal treatment works. The remainder shall be used by the local agency solely for enforcement purposes and for upgrading municipal treatment works; and
- 5. Except as otherwise provided in N.J.S.A. 47:1A-3, any records, reports, or other information obtained by a local agency pursuant to this paragraph or N.J.S.A. 58:11-53, including any correspondence relating thereto, shall be available to the public. However, upon a showing satisfactory to the local agency by any person that the making public of any record, report, or information, or a part thereof, other than effluent data, would divulge methods or processes entitled to protection as trade secrets, the local agency shall consider such record, report, or information, or part thereof, to be confidential and access thereto shall be limited to authorized officers or employees of the Department, local agency, and the Federal government.
- (c) All delegated local agencies (DLAs) shall comply with the following IPP requirements:
 - 1. All DLAs shall notify indirect users of the responsibilities required in the DLA's rules and regulations or sewer use ordinance as soon as possible but no later than 30 days from the determination that such indirect users are subject to regulation under the IPP. This notice shall not preclude the DLA from taking any enforcement action against an indirect user;
 - 2. All DLAs shall issue an IPP permit to indirect users, as required by the DLA's NJPDES permit;

- 3. All DLAs shall perform compliance monitoring and inspections of indirect users, as required by the DLA's NJPDES permit;
- 4. All DLAs shall review and respond to violations of an IPP permit or the sewer use ordinance/rules and regulations, within 60 days of receipt of the compliance information generated by indirect users or the DLA;
- 5. All DLAs shall take enforcement actions based upon indirect users' noncompliance in accordance with the approved Enforcement Response Plan (ERP). In the absence of an approved ERP, the enforcement action shall be taken in accordance with the IPP as approved;
- 6. All DLAs shall develop and maintain a data management system which includes an indirect user inventory, characterization of the nature of indirect user discharges, compliance status, permit status, and enforcement actions. The DLA shall retain for a minimum of five years records of its monitoring activities and results (whether or not such activities are required by the DLA's NJPDES permit) and shall make such records available to EPA and the Department upon request;
- 7. All DLAs shall sample their treatment works and sludges as specified below:
 - i. Perform, at least once per year, an analysis for those priority pollutants listed in N.J.A.C. 7:14A-4, Appendix A, Tables II and III, of the discharge from, and inflow to, the municipal treatment works; and
 - Perform, at least once per year, a priority pollutant scan on the sludge produced at the municipal treatment works. This analysis must be completed on those parameters listed in the Sludge Quality Assurance Regulations, N.J.A.C. 7:14C. The sludge samples shall be collected to coincide with the influent and effluent monitoring for priority pollutants required in (c)7i above;
- 8. All DLAs shall comply with the public participation and notification requirements in N.J.A.C. 7:14A-19.10;
- 9. All DLAs shall notify their significant indirect users (SIUs) in writing, in accordance with 40 CFR 403.8(f)(2)(iii), of the SIUs' obligation to comply with applicable requirements under Subtitles C and D of the Resource Conservation and Recovery Act (RCRA);
- 10. All DLAs shall secure and maintain sufficient resources and qualified personnel, in accordance with 40 CFR 403.8(f)(3), to carry out the program implementation procedures described in this subchapter;

- 11. All DLAs shall submit annual reports required by N.J.A.C. 7:14A-19.6(c), (f) and (h); and
- 12. Of the penalty amount collected through the issuance of a summons pursuant to N.J.S.A. 58:10A-10.4, 10 percent shall be paid to the municipality or municipalities in which the municipal court retains jurisdiction for use for court purposes, with the remainder to be retained by the DLA.
- (d) Each local agency shall identify, within its sewer use ordinance or rules and regulations, violations of the requirements of the ordinance or rules and regulations based on the State Act that are minor or non-minor in accordance with the criteria of the Grace Period Law, N.J.S.A. 13:1D-129(b). A time period for correction of minor violations and to achieve compliance shall be established in accordance with N.J.S.A. 13:1D-127.

7:14A-19.4 Enforcement response plan

- (a) A delegated local agency shall develop and implement an enforcement response plan in accordance with this section. The plan shall contain detailed procedures describing how a delegated local agency shall investigate and respond to instances of indirect user noncompliance. The plan shall, at a minimum:
 - 1. Describe how the delegated local agency shall investigate instances of noncompliance;
 - 2. Describe the types of escalating enforcement responses the delegated local agency shall take in response to all anticipated types of indirect user violations and the time frames within which responses shall take place;
 - 3. Identify (by title) the official(s) responsible for each type of response;
 - 4. Adequately reflect the delegated local agency's primary responsibility to enforce all applicable pretreatment requirements and standards as detailed in 40 CFR 403.8(f)(1) and (f)(2), and the delegated local agency's approved pretreatment program and amendments; and
 - 5. Contain noncompliance and nature of violation criteria and responses as set forth in the plan contained in Appendix A of this subchapter, incorporated hereby by reference, which denotes the minimum requirements.
- (b) A delegated local agency may develop an enforcement response plan in tabular format for easy reference, such as the enforcement response plan set forth in Appendix A.

- (c) The enforcement response plan shall be included within the rules and regulations or sewer use ordinance of a delegated local agency.
- (d) The enforcement response plan shall include or shall incorporate by reference all mandatory penalties, settlement restrictions, uniform penalty policies, grace period provisions, and other requirements applicable to the Department in accordance with N.J.A.C. 7:14-8.1(f), including, without limitation, the civil administrative penalty determination procedure specified in N.J.A.C. 7:14-8.16.
- (e) The development of the ERP in accordance with this section shall not preclude a DLA from initiating other available enforcement responses where violations are not specifically identified in the ERP.
- (f) All delegated local agencies shall submit to the Department an ERP in accordance with (a) above no later than March 20, 1999.
- (g) Notwithstanding the time frame provided by (f) above for submissions, this subchapter as amended effective January 19, 1999 shall apply to any violation occurring on or after January 19, 1999.

7:14A-19.5 Enforcement requirements in an industrial pretreatment program

- (a) All delegated local agencies shall, at a minimum, include in their sewer use ordinance or rules and regulations the following enforcement and penalty provisions:
 - 1. The ability to issue an order in accordance with N.J.S.A. 58:10A-10a(1);
 - 2. The ability to bring a civil action, including injunctive relief, in accordance with N.J.S.A. 58:10A-10a(2) and 58:11-55(b);
 - 3. The ability to petition the county prosecutor or Attorney General to bring a criminal action in accordance with N.J.S.A. 58:10A-6.i. and 58:10A-10a(5);
 - 4. The ability to issue a civil administrative penalty in accordance with N.J.S.A 58:10A-10.5;
 - 5. The ability to bring an action for a civil penalty in accordance with N.J.S.A. 58:10A-10a(4);
 - 6. The ability to issue a summons in accordance with N.J.S.A. 58:10A-10.4;
 - The ability to assess a penalty for each violation that causes a violator to be, or continue to be, a significant noncomplier as defined at N.J.A.C. 7:14-8.2;

- 8. The ability to assess a penalty for each serious violation as defined at N.J.A.C. 7:14-8.2;
- 9. The ability to assess a penalty in accordance with N.J.A.C. 7:14-8.16;
- 10. The ability to assess a penalty for submitting inaccurate or false information in accordance with N.J.A.C. 7:14-8.6; and
- 11. The ability to assess a penalty for failure to properly conduct monitoring or sampling activities or to submit discharge monitoring reports/self-monitoring reports, or other pretreatment monitoring reports in accordance with N.J.A.C. 7:14-8.9(c), (d) and (e).
- (b) All delegated local agencies shall include in their sewer use ordinance or rules and regulations procedural and substantive requirements regarding:
 - 1. Notice of a penalty assessment and notice of the opportunity to request an administrative hearing on the assessment of a civil administrative penalty in accordance with N.J.S.A. 58:10A-10.5 and N.J.A.C. 7:14-8.4;
 - 2. Opportunity to file exceptions, objections, and replies to the head of the delegated local agency in accordance with N.J.S.A. 58:10A-10.6;
 - 3. Issuance of a final decision or order in accordance with N.J.S.A. 58:10A-10.6 and 10.7;
 - 4. Appeal of a civil administrative penalty, the payment of interest, the collection of the civil administrative penalty and other procedures in accordance with N.J.S.A. 58:10A-10.8; and
 - 5. Civil administrative penalty settlement restrictions in accordance with N.J.A.C. 7:14-8.3(e).
- (c) All delegated local agencies shall, by March 20, 1999, submit to the Department a sewer use ordinance or rules and regulations which include those provisions specified in (a) and (b) above, as well as the provisions of the enforcement response plan required by N.J.A.C. 7:14A-19.4(a) through (e).
- (d) Notwithstanding the time frame provided by (c) above for submissions, this subchapter as amended effective January 19, 1999 shall apply to any violation occurring on or after January 19, 1999.

7:14A-19.6 Additional requirements for delegated local agencies

(a) Each permitted facility discharging into the municipal treatment works of a delegated local agency, other than a facility discharging only stormwater or

non-contact cooling water, shall be inspected by the delegated local agency at least once a year. The Department may also inspect a facility required to be inspected by a delegated local agency. Exemption of stormwater facilities from the provisions of this subsection shall not apply to any permitted facility discharging or receiving stormwater runoff having come into contact with a hazardous discharge site on the Federal National Priorities List adopted by the EPA pursuant to the Comprehensive Environmental Response Compensation and Liability Act, 42 U.S.C. §§9601 et seq., or any other hazardous discharge site included by the Department on the master list for hazardous discharge site cleanups adopted pursuant to N.J.S.A. 58:10-23.16. An inspection required under this subsection shall be conducted within six months following a permittee's submission of an application for a permit, permit renewal or issuance of a permit for a new facility, except that if for any reason, a scheduled inspection cannot be made, the inspection shall be rescheduled to be performed within 30 days of the originally scheduled inspection or in the case of a temporary shutdown, of resumed operation. Inspections shall include:

- 1. A representative sampling of the effluent for each permitted facility, except that in the case of facilities that are not major facilities or significant indirect users, sampling pursuant to this paragraph shall be conducted at least once every three years. Collection of a representative sampling is required to complete an inspection but does not necessarily have to be conducted concurrently with the inspection;
- 2. An analysis of all collected samples by a laboratory certified by the Department;
- 3. An evaluation of the maintenance record of the permittee's treatment equipment;
- 4. An evaluation of the permittee's sampling techniques;
- 5. A random check of written summaries of test results, prepared by the certified laboratory, providing the test results for the immediately preceding 12-month period, signed by a responsible official of the certified laboratory, certifying the accuracy of the test results. This random check can be completed by reviewing the test results at the permitted facility, and/or through review of test results previously submitted by the permitted facility to the delegated local agency;
- 6. An inspection of the permittee's sample storage facilities and techniques if the sampling is normally performed by the permittee; and
- 7. An evaluation, at least once every two years, of each significant indirect user (as defined by the delegated local agency) in order to determine the

need for a plan to control slug discharges. For purposes of this paragraph, a slug discharge is any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a noncustomary batch discharge. If the delegated local agency decides that a slug control plan is needed, the plan shall contain, at a minimum, the following elements:

- i. A description of discharge practices, including non-routine batch discharges;
- ii. A description of stored chemicals;
- Procedures for immediately notifying the POTW of slug discharges, including any discharge that would violate a prohibition at N.J.A.C. 7:14A-21.2, with procedures for followup written notification within five days; and
- iv. If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response.
- (b) In addition to the inspection requirements of (a) above, all delegated local agencies shall inspect any permittee which meets the significant noncomplier definition at N.J.A.C. 7:14A-1.2. The inspection under this subsection shall be conducted within 60 days of receipt of the discharge monitoring report or self-monitoring report that initially results in the permittee's being identified as a significant noncomplier. The inspection shall include a random check of written summaries of test results, prepared by the certified laboratory providing the test results for the immediately preceding 12-month period signed by a responsible official of the certified laboratory, certifying the accuracy of the test results. A copy of each summary shall be maintained by the permittee. The inspection shall be for the purpose of determining compliance and shall only be performed once each calendar year. A delegated local agency is not required to make an inspection hereunder if an inspection has been made pursuant to (a) above within six months of the period within which an inspection is required to be conducted under this subsection.
- (c) A delegated local agency shall submit a "Clean Water Enforcement Act" (CWEA) annual report to the Department by February 1 of each year. The CWEA annual report shall include, at a minimum, the information under N.J.S.A. 58:10A-14.2, including all supplements and amendments thereto.

- (d) In addition to the information required in the CWEA annual report under (c) above, delegated local agencies shall also include the following information in the CWEA annual report:
 - 1. The number of indirect users which met the significant non-compliance definition during the calendar year and, by the close of the calendar year, had achieved compliance; and
 - 2. The number of indirect users which had met the significant noncompliance criteria during the prior reporting year which have achieved compliance in the reporting period for which the annual report is being prepared.
- (e) The information required in (c) and (d) above shall be submitted on forms provided by the Department.
- (f) All delegated local agencies shall submit to the Department a "40 CFR Part 403" annual report which describes their pretreatment program activities. This report must contain, at a minimum, the information required under 40 CFR 403.12(i), including all supplements and amendments thereto. This report shall be submitted by the date specified in the delegated local agency's NJPDES permit.
- (g) Each delegated local agency shall, by February 2, 2008, submit to the Department a sewer use ordinance or rules and regulations that include those provisions specified in N.J.A.C. 7:14A-19.3(d).
- (h) A delegated local agency shall submit a grace period annual report to the Department. The grace period annual report shall include, for each calendar year, the information required under N.J.S.A. 13:1D-132, including, but not limited to:
 - 1. The number of facilities regulated;
 - 2. The number of inspections performed;
 - 3. The number of minor violations identified, and the number of facilities responsible therefore;
 - 4. The number of minor violations corrected during a grace period, and the number of facilities responsible therefore;
 - 5. The number of minor violations not corrected during a grace period, and the number of facilities responsible therefore;
 - 6. The number of enforcement actions assessing a penalty initiated for one or more minor violations not corrected during a grace period;

- 7. The number of non-minor violations identified, and the number of facilities responsible therefore; and
- 8. The number of enforcement actions assessing a penalty initiated for one or more non-minor violations.
- (i) The information required in (h) above shall be submitted to the Department on or before March 1 of the year immediately following the calendar year to which the information applies. The information required in (h) above shall be submitted on forms provided by the Department.

7:14A-19.7 Development of local limits by local agencies

- (a) All local agencies shall perform a headworks analysis in order to develop local limits or demonstrate that local limits are not necessary. The headworks analysis and, if necessary, development of local limits shall:
 - Be conducted in accordance with the <u>Guidance Manual on the</u> <u>Development and Implementation of Local Discharge Limitations</u> <u>under the Pretreatment Program</u> (December 1987, USEPA Office of Water Enforcement), including all supplements and amendments thereto; and
 - 2. Ensure compliance with the following minimum environmental protection criteria:
 - i. The numerical effluent limitations in the local agency's NJPDES permit;
 - ii. The local agency's process inhibition and upset criteria;
 - iii. The local agency's worker health and safety protection criteria;
 - iv. The sludge quality criteria for a chosen method(s) of sludge management; and
 - v. The limitations in the local agency's Air Pollution Control permit, where applicable.
- (b) Prior to initiation of any headworks analysis and development of local limits under (a) above, all delegated local agencies shall submit a work plan to the Department, for review and approval with conditions if necessary, which outlines the tasks and time frames in the development of a headworks analysis and local limits. At a minimum, this plan shall include the parameters to be sampled, the sampling locations within the treatment plant and the collection system, and a schematic diagram of the treatment plant showing sampling locations.

- (c) When proposing and adopting local limits, all delegated local agencies shall comply with the public notice and hearing requirements of N.J.A.C. 7:14A-19.10(a).
- (d) All delegated local agencies shall submit a written technical evaluation of the need to revise local limits whenever:
 - 1. There are any changes in the applicable sludge quality criteria or effluent limitations, or there is a significant change in the nature of indirect user contributions to the local agency's influent; or
 - 2. The local agency's NJPDES permit renewal application is due.
- (e) The written technical evaluation required under (d) above shall include the following:
 - 1. A listing of all existing local limits and the limiting factor by which each local limit was established;
 - 2. The date that the existing local limits were established;
 - 3. A description of any changes in Federal or State regulations, environmental protection criteria, plant design, operational criteria, or any significant change in the nature of industrial contributions which may require the reevaluation of local limits through the completion of a headworks analysis;
 - 4. A description of the local agency's compliance history over the previous five years, with respect to compliance with effluent limitations, sludge quality, plant inhibition or upset, and worker health and safety; and
 - 5. A statement from the local agency as to whether or not local limits need to be revised based on the information gathered under (e)1 through 4 above.
- (f) The Department shall review the written technical evaluation submitted under(d) above and, if necessary, require the local agency to revise the local limits in accordance with (a) above.

7:14A-19.8 Requirements for issuance of IPP permits by delegated local agencies

- (a) All delegated local agencies shall issue an IPP permit to:
 - 1. Any SIU as defined in N.J.A.C. 7:14A-1.2 or as defined in the delegated local agency's sewer use ordinance or rules and regulations; and
 - 2. Any other indirect user when effluent limitations and other conditions are to be imposed on that user, at the discretion of the local agency.

- (b) The delegated local agency shall include the following requirements in all IPP permits:
 - 1. All permit requirements established in N.J.S.A. 58:10A-6f; and
 - 2. All permit requirements for IPP/SIU permits established in 40 CFR 403.8(f)(1)(iii)(A) through (E).
- (c) Prior to approving any proposed new indirect user IPP permits, proposed renewed indirect user IPP permits, or proposed major modifications to any existing indirect user IPP permit, all delegated local agencies shall comply with the public notice and hearing requirement of N.J.A.C. 7:14A-19.10(e).
- (d) All delegated local agencies shall include in their sewer use ordinance or rules and regulations the following permit issuance requirements:
 - 1. Procedural and substantive requirements regarding written applications for IPP permits and indirect user authorizations to discharge. The application form must require the submission of full information as to the quantity, character, and composition of the proposed discharge;
 - 2. Procedural requirements for the issuance, renewal, modification, suspension, revocation of IPP permits or indirect user authorizations. The procedures must include notice, opportunity to comment, and opportunity to request a public hearing on all draft IPP permits. The DLA shall issue a response-to-comments document at the time that a final permit is issued. The response-to-comments document shall:
 - i. State the action the DLA has taken on the final permit;
 - ii. Specify which provisions, if any, of the draft permit have been changed in the final permit, and the reasons for any such change; and
 - iii. Briefly describe and respond to all relevant comments on the draft permit raised during the public comment period, or during the public hearing, if any;
 - 3. The requirement that no IPP permit shall be issued, renewed, or modified by a delegated local agency so as to relax any effluent limitation unless the IPP permittee or applicant has complied with the requirements of N.J.S.A. 58:10A-6k.

7:14A-19.9 Modifications of an industrial pretreatment program

(a) All delegated local agencies shall provide written notice to the Department regarding all substantial and non-substantial IPP modifications, as defined under 40 CFR 403.18.

- (b) For non-substantial modifications, the delegated local agencies shall include a statement of the basis for the modification, and a copy of the elements of the IPP to be modified.
- (c) For substantial modifications, the delegated local agency shall submit:
 - 1. A statement of basis for the proposed modifications;
 - 2. A statement of legal authority in accordance with 40 CFR 403.9(b)(1);
 - 3. Documentation which will allow the Department to identify those parts of the sewer use ordinance or rules and regulations, NJPDES permit, and/or the original program submission, or amendments thereto, which are being modified; and
 - 4. Any other documentation the Department requests during the review of the proposed modifications.
- (d) While awaiting a decision from the Department on a request for a substantial modification the delegated local agency shall:
 - 1. Adopt the proposed modifications with the written condition that the modifications shall not become effective and shall not be implemented until the Department has given written approval of the modifications; or
 - 2. Await Departmental approval prior to adopting the modifications.
- (e) The Department shall approve or disapprove any proposed modification(s) based on the requirements of 40 CFR 403.8(f), following the procedures in 40 CFR 403.11(b) through (f).
- (f) For industrial pretreatment program modifications, all delegated local agencies shall comply with the public notice and hearing requirement of N.J.A.C. 7:14A-19.10(a).
- (g) All approved modifications to an IPP shall be incorporated, where applicable, into the delegated local agency's NJPDES permit as a minor modification in accordance with **N.J.A.C. 7:14A-16.5**.

7:14A-19.10 Public notice requirements for delegated local agencies

(a) All delegated local agencies shall provide public notice and an opportunity for a public hearing for all requests for substantial modification of an industrial pretreatment program following the procedures under 40 CFR 403.11(b). The delegated local agency shall submit to the Department copies of the public notice, all written comments submitted in response to the public notice and public hearing, if conducted, and responses to comments. The Department shall approve or disapprove the modifications following the procedures noted in N.J.A.C. 7:14A-19.9(e).

- (b) All delegated local agencies shall provide public notice identifying those indirect users which met the significant noncompliance criteria under 40 CFR 403.8(f)(2)(vii) at any time during the period covered by the delegated local agency's 40 CFR Part 403 Annual Report submitted to the Department pursuant to N.J.A.C. 7:14A-19.6(f). This public notice shall be published in the official daily newspaper designated by the local agency no later than 60 days after the 40 CFR 403 Annual Report due date.
- (c) A delegated local agency shall afford an opportunity to the public to comment on a proposed administrative consent order prior to final adoption if the administrative consent order would establish interim enforcement limits that would relax effluent limitations established in a permit or a prior administrative order. The delegated local agency shall provide public notice of the proposed administrative consent order, announce the length of the comment period, which shall be not less than 30 days, commencing from the date of publication of the notice. A notice shall also include a summary statement describing the nature of the violation necessitating the administrative consent order and its terms and conditions; shall specify how additional information on the administrative consent order may be obtained; and shall identify to whom written comments are to be submitted. At least three days prior to publication of the notice, a written notice containing the same information to be provided in the public notice shall be mailed to the mayor and governing body of the municipality and county in which the violation occurred, and to any other persons who have expressed an interest in the public notice, including any other governmental agencies. The delegated local agency shall consider the written comments received during the comment period prior to final adoption of the administrative consent order. Not later than the date that final action is taken on the proposed order, the delegated local agency shall notify each person or group having submitted written comments on the main provisions of the approved administrative consent order and respond to the comments received therefrom.
- (d) The delegated local agency, on its own initiative or at the request of any person submitting written comments pursuant to (c) above, may hold a public hearing on the proposed administrative order or administrative consent order, prior to final adoption if the order would establish interim enforcement limits that would relax for more than 24 months effluent limitations established in a permit or a prior administrative order or administrative consent order. Public notice for the public hearing to be held pursuant to this subsection shall be published not more than 30 and not less than 15 days prior to the holding of the hearing. The hearing shall be held in the municipality in which the violation necessitating the order occurred.
- (e) All delegated local agencies shall provide public notice and may hold a public hearing for any proposed new indirect user IPP permits, proposed renewed indirect user IPP permits, proposed revocations of any indirect user IPP

permits, or proposed major modifications to any existing indirect user IPP permits.

7:14A-19.11 Enforcement action for failure to implement or enforce an approved industrial pretreatment program

(a) The Department may take enforcement action against a delegated local agency pursuant to N.J.A.C. 7:14-8.17 for failure to implement the conditions of an approved industrial pretreatment program and any subsequent amendments thereto or enforce the conditions of an approved industrial pretreatment program, including the approved enforcement response plan, and any subsequent amendments thereto in accordance with N.J.A.C. 7:14-8.

N.J.A.C. 7:14A-19: APPENDIX A ENFORCEMENT RESPONSE PLAN

UNAUTHORIZED DISCHARGES

NONCOMPLIANCE	NATURE OF THE VIOLATION	ENFORCEMENT Responses	TIME Frame	Personnel	TYPE OF VIOL. & GRACE PERIOD
 Discharge without a permit (Permit required) 	No harm to POTW environment	NOV with application form, if needed	60 days		NM
	Harm to POTW/environment (IU meets SNC criteria under 40 CFR Part 403.8(f)(2)(vii))	Take action to halt activity	2 days		NM
	Noncompliance with order to submit application	Seek penalty	6 months		NM
2. Failure to renew	Failure to submit application prior to 180 days of expiration of current permit	NOV	60 days		NM
	Failure to apply continues after notice by the POTW	Seek penalty	6 months		NM
 Discharge outside scope of application/permit 	Failure to notify in advance of new introductions of pollutants or significant change in existing pollutants	NOV with permit application to be modified	60 days		NM

DISCHARGE LIMIT VIOLATION

NONCOMPLIANCE	NATURE OF THE VIOLATION	Enforcemen t Responses	TIME Frame	Personne L	TYPE OF VIOL. & GRACE PERIOD
1. Exceedance of local or Federal standard (permit limit)	Individual or monthly non- serious violation	NOV; compliance response/correctiv e action plan, if needed	60 days from receipt		NM
	Serious violation (individual or monthly)	Seek at least a mandatory minimum penalty in accordance with N.J.A.C. 7:14- 8.16	6 months		NM
2. Exceedance of local or Federal standard (permit limit) (continued)	Significant Noncompliance (IU meets SNC criteria under 40 CFR Part 403)	Public notice	Annually, but no later than 60 days after 403 annual report submitted to NJDEP.		NM
	Significant noncompliance (IU meets SNC criteria in NJWPCA, under N.J.S.A. 58:10A- 3.w.)	Seek at least a mandatory minimum penalty in accordance with N.J.A.C. 7:14- 8.16	6 months		NM

MONITORING AND REPORTING VIOLATIONS

NONCOMPLIANCE	NATURE OF THE VIOLATION	ENFORCEMENT Responses	TIME Frame	PERSONNEL	TYPE OF VIOL. & GRACE PERIOD
1. Reporting violation	Late, 5 or more days after due date (but complete)	NOV, seek penalty, including at least mandatory minimum penalty for overdue effluent parameter information, if any, in accordance with N.J.A.C. 7:14-8.9	6 months		NM
		(note: Penalty waived if complete report is received within 10 days of receipt of the NOV)			
	Late 31 days or more after due date (but complete)	Public notice, NOV, and seek penalty, including at least mandatory minimum penalty for overdue effluent parameter information, if any, in accordance with N.J.A.C. 7:14-8.9	Public notice in accordance with aproved program Penalty within 6 months		NM
		(note: Penalty waived if complete report is received within 10 days of receipt of the NOV)			
	Incomplete for effluent parameter omission	Seek at least a mandatory minimum penalty in accordance with N.J.A.C. 7:14-8.9	6 months		NM

MONITORING AND REPORTING VIOLATIONS (CONTINUED)

NONCOMPLIANCE	NATURE OF THE VIOLATION	Enforcement Responses	Time Frame	Personnel	TYPE OF VIOL. & GRACE PERIOD
	Incomplete for data omission (IU meets SNC criteria under 40 CFR Part 403)	Public notice	Annually		NM
	Incomplete for effluent parameter omission (IU meets SNC criteria under NJWPCA)	Public notice and seek at least a mandatory minimum penalty in accordance with N.J.A.C. 7:14-8.9 and N.J.A.C. 7:14- 8.16(a)	Public notice in accordance with approved program Penalty within 6 months		NM
	Incomplete for other omissions (IU meets SNC criteria under NJWPCA)	Public notice and seek at least a mandatory minimum penalty in accordance with N.J.A.C. 7:14-8.16	Public notice in accordance with approved program Penalty within 6 months		NM
	Incomplete for other omissions	NOV	60 days		M – 10 days
	Falsification	Seek penalty or refer to county prosecutor	60 days		NM
2. Failure to adhere to compliance schedules (in control document, permit, AO/ACO, letter of agreement)	Missed milestone by less than 30 days	NOV, seek penalty (note: penalty may be waived if final compliance is met by due date)	6 months		NM
	Missed milestone by more than 30 days (IU meets SNC criteria under 40 CFR Part 403)	NOV, seek penalty, public notice (note: penalty may be waived if final compliance is met by due date)	6 months		NM
	Failure to meet final compliance date	NOV, seek penalty	6 months		NM

MONITORING AND REPORTING VIOLATIONS (CONTINUED)

Noncompliance	NATURE OF THE VIOLATION	Enforcement Responses	TIME Frame	Personnel	TYPE OF VIOL. & GRACE PERIOD
3. Failure to notify	Failure to report spill or changed discharge	NOV; seek penalty where necessary	NOV w/in 60 days of discovery; penalty no later than 6 months of discovery		NM
4. Failure to monitor correctly	Incorrect sample location, incorrect sample type, incorrect sample collection techniques, or incorrect sample analysis	NOV, with proper resampling, including sample analysis	60 days		NM
5. Failure to report additional monitoring	POTW inspection finds additional files	NOV with request to submit additional monitoring data	60 days		NM

OTHER PERMIT VIOLATIONS

NONCOMPLIANCE	NATURE OF THE VIOLATION	Enforcement Responses	TIME Frame	PERSONNEL	TYPE OF VIOL. & GRACE PERIOD
1. Wastestreams are diluted to achieve discharge limits	Dilution	NOV, seek penalty	NOV-60 days; penalty- 6 months		NM
2. Continuing failure to halt or prevent a discharge which caused or causes imminent endangerment to human health, welfare, or the environment or has resulted in the POTW's exercise of its emergency authority under 40 CFR 403.8(f)(1)(vi)(B)	Refusal to discontinue activity upon notification	Take physical (effective) action or seek court order to halt discharge	2 days max.		NM
3. Failure to maintain in good working order and properly operate, any facilities or systems of control installed to achieve compliance with the terms and conditions of the permit	Violation of operating requirements	NOV	60 days		NM
4. Entry denial	Entry denied or consent withdrawn. Copies of records denied	NOV, seek penalty	6 months		NM
5. Inadequate record keeping	POTW inspector finds files incomplete or missing	NOV	60 days		NM

SUBCHAPTER 20 STANDARDS FOR THE USE OR DISPOSAL OF RESIDUAL

7:14A-20.1 Purpose

- (a) This subchapter establishes:
 - 1. Permit application requirements and standards, which consist of general requirements, pollutant limits, management practices, frequency of monitoring requirements, recordkeeping and operational standards, for residual applied to the land or the land to which residual is applied in conformance with 40 CFR Part 503, unless otherwise specifically stated;
 - 2. Permit application requirements and standards for the closure of sewage sludge surface disposal sites;
 - 3. Permit application requirements and standards for residual transfer stations; and
 - 4. Permit application and case-by-case permitting requirements for residual use and disposal practices consistent with 40 CFR Parts 122, 123 and 124.

7:14A-20.2 Applicability

- (a) This subchapter applies to:
 - 1. Any person who prepares residual that is applied to the land, any person who applies residual to the land, residual applied to the land, and the land on which residual is applied;
 - 2. The closure of sewage sludge surface disposal sites; and
 - 3. The operating entity of any treatment works treating domestic sewage, including residual transfer stations, or of any residual-only facility, whether or not the treatment works is otherwise required to obtain a NJPDES permit unless all requirements implementing standards for residual use or disposal applicable to the treatment works are included in a permit issued under the authority of the New Jersey Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., or the New Jersey Air Pollution Control Act, N.J.S.A. 26:2C-1 et seq.
- (b) The requirements in N.J.A.C. 7:14A-20.7 do not apply when:
 - 1. Bulk material derived from sewage sludge is applied to the land if the sewage sludge from which the bulk material is derived is generated under a NJPDES permit and meets the pollutant concentrations in 40 CFR 503.13(b)3, the Class A pathogen requirements in 40 CFR

503.32(a), and one of the vector attraction reduction requirements in 40 CFR 503.33(b)1 through 8; or

- 2. A material derived from sewage sludge is sold or given away in a bag or other container to be applied to the land if the sewage sludge from which the material is derived is generated under a NJPDES permit and meets the pollutant concentrations in 40 CFR 503.13(b)3, the Class A pathogen requirements in 40 CFR 503.32(a), and one of the vector attraction reduction requirements in 40 CFR 503.33(b)1 through 8.
- (c) The general requirements in N.J.A.C. 7:14A-20.7(b)1 and the management practices in N.J.A.C. 7:14A-20.7(b)2 do not apply when:
 - Bulk residual is applied to the land, if the bulk residual meets the pollutant concentrations in 40 CFR 503.13(b)(3), the Class A pathogen requirements in40 CFR 503.32(a), and one of the vector attraction reduction requirements in40 CFR 503.33(b)(1) through (8). However, the Department may apply any or all of the general requirements in N.J.A.C. 7:14A-20.7(b)1 and the management practices in N.J.A.C. 7:14A-20.7(b)2 to the bulk residual on a case-by-case basis as described at N.J.A.C. 7:14A-20.5(a)3;
 - 2. Bulk material derived from residual is applied to the land if the derived bulk material meets the pollutant concentrations in 40 CFR 503.13(b)(3), the Class A pathogen requirements in 40 CFR 503.32(a), and one of the vector attraction reduction requirements in 40 CFR 503.33(b)(1) through (8). However, the Department may apply any or all of the general requirements in N.J.A.C. 7:14A-20.7(b)1 and the management practices in N.J.A.C. 7:14A-20.7(b)2 to the bulk material on a case-by-case basis as described at N.J.A.C. 7:14A-20.5(a)3;

3. Residual is sold or given away in a bag or other container for application to the land if the residual sold or given away in a bag or other container for application to the land meets the pollutant concentrations in 40 CFR 503.13(b)(3), the Class A pathogen requirements in 40 CFR 503.32(a), and one of the vector attraction reduction requirements in 40 CFR 503.33(b)(1) through (8);

4. A material derived from residual is sold or given away in a bag or other container for application to the land if the derived material meets the pollutant concentrations in 40 CFR 503.13(b)(3), the Class A pathogen requirements in 40 CFR 503.32(a), and one of the vector attraction reduction requirements in 40CFR 503.33(b)(1) through (8).

(d) References in this subchapter to 40 CFR Part 122, Part 258, 503.13, 503.15, 503.17(a), 503.32 and 503.33, with the exception of requirements for domestic septage, incorporate such Federal requirements by reference including future supplements and amendments to these requirements. All other references in this subchapter to 40 CFR Part 503 incorporate such

Federal requirements by reference as they existed as of May 5, 1997.

(e) Where the Statewide Sludge Management Plan (SSMP) and this subchapter conflict, the provisions of this subchapter shall control.

7:14A-20.3 Relationship to other regulations

- (a) This subchapter does not establish:
 - 1. Standards for the firing of residual in an incinerator which receives an air pollution control permit pursuant to N.J.A.C. 7:27;
 - 2. Requirements for the use or disposal of residual determined to be hazardous in accordance with 40 CFR Part 261 and N.J.A.C. 7:26G;
 - 3. Requirements for the use or disposal of residual with a concentration of polychlorinated biphenyls (PCBs) equal to or greater than 50 milligrams per kilogram of total solids (dry weight basis) in accordance with 40 CFR Part 761;
 - 4. Standards for the co-disposal of residual in a municipal solid waste landfill which receives a permit pursuant to 40 CFR Part 258 or N.J.A.C. 7:26; or
 - 5. Standards for the disposal of residual in a sanitary landfill, as defined at N.J.A.C. 7:26, which receives a permit pursuant to N.J.A.C. 7:26.

7:14A-20.4 Special definitions

The following words and terms have specific meanings when used in this subchapter: "agricultural land," "final cover," "forest," "liner," "lower explosive limit for methane gas," "pasture," "permitting authority," "pollutant limit," "public contact site," "range land" and "runoff." The applicable definitions are set forth at N.J.A.C. 7:14A-1.2.

7:14A-20.5 Establishing limitations, standards and other permit conditions

- (a) The Department shall establish conditions in each NJPDES permit for the use or disposal of residual, as required on a case-by-case basis, to provide for and ensure compliance with all applicable requirements of the Federal and State Acts and the regulations promulgated thereunder, as follows:
 - 1. The Department shall include standards for residual use or disposal in each NJPDES permit unless those standards have been included in a permit issued under the appropriate provisions of the New Jersey Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., or the New Jersey Air Pollution Control Act, N.J.S.A. 26:2C-1 et seq. If any applicable standard for residual use or disposal is promulgated and that standard is

more stringent than any limitation on the pollutant or practice in the permit, the Department may initiate proceedings under N.J.A.C. 7:14A-16.4 to modify or revoke and reissue the permit to conform to the standard for residual use or disposal.

- 2. For any permit issued to a treatment works treating domestic sewage or residual-only facility, the Department shall include a reopener clause to allow the incorporation of any applicable standard for residual use or disposal. The Department shall promptly modify or revoke and reissue any permit containing the reopener clause required by this paragraph if an applicable standard for residual use or disposal is more stringent than any requirements for residual use or disposal in the permit, or controls a pollutant or practice not limited in the permit.
- 3. On a case-by-case basis, the Department may impose requirements for the use or disposal of residual in addition to or more stringent than the requirements in this subchapter when necessary to protect public health or the environment from any adverse effect of the pollutant in the residual. This authority shall include, but not be limited to, the following:
 - The authority to require compliance with pollutant limits for additional constituents which the Department has evidence exceed the range found in sewage sludge produced in the State as determined by the Sludge Quality Assurance Regulations, N.J.A.C. 7:14-4, or which exceed acceptable levels in USEPA's Technical Support Document for Land Application of Sewage Sludge, EPA 822/R-93-001a and 001b, November 1992 or Technical Support Document for Surface Disposal of Sewage Sludge, EPA 822/R-93-002, November 1992, as amended and supplemented;
 - For bulk residual applied in accordance with N.J.A.C. 7:14A-20.7(h)1, the authority to require compliance with any or all of the general requirements in N.J.A.C. 7:14A-20.7(b)1 and the management practices in N.J.A.C. 7:14A-20.7(b)2 upon the Department's determination that the general requirements or management practices are needed to protect public health and the environment;
 - iii. For residual applied in accordance with N.J.A.C. 7:14A-20.7(h), the authority to establish additional steps in the treatment of residual to control the release of air contaminants (including, but not limited to, ammonia) consistent with the Air Pollution Control Act, N.J.S.A. 26:2C-1 et seq. This additional step shall include, but not be limited to, the requirement to increase the maturity of marketable residual products by achieving additional temperature reduction and moisture reduction; and

- iv. For sites where bulk residual is applied under N.J.A.C. 7:14A-20.7(h), the authority to require a permit or a Letter of Land Application Management Approval to be obtained upon the Department's determination that a permit or Letter of Land Application Management Approval is needed to protect public health and the environment.
- (b) The Department shall set forth the basis for permit conditions imposed under (a) above in a fact sheet issued pursuant to N.J.A.C. 7:14A-20.9, or, if the requirements are based on site-specific factors, a Letter of Land Application Management Approval issued pursuant to N.J.A.C. 7:14A-20.7(h) for the residual land application site.
- (c) Innovative or alternative technologies and systems for residual use or disposal shall be regulated on a case-by-case basis in conformance with the requirements for the technology which most closely resembles the innovative or alternative technology system.
- (d) The Department may designate any person subject to the standards for residual use or disposal as a "treatment works treating domestic sewage" or "residual-only facility" as defined by N.J.A.C. 7:14A-1.2, where it is found that a permit is necessary to protect public health and the environment from the adverse effects of a residual or to ensure compliance with the technical standards for residual use or disposal. Any person designated as a "treatment works treating domestic sewage" or "residual-only facility" shall submit an application for a permit under N.J.A.C. 7:14A-4 within 180 days of being notified by the Department that a permit is required. The basis for the Department's decision to designate a person as a "treatment works treating domestic sewage" or "residual-only facility" under this paragraph shall be stated in the fact sheet or statement of basis for the permit.

7:14A-20.6 Environmental assessment

(a) In addition to the information required by N.J.A.C. 7:14A-4, an applicant for a NJPDES permit for residual use or disposal shall submit an environmental assessment for the location where a residual will be prepared to be applied to the land, the location where a residual was placed on a surface disposal site, or the location of any other treatment works treating domestic sewage (TWTDS) or residual-only facility required to obtain a permit pursuant to this subchapter. The magnitude and detail of the environmental assessment shall be determined by the Department and shall be relative to the nature, scale and location of the proposed TWTDS or residual-only facility. Where the permitted activity shall not require the construction of additional infrastructure the Department shall waive this requirement. At a minimum, the environmental assessment shall conform to the environmental assessment requirements of the Department's applicable NJPDES Permit Technical

Manual in effect at the time of submission of the assessment and shall include:

- 1. A written description of facility operations, including volumes of residual to be handled, methods of handling, facility layout, and use or disposal of any end products;
- 2. An analysis of the impact that the proposed TWTDS or residual-only facility will have on local transportation patterns, drainage and soil characteristics, surface and ground water quality, endangered or threatened wildlife and vegetation, stormwater and wastewater collection/treatment capability, water supply capability, ambient acoustical conditions and air quality;
- 3. A description of how the TWTDS or residual-only facility will conform or conflict with the objectives of any applicable Federal, State, or local land use and/or environmental requirements for areas within two miles of the perimeter of a proposed large facility (residual production equal to or greater than 15,000 metric tons per 365 day period), or within one mile of the perimeter of a proposed small facility (residual production less than 15,000 metric tons per 365 day period); and
- 4. Where a potential conflict between the TWTDS or residual onlyfacility and the objectives of land use and/or environmental requirements is identified under (a)3 above, a description of the mitigation efforts to be undertaken to minimize any such conflict.

7:14A-20.7 Land application

- (a) In addition to the information required in N.J.A.C. 7:14A-4 and 20.6, an applicant for a NJPDES permit to prepare residual for land application shall submit the following:
 - 1. Information on the characteristics of the residual proposed to be applied, to the extent known at the time that the permit application is submitted, including, but not limited to:
 - i. The origin and volume of the residual;
 - ii. A dated analysis of the residual on a mg/kg dry weight basis (or other unit as specified) for the following constituents:

Total solids (percent by weight) pH (standard units) Total Kjeldahl Nitrogen Ammonia-Nitrogen Nitrate-Nitrogen Calcium Potassium Phosphorus Arsenic

- Cadmium Copper Lead Mercury Molybdenum Nickel Selenium Zinc
- A copy of all reports required to be submitted under the Sludge Quality Assurance Regulations (SQAR), N.J.A.C. 7:14C, for the previous 12-month period;
- iv. Additional quality analyses (including characteristics pursuant to N.J.A.C. 7:26G) as may be deemed necessary by the Department through evaluation of past SQAR reports or other relevant information, such as information on industrial discharges which might contribute constituents not normally evaluated under the SQAR program or which may exceed levels identified in USEPA's <u>Technical Support Document for Land Application of</u> <u>Sewage Sludge</u>, EPA 822/R-93-001a and 001b, November 1992.
- 2. Where the sources of residual to be land applied are not known at the time of permit application, requests for approval to land apply residual shall be submitted in accordance with N.J.A.C. 7:14A-20.11.
- 3. For bulk residual which does not satisfy the pollutant concentrations in 40 CFR 503.13(b)(3), the Class A pathogen requirements in 40 CFR 503.32(a), or one of the vector attraction reduction options in 40 CFR 503.33(b)(1) through (8), requests for approval to land apply residual shall be submitted in accordance with the following:
 - i. For each residual land application site identified at the time of permit application, the applicant shall, in accordance with the applicable NJPDES Permit Technical Manual, supply information necessary to determine if the site is appropriate for land application and a description of how the site is or will be managed, including, but not limited to, the following:
 - A residual land application site evaluation that includes, at a minimum, a description of easements, distances to surface water, distances to drinking water wells, distances to occupied dwellings, depth to ground water, depth to bedrock, slope, soil drainage class, pH, flooding, site soil texture and parent geologic material, and proposed buffer zones;
 - (2) A written analysis of operational considerations including, at a minimum, crop type, crop end use, residual application methods, whole residual application rates and seasonal

limitations;

- (3) An original or clear copy of the appropriate Soil Conservation Service Soil Survey Map showing the residual land application site;
- (4) An original or clear copy of a 1:24,000 scale (7.5 minute Quadrangle) United States Geological Survey Topographic Map showing the exact location of the residual land application site and indicating the sheet name from which the map portion was taken; and
- (5) An original or clear copy of the county tax map showing the location of the residual land application site and the location of any residual storage installations and indicating the sheet name from which the map portion was taken;
- ii. Where proposed residual land application sites are not identified at the time of permit application, the applicant shall submit a notification plan for the Department's approval which at a minimum:
 - (1) Describes the geographical area covered by the plan; and
 - (2) Describes the form of advance public notice which, at a minimum, will be supplied to all landowners and occupants adjacent to or abutting a proposed residual land application site. This requirement may be satisfied through public notice in a newspaper of local circulation. Notice shall include, at a minimum, the name and address of the permittee, the name and address of the proposed residual land application site, a description of the activities that are proposed to occur at the residual land application site, and the name and address of the Bureau within the Department to which the permittee must submit an application for a Letter of Land Application Management Approval; and
- iii. Following issuance of a permit, when a new land application site is proposed, a permittee shall submit an application to the Department for a Letter of Land Application Management Approval, where required pursuant to (h) below. An additional copy of the complete application for a LLAMA shall be simultaneously submitted to the municipal clerk of the municipality(ies) where the residual land application site is located. The application for a LLAMA shall include information necessary to determine if the proposed residual land application site is appropriate for land application and a description of how the site is or will be managed, including, but not limited to, the following:

- (1) Information required pursuant to (a)3i above; and
- (2) Information necessary for the Department to determine if the request is in conformance with a notification plan approved by the Department pursuant to (a)3ii above.
- 4. In order for the Department to approve a permit application for the land application of residuals other than sewage sludge, the applicant shall demonstrate, in addition to the requirements of (a)1 through 3 above, the following:
 - i. That the land application of the residual will benefit soil physical properties, soil fertility and/or cover vegetation;
 - ii. An understanding of the impacts of the residual on soil fertility, soil physical properties and plant growth; and
 - iii. That the land application of a particular residual has a scientific basis and has been successfully tested or demonstrated in a field application or pilot program.
- (b) For the land application of residual, the following general requirements and management practices shall apply, unless otherwise specifically stated:
 - 1. In lieu of the general requirements in 40 CFR 503.12:
 - i. No person shall apply residual to the land except in accordance with the requirements of this subchapter.
 - No person shall apply bulk residual subject to the cumulative pollutant loading rates in 40 CFR 503.13(b)2 to agricultural land, forest, a public contact site, or a reclamation site if any of the cumulative pollutant loading rates in 40 CFR 503.13(b)2 has been reached.
 - iii. No person shall apply domestic septage to agricultural land, forest, or a reclamation site except in accordance with (f) below.
 - iv. The person who prepares bulk residual that is applied to agricultural land, forest, a public contact site, or a reclamation site shall provide the person who applies the bulk residual written notification of information necessary to determine the agronomic rate pursuant to (g) below.
 - v. The person who applies residual to the land shall obtain information needed to comply with the requirements in this subchapter. In addition, before bulk residual subject to the cumulative pollutant loading rates in 40 CFR 503.13(b)2 is applied to the land, the person who proposes to apply the bulk residual shall comply with the requirements in 40 CFR 503.12(e) and shall also contact the Department to determine whether bulk residual was applied to the site prior to July 20, 1993. The

cumulative amount of each pollutant that was applied to the site in the bulk residual and that was required to be tracked by the Department prior to July 20, 1993, shall be used to determine the additional amount of each pollutant which can be applied to the site after July 20, 1993 pursuant to 40 CFR 503.13(a)2i.

- vi. When a person who prepares bulk residual provides the bulk residual to a person who applies the bulk residual to the land, the person who prepares the bulk residual shall provide the person who applies the bulk residual notice and necessary information to comply with the requirements of this subchapter.
- vii. When a person who prepares residual provides the residual to another person who prepares the residual, the person who provides the residual shall provide the person who receives the residual notice and necessary information to comply with the requirements of this subchapter.
- viii. The person who applies bulk residual to the land shall provide the owner or lease holder of the land on which the bulk residual is applied notice and necessary information to comply with the requirements of this subchapter.
- ix. Any person who prepares bulk residual in New Jersey that is applied to land in a State other than New Jersey shall provide written notice to the permitting authority for the State in which the bulk residual is proposed to be applied prior to the initial application of bulk residual to the residual land application site by the applier. Any person who prepares bulk residual out-ofstate that is to be applied to land in New Jersey shall provide written notice to the Department prior to the initial application of bulk residual to the residual land application site by the applier. The notice shall include:
 - (1) The location, by either street address or latitude and longitude, of each residual land application site;
 - (2) The approximate time period during which bulk residual will be applied to each residual land application site;
 - (3) The name, address, telephone number, and New Jersey or National Pollutant Discharge Elimination System permit number (if applicable) for the person who prepares the bulk residual;
 - (4) The name, address, telephone number, and New Jersey or National Pollutant Discharge Elimination System permit number (if applicable) for the person who will apply the bulk residual; and
 - (5) Out-of-State generators which transport residual into the

State of New Jersey to be applied to the land shall also comply with the requirements of (l) below.

- x. Any person who prepares bulk residual in New Jersey and applies bulk residual subject to the cumulative pollutant loading rates in 40 CFR 503.13(b)(2) to the land outside of the State of New Jersey shall provide written notice to the permitting authority for the State in which the bulk residual will be applied prior to the initial application of bulk residual to a residual land application site by the applier. Any person who applies bulk residual subject to the cumulative pollutant loading rates in 40 CFR 503.13(b)2 to the land in New Jersey shall provide written notice to the Department prior to the initial application of bulk residual to a residual land application site by the applier. The permitting authority or Department shall retain and provide the public with access to the notice. The notice shall include:
 - (1) The location, by either street address or latitude and longitude, of the land application site; and
 - (2) The name, address, telephone number, and New Jersey or National Pollutant Discharge Elimination System permit number (if applicable) of the person who will apply the bulk residual.
- 2. In lieu of the management practices in 40 CFR 503.14:
 - Bulk residual shall not be applied to the land if it is likely to adversely affect a threatened or endangered species listed under Section 4 of the Federal Endangered Species Act, 16 U.S.C. §1533 or its designated critical habitat.
 - ii. Bulk residual shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk residual enters a wetland or other waters of the State, as defined in N.J.A.C. 7:14A-1.2, except as otherwise provided in a permit issued pursuant to Section 402 or 404 of the CWA.
 - iii. Bulk residual shall not be applied to agricultural land, forest, or a reclamation site that is 10 meters or less from waters of the State, as defined in N.J.A.C. 7:14A-1.2, unless otherwise specified by the Department in a permit.
 - iv. Bulk residual shall be applied to agricultural land, forest, a public contact site, or a reclamation site in accordance with (g) below.
 - v. Either a label shall be affixed to the bag or other container in which residual that is sold or given away for application to the land, or an information sheet shall be provided to the person who receives residual sold or given away in an other container for

application to the land. The label or information sheet shall contain the following information:

- (1) The name and address of the person who prepared the residual that is sold or given away in a bag or other container for application to the land;
- (2) A statement that application of the residual to the land is prohibited except in accordance with the instructions on the label or information sheet;
- (3) The annual whole residual application rate for the residual that does not cause any of the annual pollutant loading rates in Table 4 of 40 CFR 503.13 to be exceeded; and
- (4) Additional information as required under (h)4vii below.
- (c) The applicable requirements and pollutant limits in 40 CFR 503.13(a) and (b) shall be met.
- (d) Residual shall not be applied to the land unless the operational standards for pathogen and vector attraction reduction pursuant to 40 CFR 503.15(a) and (c) are met. Compliance with the operational standards for pathogen reduction is not required for pathogen-free material; however, the Department may impose operational standards for vector attraction reduction on pathogen-free material on a case-by-case basis through a NJPDES permit depending on the physical and chemical characteristics of the material to be land applied.
- (e) Foreign material shall be removed from residual prior to the application of residual to the land. Foreign material removed from residual shall be managed in accordance with applicable State and Federal law and regulations.
- (f) In accordance with the SSMP, it is the Department's policy that the use of domestic treatment works is the most environmentally sound and controllable method for management of domestic septage. However, the land application of domestic septage shall be permitted on a case-by-case basis where the applicant demonstrates that no reasonable alternative exists, subject to the following requirements:
 - Domestic septage shall not be applied to the land unless, at a minimum, the Class B pathogen reduction requirements pursuant to 40 CFR 503.32(b) and one of the vector attraction reduction requirements in 40 CFR 503.33(b)(1) through (b)(10) are met;
 - 2. Domestic septage must be applied at a whole residual application rate that is equal to or less than the agronomic rate in accordance with (g) below;

- 3. Domestic septage must be screened through a number 4 mesh screen to remove foreign material;
- 4. Domestic septage must be certified to be from domestic sources only, analyzed pursuant to (a)1 above and satisfy the pollutant limits in 40 CFR 503.13(a) and (b); and
- 5. Domestic septage shall be applied to the land only in accordance with one of the land application programs described at (h) below.
- (g) Bulk residual shall be applied to the land at a whole residual application rate that is equal to or less than the agronomic rate as specified by the Department in a permit based on best professional judgment unless, in the case of a reclamation site, otherwise approved by the Department.
- (h) Residual applied to the land shall conform to one of the following programs based on the level of quality, pathogen reduction and vector attraction reduction achieved:
 - Residual which meets the pollutant concentrations in 40 CFR 503.13(b)(3), the Class A pathogen requirements in 40 CFR 503.32(a), and one of the vector attraction reduction requirements in 40 CFR 503.33(b)(1) through (8) shall be applied only in accordance with the following requirements:
 - i. The residual shall be monitored, records kept and information reported in accordance with (i), (j) and (k) below;
 - ii. Residual may be applied in bulk, or sold or given away in a bag or other container;
 - iii. Residual which is sold, offered for sale, or intended for sale as a fertilizer, soil conditioner or agricultural liming material shall be licensed by the New Jersey Department of Agriculture pursuant to the New Jersey Commercial Fertilizer and Soil Conditioner Act, N.J.S.A. 4:9-15.1 et seq., or the New Jersey Agricultural Liming Materials Act, N.J.S.A. 4:9-21.1 et seq., unless permit conditions for distribution are otherwise established by the Department in accordance with N.J.A.C. 7:14A-20.5; and
 - iv. Residual shall be labeled or accompanied by instructional literature conforming to the labeling requirements established by the New Jersey Department of Agriculture pursuant to the New Jersey Commercial Fertilizer and Soil Conditioner Act, N.J.S.A. 4:9-15.1 et seq., the New Jersey Agricultural Liming Materials Act, N.J.S.A. 4:9-21.1 et seq., or distribution requirements specified by the Department in a permit.
 - 2. Residual which meets the pollutant concentrations in 40 CFR 503.13(b)(3) and the Class A pathogen requirements in 40 CFR

503.32(a), and which will meet one of the vector attraction reduction requirements in 40 CFR 503.33(b)(9) or (b)(10) shall be applied only in accordance with the following requirements:

- i. The residual shall be monitored, records kept and information reported in accordance with (i), (j) and (k) below;
- ii. The residual shall be applied in bulk only and shall not be applied to a lawn or home garden;
- iii. The general requirements at (b)1 above and the management practices at (b)2 above apply;
- iv. A Conservation Plan developed by the USDA-NRCS and approved by the Soil Conservation District or a SESCP (as applicable) shall be obtained and implemented for all residual land application sites (unless such planning is determined inapplicable to the site by an agency with concurrent jurisdiction); and
- v. A LLAMA shall be obtained for all residual land application sites pursuant to (a)3iii above prior to the initial application of residual to the residual land application site. The conditions of a LLAMA shall be met by the person who applies residual to a residual land application site.
- 3. Residual which meets the pollutant concentrations in 40 CFR 503.13(b)(3) and the Class B pathogen requirements in 40 CFR 503.32(b), and which meets one of the vector attraction reduction requirements in 40 CFR 503.33(b)(1) through (8) or which will meet one of the vector attraction reduction requirements in 40 CFR 503.33(b)(9) or (b)(10), shall be applied only in accordance with the following requirements:
 - i. The residual shall be monitored, records kept and information reported in accordance with (i), (j) and (k) below;
 - ii. The residual shall be applied in bulk only and shall not be applied to a lawn or home garden;
 - iii. The general requirements at (b)1 above, the management practices at (b)2 above and the site restrictions at 40 CFR 503.32(b)(5) apply;
 - iv. A Conservation Plan developed by the USDA-NRCS and approved by the Soil Conservation District or a SESCP (as applicable) shall be obtained and implemented for all residual land application sites (unless such planning is determined inapplicable to the site by an agency with concurrent jurisdiction); and
 - v. A LLAMA shall be obtained for all residual land application sites

pursuant to (a)3iii above prior to the initial application of residual to a residual land application site. The conditions of a LLAMA shall be met by the person who applies residual to a residual land application site.

- 4. Residual which meets the pollutant concentrations in 40 CFR 503.13(b)(1), the Class A pathogen requirements in 40 CFR 503.32(a), and one of the vector attraction reduction requirements in 40 CFR 503.33(b)(1) through (8) shall be applied only in accordance with the following requirements:
 - i. The residual must be monitored, records kept and information reported in accordance with (i), (j) and (k) below;
 - ii. The residual may be applied in bulk, or sold or given away in a bag or other container;
 - iii. The residual shall not be applied in bulk to a lawn or home garden;
 - iv. The general requirements at (b)1 above and the management practices at (b)2 above apply;
 - v. Residual which is sold, offered for sale, or intended for sale as a fertilizer, soil conditioner or agricultural liming material must be licensed by the New Jersey Department of Agriculture pursuant to the New Jersey Commercial Fertilizer and Soil Conditioner Act, N.J.S.A. 4:9-15.1 et seq., or the New Jersey Agricultural Liming Materials Act, N.J.S.A. 4:9-21.1 et seq., unless permit conditions for distribution are otherwise established by the Department in accordance with N.J.A.C. 7:14A-20.5;
 - vi. Residual sold or given away in a bag or other container shall be labeled or the other container shall be accompanied by instructional literature, conforming to the labeling requirements established by the New Jersey Department of Agriculture pursuant to the New Jersey Commercial Fertilizer and Soil Conditioner Act, N.J.S.A. 4:9-15.1 et seq., the New Jersey Agricultural Liming Materials Act, N.J.S.A. 4:9-21.1 et seq., the labeling or literature requirements of (b)2v above, or other distribution requirements specified by the Department in a permit;
 - vii. For residual applied in bulk, the cumulative pollutant loading rates in 40 CFR 503.13(b)(2) shall not be exceeded and shall be tracked, recorded and reported in accordance with (i), (j) and (k) below;
 - viii. Where residual is applied in bulk, a Conservation Plan developed by the USDA-NRCS and approved by the Soil Conservation District or a SESCP (as applicable) shall be obtained and

implemented for the residual land application site (unless such planning is determined inapplicable to the site by an agency with concurrent jurisdiction); and

- ix. Where residual is applied in bulk, a LLAMA shall be obtained for all residual land application sites pursuant to (a)3iii above prior to the initial application of residual to the residual land application site. The conditions of a LLAMA shall be met by the person who applies residual to a residual land application site.
- 5. Residual which meets the pollutant concentrations in 40 CFR 503.13(b)(1) and the Class A pathogen requirements in 40 CFR 503.32(a), and which will meet one of the vector attraction reduction requirements in 40 CFR 503.33(b)(9) or (b)(10) shall be applied only in accordance with the following requirements:
 - i. The residual shall be monitored, records kept and information reported in accordance with (i), (j) and (k) below;
 - ii. The residual shall be applied in bulk only and shall not be applied to a lawn or home garden;
 - iii. The general requirements at (b)1 above and the management practices at (b)2 above apply;
 - iv. The cumulative pollutant loading rates in 40 CFR 503.13(b)(2) shall not be exceeded and shall be tracked, recorded and reported in accordance with (i), (j) and (k) below;
 - v. A Conservation Plan developed by the USDA NRCS and approved by the Soil Conservation District or a SESCP (as applicable) shall be obtained and implemented for all residual land application sites (unless such planning is determined inapplicable to the site by an agency with concurrent jurisdiction); and
 - vi. A LLAMA shall be obtained for all residual land application sites pursuant to (a)3iii above prior to the initial application of residual to the residual land application site. The conditions of a LLAMA shall be met by the person who applies residual to a residual land application site.
- 6. Residual which meets the pollutant concentrations in 40 CFR 503.13(b)(1) and the Class B pathogen requirements in 40 CFR 503.32(b), and which meets one of the vector attraction reduction requirements in 40 CFR 503.33(b)(1) through (8) or which will meet one of the vector attraction reduction requirements in 40 CFR 503.33(b)(9) or (b)(10) shall be applied only in accordance with the following requirements:
 - i. The residual shall be monitored, records kept and information

reported in accordance with (i), (j) and (k) below;

- ii. The residual shall be applied in bulk only and shall not be applied to a lawn or home garden;
- iii. The general requirements at (b)1 above, the management practices at (b)2 above and the site restrictions at 40 CFR 503.32(b)(5) apply;
- iv. The cumulative pollutant loading rates in 40 CFR 503.13(b)(2) shall not be exceeded and shall be tracked, recorded and reported in accordance with (i), (j) and (k) below;
- v. A Conservation Plan developed by the USDA NRCS and approved by the Soil Conservation District or a SESCP (as applicable) shall be obtained and implemented for all residual land application sites (unless such planning is determined inapplicable to the site by an agency with concurrent jurisdiction); and
- vi. A LLAMA shall be obtained for all residual land application sites pursuant to (a)3iii above prior to the initial application of residual to the residual land application site. The conditions of a LLAMA shall be met by the person who applies residual to a residual land application site.
- (i) For residual which is to be applied to the land, the frequency of monitoring for the pollutants listed in Table 1, Table 2, Table 3 and Table 4 of 40 CFR 503.13, for the pathogen density requirements in 40 CFR 503.32(a) and 40 CFR 503.32(b)(2) through (b)(4), when applicable, and for the vector attraction reduction requirements in 40 CFR 503.33(b)(1) through (b)(8), when applicable, shall be the frequency specified in Table 1 of 40 CFR 503.16(a) unless otherwise specified below:
 - 1. For sewage sludge, the frequency of monitoring shall be as specified in Table 1 of 40 CFR 503.16(a) or quarterly, whichever is more frequent, except as allowed under (i)2 and 3 below;
 - 2. After any residual has been monitored for two years at the frequency in Table 1 of 40 CFR 503.16(a) or (i)1 above, the permittee may request the Department to reduce the frequency of monitoring as specified in 40 CFR 503.16(a)(2);
 - 3. When a single source of sewage sludge totaling less than 290 metric tons per year (see Table 1 of 40 CFR 503.16(a)) is removed for application to the land no more frequently than three times per year, then monitoring shall be performed at least once prior to each removal;
 - Process parameter monitoring necessary to demonstrate whether any of the pathogen reduction requirements in 40 CFR 503.32(a)(3), (a)(4), (a)(5), (a)(7), (a)(8) and/or 40 CFR 503.32(b)(3) or (b)(4) are met (for

example, temperature, time, percent total solids and pH) must be performed each day that the process(es) intended to meet any of the requirements is operated and as often each day as necessary; and

- 5. Process parameter monitoring necessary to demonstrate whether vector attraction reduction requirements in 40 CFR 503.33(b)(1), (b)(5), (b)(6), (b)(7) and (b)(8) are met (for example, volatile solids, time, temperature, pH and percent total solids) must be performed each day that the process(es) intended to meet any of the requirements is operated and as often each day as necessary.
- (j) For residual which is to be applied to the land, recordkeeping shall conform to the requirements of 40 CFR 503.17(a) and the following additional information shall be retained for five years (unless otherwise required by 40 CFR Part 503):
 - 1. Daily records of the sources of residual generated, received and processed as well as the quantity of residual generated, received and processed;
 - 2. If bulk residual does not satisfy the pollutant concentrations in 40 CFR 503.13(b)(3), the Class A pathogen requirements in 40 CFR 503.32(a), or one of the vector attraction reduction options in 40 CFR 503.33(b)(1) through (8), the person who prepares the residual shall keep daily records of the destination of the residual, including, but not limited to, the location, by either street address, lot and block number or latitude and longitude of each site, the quantity of residual delivered and applied to each site, and the whole residual application rate in accordance with (g) above;
 - 3. Where not otherwise specified in 40 CFR 503.17(a), information necessary to demonstrate compliance with the applicable land application program(s) pursuant to (h) above;
 - 4. Records necessary to demonstrate compliance with (i) above; and
 - 5. Records on the quantity and quality of all residual generated and/or received for processing pursuant to the Sludge Quality Assurance Regulations, N.J.A.C. 7:14C. A 12 month moving mean and median shall be kept for all parameters specified under 40 CFR 503.13.
- (k) For the land application of residual the following reporting requirements shall apply in lieu of the reporting requirements of 40 CFR 503.18:
 - 1. The frequency of reporting to the Department of the records kept in accordance with (j) above shall be quarterly; and
 - 2. The frequency of reporting may be reduced by the Department after two years of reporting pursuant to (k)1 above, but in no case shall the frequency of reporting be less than once per year.

- (1) Out-of-State generators which transport residual into the State of New Jersey to be applied to the land shall, at a minimum, comply with all applicable requirements for the land application of residual pursuant to this subchapter and the following additional notice requirements:
 - 1. In order for the Department to determine the applicable requirements under this subchapter, any person who prepares residual out-of-State for land application in New Jersey shall provide notice to the Department at least 120 days prior to the date that person intends to commence operations for the land application of residual. This notice shall, at a minimum, include:
 - i. Information on each residual land application site as required to be submitted pursuant to (a)3 and (b)1ix above, as applicable;
 - ii. Copies of those permits and approvals issued by the permitting authority for the state in which the residual is prepared;
 - iii. The name, address and phone number of a contact for the permitting authority for the state in which the residual is prepared; and
 - iv. A listing of any brand names under which a marketable residual product will be distributed.
 - 2. In order for the Department to determine the applicable requirements under this subchapter, any person who currently prepares residual outof-state which is land applied in New Jersey and plans to continue such activities after May 5, 1997 shall provide notice to the Department by August 3, 1997. This notice shall, at a minimum, include:
 - i. Information on each residual land application site as required to be submitted pursuant to (a)3 and (b)1ix above, as applicable;
 - ii. Copies of those permits and approvals issued by the permitting authority for the state in which the residual is prepared;
 - iii. The name, address and phone number of a contact for the permitting authority for the state in which the residual is prepared; and
 - iv. A listing of any brand names under which a marketable residual product has been or will be distributed.
 - 3. Upon receipt of the notifications pursuant to (l)1 and 2 above, the Department shall notify the person who prepares residual of the applicable requirements of this subchapter.
 - 4. The Department shall waive some or all of the requirements for record keeping and reporting pursuant to (j) and (k) above if equivalent information is already kept and reported to the permitting authority for the out-of-State generator.

(m) See N.J.A.C. 7:14A-20.2(b) and (c) for situations in which the requirements in this section and in (b) above, respectively, do not apply.

7:14A-20.8 Surface disposal of sewage sludge

- (a) The storage of sewage sludge for more than six months constitutes surface disposal and is prohibited under this subchapter. However, this prohibition does not apply to sewage sludge that remains on the land for longer than six months when the person who prepares the sewage sludge demonstrates that the land on which the sewage sludge remains is not a surface disposal site. The demonstration shall explain why sewage sludge must remain on the land for longer than six months prior to final use or disposal, discuss the approximate time period during which the sewage sludge shall be used or disposed and provide documentation of ultimate management arrangements. Said demonstration shall be in writing, kept on file by the person who prepares sewage sludge and submitted to the Department upon request.
- (b) The owner and/or operator of a sewage sludge surface disposal site that has not implemented a Department approved closure plan prior to May 5, 1997 shall submit a surface disposal site closure plan in accordance with the requirements of (d) below by May 5, 1998.
- (c) The operating entity for a closed surface disposal site shall comply with the following management practices:
 - 1. The closure of a surface disposal site shall not restrict the flow of a base flood, unless otherwise approved by the Department under the Flood Hazard Area Control rules, N.J.A.C. 7:13;
 - 2. A closed surface disposal site shall not be located in an unstable area;
 - 3. The sewage sludge leachate collection system for a closed surface disposal site that has a liner and sewage sludge leachate collection system shall be operated and maintained for a minimum of five years after the Department approves closure of the surface disposal site. Leachate from a closed surface disposal site that has a liner and sewage sludge leachate collection system shall be collected and shall be disposed in accordance with applicable requirements for a minimum of five years after the Department approves closure of the surface disposal site;
 - 4. When a final cover is placed on a surface disposal site at closure, the concentration of methane gas in air in any structure within the surface disposal site shall not exceed 25 percent of the lower explosive limit for methane gas and the concentration of methane gas in air at the property line of the surface disposal site shall not exceed the lower

explosive limit for methane gas for a minimum of five years after the Department approves closure of the surface disposal site;

- 5. The owner of a surface disposal site shall provide written notification to the subsequent owner of the site that sewage sludge was placed on the land. As part of closure of the surface disposal site, a detailed description of the surface disposal site shall be recorded, along with the deed, with the appropriate county recording office. The description shall include the quantity and quality of sewage sludge disposed, a map indicating the location and depth of sewage sludge on the site, the depth and type of cover material (if applicable), the dates the surface disposal site was in use and all such other information as may be of interest to potential landowners, and shall remain in the legal record of the property in perpetuity;
- 6. A food crop, a feed crop, or a fiber crop shall not be grown on a closed surface disposal site, unless the owner/operator of the surface disposal site demonstrates to the Department that through management practices public health and the environment will be protected from any adverse effects of pollutants in sewage sludge when crops are grown;
- 7. Animals shall not be grazed on a closed surface disposal site, unless the owner/operator of the surface disposal site demonstrates to the Department that through management practices public health and the environment will be protected from any adverse effects of pollutants in sewage sludge when animals are grazed;
- 8. The operating entity must implement a ground water monitoring program in compliance with N.J.A.C. 7:9C; and
- 9. Public access to a closed surface disposal site shall be restricted for a minimum of five years after the Department approves closure of the surface disposal site.
- (d) In addition to the requirements of N.J.A.C. 7:14A-4 and 20.6, a surface disposal site closure plan shall include the following minimum information:
 - 1. The approximate date discharge to the surface disposal site ceased;
 - 2. A description of the surface disposal site including approximate acreage, and lateral and vertical extent of the surface disposal site;
 - 3. A discussion of the characteristics of the sewage sludge present in the surface disposal site, including:
 - i. The origin and volume of the sewage sludge;
 - ii. Dated quality analyses of the sewage sludge on a mg/kg dry weight basis including analyses of all constituents required to be analyzed in accordance with the Sludge Quality Assurance Regulations (SQAR), N.J.A.C. 7:14C. The number of samples

required to be analyzed shall be based on a statistical method as described in the Department's Field Sampling Procedures Manual, or as otherwise approved by the Department;

- iii. Additional quality analyses may be required if deemed necessary by the Department through evaluation of past SQAR reports or other relevant information, such as information on industrial discharges which might contribute constituents not normally evaluated under the SQAR program for domestic treatment works; and
- A discussion, or where applicable, analyses pursuant to 40 CFR 503.25, explaining how pathogen requirements or vector attraction reduction requirements were achieved;
- 4. A description of the proposed method of closure, including plans for the removal and/or in-situ closure of sewage sludge remaining at the surface disposal site, and an implementation schedule for each component of the closure plan;
- 5. For in-situ closure proposals, the following information:
 - i. If the surface disposal site has a liner and sewage sludge leachate collection system, a discussion of how the sewage sludge leachate collection system will be operated and maintained for a minimum of five years;
 - ii. A description of the system used to monitor for methane gas in the air in any structures within the surface disposal site and in the air at the property line of the surface disposal site for a minimum of five years, where applicable;
 - iii. A discussion of how public access to the surface disposal site will be restricted for a minimum of five years; and
 - A calculation of the surface run-off across the surface disposal site shall be prepared using a 24-hour, 25-year storm event with estimates of the effect of such run-off on treatment capacity, storage capacity, erosion, flooding, impacts on surface water quality and related details;
- 6. A soil erosion and sediment control plan certified by the local Soil Conservation District in accordance with the Soil Erosion and Sediment Control Act of 1975, or as amended (N.J.S.A. 4:24-39 et seq.), unless such planning is determined inapplicable by an agency with concurrent jurisdiction; and
- 7. Any other information required by N.J.A.C. 7:14A-7.14 for residual surface impoundments or residual infiltration-percolation lagoons.

7:14A-20.9 Fact sheet

- (a) In addition to the requirements of N.J.A.C. 7:14A-15.8, any fact sheet prepared under this subchapter shall contain the following:
 - 1. Any calculations or other necessary explanation of the derivation of specific conditions or standards for residual use or disposal, including a citation as to the applicable basis or standard for residual use or disposal;
 - 2. When the draft permit contains limitations set on a case-by-case basis pursuant to N.J.A.C. 7:14A-20.5, an explanation of the reasons why such conditions are appropriate;
 - 3. When appropriate, a sketch or detailed description of the location of the regulated activity described in the application; and
 - 4. For a draft permit that includes a notification plan under N.J.A.C. 7:14A-20.7(a)3, a brief description of the conditions of the permit that address approval of land application sites not identified at the time of permit application.

7:14A-20.10 Residual transfer stations

- (a) In addition to the information required by N.J.A.C. 7:14A-4 and 20.6, an applicant for a NJPDES permit for a residual transfer station shall submit application information for residual transfer stations required pursuant to the Statewide Sludge Management Plan and the applicable NJPDES Permit Technical Manual adopted pursuant to N.J.S.A. 13:1D-111.
- (b) Transfer of residual transport containers directly from vehicle to vehicle, including truck to train, for shipment to a residual management site or facility authorized by the permitting authority, is not considered a residual transfer station under this subchapter provided the following conditions are met:
 - 1. The contents of each residual transport container shall remain in the residual transport container during transfer between vehicles; and
 - 2. The transfer of residual transport containers shall not result in off-site nuisances, including, but not limited to, dust, odor and noise.

7:14A-20.11 Generic residual quality determinations

- (a) It shall be the responsibility of the person who prepares residual to ensure that all residual accepted for processing is compatible with the applicable residual quality limitations;
- (b) A person who prepares residual to be applied to the land may accept a residual which does not meet the residual quality limitations of 40 CFR

503.13 provided the residual is to be blended with other residual and the final residual to be applied to the land meets the appropriate pollutant limits under 40 CFR 503.13, subject to the following:

- 1. Written Department approval pursuant to (c) below is required to accept sewage sludge for blending from domestic treatment works sources not known at the time of permit application where the median or mean pollutant concentration (based on a 12 month moving mean and median) for the source exceeds the residual quality limitations imposed on the person who prepares the residual pursuant to 40 CFR 503.13; and
- 2. Written Department approval pursuant to (c) below is required to accept residual from industrial treatment works sources not known at the time of permit application regardless of quality.
- (c) The following information shall be submitted in order to obtain a generic residual quality determination:
 - 1. For requests to process specific residuals, information shall be provided on the characteristics of the residual and analyses conducted in accordance with N.J.A.C. 7:14A-20.7(a)1 for the previous 12 month period, which shall be analyzed for mean, median and range for each parameter; and
 - 2. For blending requests, a process schematic shall be provided on how complete blending of residuals will be achieved as well as technical documentation on achievement of residual quality limitations pursuant to 40 CFR 503.13 (including mass balance calculations).

N.J.A.C. 7:14A-1

POLLUTANT DISCHARGE ELIMINATION SYSTEM

SUBCHAPTER 21. REQUIREMENTS FOR INDIRECT USERS

Statutory authority: N.J.S.A. 13:1B-3 et seq., 13:1D-1 et seq., 13:1E-1 et seq., 26-2C-1 et seq., 58:10-23.11 et seq., 58:10A-1 et seq., 58:11-49 et seq., 58:11-64 et seq., 58:11A-1 et seq., and 58:12A-1 et seq.

Date last amended: October 1, 2007

For regulatory history and effective dates see the New Jersey Administrative Code Table of Contents

SUBCHAPTER 21. REQUIREMENTS FOR INDIRECT USERS

7:14A-21.1 Purpose and scope

- (a) This subchapter establishes requirements to:
 - 1. Establishes requirements to prevent the introduction of pollutants into a local agency's treatment works which may:
 - i. Interfere with the operation of the local agency's treatment works;
 - ii. Pass through or would otherwise be incompatible with the local agency's treatment works; or
 - iii. Interfere with the local agency's chosen method of sludge management;
 - 2. Sets forth the minimum discharge criteria and reporting requirements for all indirect users; and
 - 3. Sets forth the specific requirements for an individual NJPDES-SIU permit for a significant indirect user as defined in N.J.A.C. 7:14A-1.2 discharging into a non-delegated local agency's treatment works.
- (b) The Department adopts and incorporates herein by reference the General Pretreatment Regulations for Existing and New Sources of Pollution, 40 CFR 403, and National Pretreatment Standards in 40 CFR chapter I, subchapter N, as amended and supplemented.

7:14A-21.2 Minimum requirements for all indirect users

- (a) The following conditions apply to all indirect users:
 - 1. The prohibitions, as set forth in 40 CFR Part 403.5, against the introduction into a local agency's treatment works any of the following:
 - i. Any pollutant(s) which causes pass through or interference;
 - Any pollutants which create a fire or explosion hazard in the local agency's treatment works including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21;
 - iii. Any pollutants which will cause corrosive structural damage to

the local agency's treatment works, but in no case a discharge with pH lower than 5.0, unless the treatment works is specifically designed to accommodate such discharges;

- iv. Any solid or viscous pollutants in amounts which will cause obstruction to the flow in the local agency's treatment works resulting in interference;
- v. Any pollutant, including oxygen demanding pollutants (for example, BOD) released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the local agency's treatment works;
- vi. Heat in amounts which will inhibit biological activity at the local agency's treatment works resulting in interference, but in no case heat in such quantities that the temperature at the local agency's treatment works exceeds 40 degrees Celsius (104 degrees Fahrenheit) unless the Department, upon request of the local agency, approves alternative temperature limits;
- vii. Petroleum oil, nonbiodegradable cutting oil, or any product of mineral oil origin in amounts that will cause interference or pass through;
- viii. Any pollutants which result in the presence of toxic gases, vapors, or fumes within the local agency's treatment works in a quantity that may cause acute worker health and safety problems; or
- ix. Any trucked or hauled pollutant, except at discharge points designated by the local agency.
- 2. The State pretreatment standards for petroleum hydrocarbons pursuant to N.J.A.C. 7:14A-12; and
- 3. Local limits developed by the local agency pursuant to N.J.A.C. 7:14A-19.7.
- (b) All indirect users shall notify the local agency immediately of all discharges that could cause problems to the local agency's treatment works, including any slug discharge loading.
- (c) The penalties, including mandatory minimum penalties, and the settlement restrictions applicable to any civil administrative penalty assessment, as specified under N.J.A.C. 7:14-8, are fully applicable to violations by indirect users occurring on or after January 19, 1999.

7:14A-21.3 Additional requirements for all significant indirect users

- (a) Within 60 days after the effective date of a pretreatment standard for a subcategory under which an indirect user may be included, the indirect user may request that the control authority provide written determination on whether the indirect user falls within that particular subcategory. If an existing indirect user adds or changes a process or operation which may be included in a subcategory, the existing indirect user shall request this determination prior to commencing discharge from the added or changed process or operation. A new source shall request this determination prior to commencing discharge. Each request shall include:
 - 1. A description of which subcategories might be applicable;
 - 2. Evidence and reasons why a particular subcategory is applicable and why others are not applicable; and
 - 3. The following certification over the signature of the person submitting the request:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- (b) Within 180 days after the effective date of a categorical pretreatment standard or 180 days after the final decision by the control authority on the categorical determination request submitted under (a) above, whichever is later, each existing indirect user subject to a categorical pretreatment standard and currently discharging or scheduled to discharge to a local agency shall submit to the control authority a baseline report. The baseline report shall contain the information specified in (b)1 through 7 below. New sources and sources that became users subsequent to the promulgation of an applicable categorical standard shall submit the information specified in (b)1 through 5 below.
 - 1. Identifying information, specifically the name and address of the facility and including the name of the operator and owners;
 - 2. A list of any environmental control permits held by or for the facility;

- 3. A brief description of the nature, average rate of production, and Standard Industrial Classification of the operation(s) carried out by such indirect user. This description shall include a schematic process diagram which indicates points of discharge to the local agency from the regulated processes;
- 4. Information showing the measured average daily and maximum daily flow, in gallons per day, to the local agency's treatment works from each of the following:
 - i. Regulated process streams; and
 - Other streams as necessary to allow use of the combined wastestream formula of N.J.A.C. 7:14A-21.4(c). The control authority may accept verifiable estimates of these flows instead of measured flows where justified by cost or feasibility considerations;
- 5. Pollutant levels measured as follows:
 - i. The indirect user shall identify the pretreatment standards applicable to each regulated process;
 - ii. The indirect user shall submit the results of sampling and analysis identifying the nature and concentration (or mass, where required by the standard or control authority) of regulated pollutants in the discharge from each regulated process. Both daily maximum and average concentration (or mass, where required) shall be reported. The sample shall be representative of daily operations;
 - iii. A minimum of four grab samples shall be used for pH, cyanide, total phenols, oil and grease, sulfide, and volatile organics. For all other pollutants, 24-hour composite samples shall be obtained through flow-proportional composite sampling techniques where feasible. The control authority shall waive flow-proportional composite sampling for any indirect user that demonstrates that flow-proportional sampling is infeasible. In such cases, samples shall be obtained through time-proportional composite sampling techniques or through a minimum of four grab samples where the indirect user demonstrates that this shall provide a representative sample of the effluent being discharged;
 - iv. The indirect user shall take a minimum of one representative sample to compile data necessary to comply with the requirements of this paragraph;
 - v. Samples shall be taken immediately downstream from

pretreatment facilities if such exist or immediately downstream from the regulated process if no pretreatment exists. If other wastewaters are mixed with the regulated wastewater prior to pretreatment the indirect user shall measure the flows and concentrations necessary to allow use of the combined wastestream formula of N.J.A.C. 7:14A-21.4(c) in order to evaluate compliance with the pretreatment standards. Where an alternative concentration or mass limit has been calculated in accordance with N.J.A.C. 7:14A-21.4(c) this adjusted limit along with supporting data shall be submitted to the control authority;

- vi. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto. Where 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, or where the Department determines that the 40 CFR Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analysis shall be performed using validated analytical methods or any other applicable sampling and analytical procedures, including procedures suggested by the local agency or other parties, approved by the Department;
- vii. The control authority may allow the submission of a baseline report which utilizes only historical data so long as the data are sufficient to determine the need for industrial pretreatment measures; and
- viii. The baseline report shall indicate the time, date and place, of sampling, and methods of analysis, and shall contain a certification from an authorized representative that such sampling and analysis is representative of normal work cycles and expected pollutant discharges to the local agency's treatment works;
- 6. A statement, reviewed by an authorized representative of the indirect user and certified to by a qualified professional, as to whether pretreatment standards are being met on a consistent basis, and, if not, whether additional operation and maintenance and/or additional pretreatment is required for the indirect user to meet the pretreatment standards and requirements; and
- 7. If additional pretreatment and/or operation and maintenance shall be required to meet the pretreatment standards, the shortest compliance schedule under which the indirect user shall provide such additional pretreatment and/or operation and maintenance shall be submitted. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard.

- i. Where the indirect user's categorical pretreatment standard has been modified by the combined wastestream formula pursuant to N.J.A.C. 7:14A-21.4(c) and/or a fundamentally different factors variance pursuant to N.J.A.C. 7:14A-21.5 at the time the indirect user submits the baseline report required under this subsection, the information required under (b)6 above and this paragraph shall pertain to the modified limits;
- ii. If the categorical pretreatment standard is modified by the combined wastestream formula pursuant to N.J.A.C. 7:14A-21.4(c) and/or a fundamentally different factors variance pursuant to N.J.A.C. 7:14A-21.5 after the indirect user submits the baseline report required under this subsection, any necessary amendments to the information required under (b)6 above and this paragraph shall be submitted by the indirect user to the control authority within 60 days after the modified limit is approved.
- (c) Existing sources shall comply with categorical pretreatment standards within three years of the date the standard is effective unless a sooner compliance deadline is specified in the applicable subpart of 40 CFR chapter I, subchapter N. Existing sources which become indirect users subsequent to promulgation of an applicable categorical pretreatment standard shall be considered existing indirect users except where such sources meet the definition of a "new source" under N.J.A.C. 7:14A-1.2. New sources shall install and have in operating condition, and shall "start-up" all pollution control equipment required to meet applicable pretreatment standards, before beginning to discharge. Within the shortest feasible time, not to exceed 90 days from commencement of discharge, new sources shall meet all applicable pretreatment standards.
- (d) As conditions to any compliance schedule for meeting categorical pretreatment standards pursuant to (b)7 above, the indirect user shall:
 - 1. Incorporate in the compliance schedule increments of progress described as dates for the commencement and completion of milestones in the construction and operation of additional pretreatment as required for the indirect user to meet the applicable categorical pretreatment standards (for example, hiring an engineer, completing preliminary plans, completing final plans, executing contract for major components, commencing construction, completing construction). No such increment shall exceed nine months; and
 - 2. Not later than 14 days following each date in the compliance schedule and the final date for compliance, submit a progress report to the control authority including, at a minimum, whether or not the indirect

user met the increment of progress on such date and, if not, the anticipated date of compliance with such increment of progress, the reason for delay, and the steps being taken by the indirect user to resume the construction schedule established. In no event shall more than nine months elapse between such progress reports to the control authority.

- (e) Within 90 days following the date for final compliance with applicable categorical pretreatment standards or, in the case of a new source, within 90 days following commencement of the introduction of wastewater into the local agency's treatment works, any indirect user subject to pretreatment standards and requirements shall submit to the control authority a report containing the information described in (b)4 through 6 above. For indirect users subject to equivalent mass or concentration limits established by the control authority in accordance with the procedures in N.J.A.C. 7:14A-21.4(c), this report shall contain a reasonable measure of the indirect user's long term production rate. For all other indirect users subject to categorical pretreatment standards expressed in terms of allowable pollutant discharge per unit of production (or other measure of operation), this report shall include the indirect user's actual production during the appropriate sampling period.
- (f) Periodic reports on continued compliance shall be submitted as follows:
 - 1. Any indirect user subject to a categorical pretreatment standard, after the compliance date of such pretreatment standard, or, in the case of a new source, after commencement of the discharge into the local agency, shall submit to the control authority during the months of June and December, unless required more frequently in the pretreatment standard or by the control authority or the Department, a report indicating the nature and concentration of pollutants in the effluent which are limited by such categorical pretreatment standards. This report shall include a record of measured or estimated average and maximum daily flows for the reporting period for the discharge reported in (b)4 above except that the control authority may require more detailed reporting of flows. At the discretion of the control authority and in consideration of such factors as local high or low flow rates, holidays, and budget cycles, the control authority may approve the designation of months other than June and December during which the above reports are to be submitted.
 - 2. Where the control authority has imposed mass limitations on indirect users as provided for by N.J.A.C. 7:14A-21.4(c), the report required under (f)1 above shall indicate the mass of pollutants regulated by pretreatment standards in the discharge from the indirect user.
 - 3. For indirect users subject to equivalent mass or concentration limits

established by the control authority in accordance with the procedures in N.J.A.C. 7:14A-21.4(a), the report required under (f)1 above shall contain a reasonable measure of the indirect user's long term production rate. For all other indirect users subject to categorical pretreatment standards expressed only in terms of allowable pollutant discharge per unit of production (or other measure of operation), the report required under (f)1 above shall include the indirect user's actual average production rate for the reporting period.

- (g) Monitoring and analysis to demonstrate continued compliance shall be conducted as follows:
 - The reports required under (b), (e) and (f) above shall contain the results of sampling and analysis of the discharge, including the flow and the nature and concentration, or production and mass where requested by the control authority, of pollutants contained therein which are limited by the applicable pretreatment standards. This sampling and analysis may be performed by the control authority in lieu of the indirect user. Where the control authority performs the required sampling and analysis in lieu of the indirect user, the indirect user will not be required to submit the compliance certification required under (b)6 and (e) above. In addition, where the control authority itself collects all the information required for the report, including flow data, the indirect user will not be required to submit the report required under (b), (e) and (f) above.
 - 2. If sampling performed by an indirect user indicates a violation of pretreatment standards, the indirect user shall notify the control authority within 24 hours of becoming aware of the violation. The indirect user shall repeat the sampling and analysis and submit the results of the repeat analysis to the control authority within 30 days after becoming aware of the violation, except the indirect user is not required to resample if:
 - i. The control authority conducts sampling of the indirect user's discharge at a frequency of at least once per month; or
 - ii. The control authority conducts sampling of the indirect user's discharge between the time when the indirect user performs its initial sampling and the time when the indirect user receives the results of this sampling.
 - 3. The reports required under (f) above shall be based upon data obtained through appropriate sampling and analysis performed during the period covered by the report, which data are representative of conditions occurring during the reporting period. The control authority shall

require that frequency of monitoring necessary to assess and ensure compliance by indirect users with applicable pretreatment standards and requirements.

- 4. All analyses shall be performed in accordance with procedures contained in 40 CFR Part 136, as amended, or with any other test procedures approved by the Department. Sampling shall be performed in accordance with the techniques approved by the Department. Where 40 CFR Part 136 does not include sampling or analytical techniques for the pollutants in question, or where the Department determines that the 40 CFR Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analyses shall be performed using validated analytical methods or any other sampling and analytical procedures, including procedures suggested by the control authority, local agency or the indirect user, approved by the Department.
- 5. If an indirect user subject to the reporting requirement in (f) above monitors any pollutant more frequently than required by the control authority, using the procedures prescribed in (g)4 above, the results of this monitoring shall be included in the report.
- (h) Significant indirect users as defined in N.J.A.C. 7:14A-1.2 shall submit to the control authority at least once each month (on dates specified by the control authority) a description of the nature, concentration, and flow of the pollutants required by the control authority to be reported. These reports shall be based on sampling and analysis performed in the period covered by the report, and in accordance with the techniques described in 40 CFR Part 136, as amended. Where 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, or where the Department determines that the 40 CFR Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analysis shall be performed using validated analytical methods or any other applicable sampling and analytical procedures, including procedures suggested by the control authority, local agency or the indirect user, approved by the Department. This sampling and analysis may be performed by the control authority in lieu of the significant indirect user. Where the control authority itself collects all the information required for the report, the indirect user will not be required to submit the report.
- (i) Requirements for notification regarding hazardous waste are as follows:
 - 1. The indirect user shall notify the local agency, the USEPA Regional Waste Management Division Director, and the Department's Division of Solid and Hazardous Waste in writing of any discharge into the local agency's treatment works of a substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR Part 261. Such

notification shall include the name of the hazardous waste as set forth in 40 CFR Part 261, the USEPA hazardous waste number, and the type of discharge (continuous, batch, or other). If the indirect user discharges more than 100 kilograms of such waste per calendar month to the local agency's treatment works, the notification shall also contain the following information to the extent such information is known and readily available to the indirect user: an identification of the hazardous constituents contained in the wastes, an estimation of the mass and concentration of such constituents in the wastestream discharged during that calendar month, and an estimation of the mass of constituents in the wastestream expected to be discharged during the following 12 months. Indirect users who commence discharging after the effective date of this chapter shall provide the notification no later than 180 days after the discharge of the listed or characteristic hazardous waste. Any notification under this paragraph need be submitted only once for each hazardous waste discharged. However, notification of changed discharges must be submitted under (j) below. The notification requirement in this section does not apply to pollutants already reported under the self-monitoring requirements of (b), (e) and (f) above.

- 2. Dischargers are exempt from the requirements of (i)1 above during a calendar month in which they discharge no more than 15 kilograms of hazardous wastes, unless the wastes are acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e). Discharge of more than 15 kilograms of non-acute hazardous wastes in a calendar month, or of any quantity of acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e), requires a one-time notification. Additional notification is not required in subsequent months during which the indirect user discharges more than such quantities of any hazardous waste.
- 3. In the case of any new promulgated regulation under section 3001 of RCRA or the State's Solid Waste Management Act identifying additional characteristics of hazardous waste or listing any additional substance as a hazardous waste, the indirect user shall notify the local agency, the USEPA Regional Waste Management Waste Division Director, and the Division of Solid and Hazardous Waste of the discharge of such substance within 90 days of the effective date of such regulation.
- 4. In the case of any notification made under this subsection, the indirect user shall certify that it has a program in place to reduce the volume and toxicity of hazardous waste generated to the degree it has determined to be economically practical.
- (j) All indirect users shall promptly notify the local agency in advance of any

substantial change in the volume or character of pollutants in their discharge, including the listed or characteristic hazardous wastes for which the indirect user has submitted initial notification (i) above.

7:14A-21.4 Categorical standards, calculation of equivalent and/or alternative limits

- (a) When the categorical pretreatment standards are expressed in terms of production, equivalent effluent limitations shall be calculated as follows:
 - 1. When the limits in a categorical pretreatment standard are expressed only in terms of mass of pollutant per unit of production, the control authority may convert the limits to equivalent limitations expressed either as mass of pollutant discharged per day or effluent concentration for purposes of calculating effluent limitations applicable to individual indirect users.
 - 2. A control authority calculating equivalent mass-per-day limitations under (a)1 above shall calculate such limitations by multiplying the limits in the categorical pretreatment standard by the indirect user's average rate of production. This average rate of production shall be based not upon the designed production capacity but rather upon a reasonable measure of the indirect user's actual long-term daily production, such as the average daily production during a representative year. For new sources, actual production shall be estimated using projected production.
 - 3. A control authority calculating equivalent concentration limitations under (a)1 above shall calculate such limitations by dividing the mass limitations derived under (a)2 above by the average daily flow rate of the indirect user's regulated process wastewater. This average daily flow rate shall be based upon a reasonable measure of the indirect user's actual long-term average flow rate, such as the average daily flow rate during the representative year. For new sources, flow rate shall be estimated using projected flow rate.
 - 4. Equivalent limitations calculated in accordance with (a)2 and 3 above shall be deemed pretreatment standards for the purposes of section 307(d) of the Federal Act and this subchapter. Indirect users will be required to comply with the equivalent limitations in lieu of the promulgated categorical standards from which the equivalent limitations were derived.
 - 5. When a categorical pretreatment standard that specifies one limit for calculating maximum daily discharge limitations and a second limit for calculating maximum monthly average, or four-day average,

limitations are applied, the same production or flow figure shall be used in calculating both types of equivalent limitations.

- 6. Any indirect user operating under a control mechanism incorporating equivalent mass or concentration limits calculated from a production based standard shall notify the control authority within two business days after the indirect user has a reasonable basis to know that the production level will significantly change within the next calendar month. Any indirect user that does not notify the control authority of such anticipated change shall be required to meet the mass or concentration limits in its IPP permit that were based on the original estimate of the long term average production rate.
- (b) Except where expressly authorized to do so by an applicable pretreatment standard or requirement, no indirect user shall increase the use of process water, or in any other way attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with a pretreatment standard or requirement. The control authority may impose mass limitations on indirect users which are using dilution to meet applicable pretreatment standards or requirements, or in other cases where the imposition of mass limitations is appropriate.
- (c) Where process effluent is mixed prior to treatment with wastewaters other than those generated by the regulated process, fixed alternative categorical limits shall be derived by the control authority or by the indirect user with the written concurrence of the control authority. These alternative categorical limits shall be applied to the mixed effluent. When deriving alternative categorical limits, the control authority or indirect user shall calculate both an alternative daily maximum value using the daily maximum value(s) specified in the appropriate categorical pretreatment standard(s) and an alternate monthly or consecutive sampling day average value using the monthly or consecutive sampling day average value(s) specified in the appropriate categorical pretreatment standard(s). The indirect user shall comply with the alternative categorical daily maximum and monthly average or consecutive sampling day limits fixed by the control authority, in the indirect user's permit. Modification is authorized whenever there is a material or significant change in the values used in the calculation to fix alternative categorical limits for the regulated pollutant. An indirect user shall immediately report any such material or significant change to the control authority. Where appropriate, alternative categorical limits shall be re-calculated within 30 days of being informed of changes by the indirect user.
 - 1. For purposes of these formulas, the average daily flow means a reasonable measure of the average daily flow for a 30-day period. For new sources, flows shall be estimated using projected values. The alternative limit for a specified pollutant shall be derived by the use of

either of the following formulas:

i. Alternative concentration limit.

$$C_{T} = \frac{\sum_{i=1}^{N} C_{i} F_{i}}{\sum_{i=1}^{N} F_{i}} * \frac{F_{T} - F_{D}}{F_{T}}$$

where

 C_{T} = the alternative concentration limit for the combined wastestream.

Ci= the categorical pretreatment standard concentration limit for a pollutant in the regulated stream i.

Fi= the average daily flow (at least a 30-day average) of stream i to the extent that it is regulated for such pollutant.

 F_{p} = the average daily flow (at least a 30-day average) from:

- (1) Boiler blowdown streams, non-contact cooling streams, stormwater streams, and demineralizer backwash streams, provided, however, that where such streams contain a significant amount of a pollutant, and the combination of such streams, prior to treatment, with an indirect user's regulated process wastestream(s) will result in a substantial reduction of that pollutant, the control authority, upon application of the indirect user, may exercise its discretion to determine whether such stream(s) shall be classified as diluted or unregulated. In its permit application to the control authority, the indirect user shall provide engineering, production, sampling and analysis and such other information so that the control authority can make its determination; or
- (2) Sanitary wastestreams where such streams are not regulated by a categorical pretreatment standard; or
- (3) From any process wastestreams which were or could have been entirely exempted from categorical pretreatment standards pursuant to paragraph 8 of the NRDC v. Costle Consent Decree (12 ERC 1833) for one or more of the following reasons :

- (A) The pollutants of concern are not detectable in the effluent from the indirect user (paragraph (8)(a)(iii)) and/or as specified in the appropriate categorical standards;
- (B) The pollutants of concern are present only in trace amounts and are neither causing nor likely to cause toxic effects (paragraph (8)(a)(iii)) and/or as specified in the appropriate categorical pretreatment standards;
- (C) The pollutants of concern are present in amounts too small to be effectively reduced by technologies known to the Administrator (paragraph (8)(a)(iii)); or
- (D) The wastestream contains only pollutants which are compatible with the local agency's treatment works (paragraph (8)(b)(i)) and/or as specified in the appropriate categorical standards.
- F_{T} = The average daily flow (at least a 30-day average) through the indirect user's treatment works (includes F_{i} , F_{D} and unregulated streams).
- N = The total number of regulated streams.
- ii. Alternative mass limit.

$$M_{T} = \sum_{i=1}^{N} M_{i} * \frac{F_{T} - F_{D}}{\sum_{i=1}^{N} F_{i}}$$

where

- M_{T} = the alternative mass limit for a pollutant in the combined wastestream.
- M_i = the categorical pretreatment standard mass limit for a pollutant in the regulated stream i (the categorical pretreatment mass limit multiplied by the appropriate measure of production).
- F_i = the average flow (at least a 30-day average) of stream i to the extent that it is regulated for such pollutant.
- F_{p} = the average daily flow (at least a 30-day average) from:
- (1) Boiler blowdown streams, non-contact cooling streams,

stormwater streams, and demineralizer backwash streams, provided, however, that where such streams contain a significant amount of a pollutant, and the combination of such streams, prior to treatment, with an indirect user's regulated process wastestream(s) will result in a substantial reduction of that pollutant, the control authority, upon application of the indirect user, may exercise its discretion to determine whether such stream(s) shall be classified as diluted or unregulated. In its permit application to the control authority, the indirect user shall provide engineering, production, sampling and analysis and such other information so that the control authority can make its determination; or

- (2) Sanitary wastestreams where such streams are not regulated by a categorical pretreatment standard; or
- (3) From any process wastestreams which were or could have been entirely exempted from categorical pretreatment standards pursuant to paragraph 8 of the NRDC v. Costle Consent Decree (12 ERC 1833) for one or more of the following reasons:
 - (A) The pollutants of concern are not detectable in the effluent from the indirect user (paragraph (8)(a)(iii)) and/or as specified in the appropriate categorical standards;
 - (B) The pollutants of concern are present only in trace amounts and are neither causing nor likely to cause toxic effects (paragraph (8)(a)(iii)) and/or as specified in the appropriate categorical standards;
 - (C) The pollutants of concern are present in amounts too small to be effectively reduced by technologies known to the Administrator (paragraph (8)(a)(iii)); or
 - (D) The wastestream contains only pollutants which are compatible with the local agency's treatment works (paragraph 8(b)(i)) and/or as specified in the appropriate categorical standards.
- F_{T} = The average flow (at least a 30-day average) through the indirect user's treatment works (includes F_{i} , F_{D} and unregulated streams).

N = The total number of regulated streams.

- 2. An alternative pretreatment limit shall not be used if such alternative limit is below the analytical detection limit for any of the regulated pollutants.
- 3. The indirect user shall monitor, to ensure compliance with the alternative categorical limits, in accordance with the requirements of N.J.A.C. 7:14A-21.3(g).
- 4. Where a treated regulated process wastestream is combined prior to treatment with wastewaters other than those generated by the regulated process, the indirect user may monitor either the segregated process wastestream or the combined wastestream for the purpose of determining compliance with applicable pretreatment standards. If the indirect user monitors the segregated process wastestream, it shall apply the applicable categorical pretreatment standard. If the indirect user chooses to monitor the combined wastestream, it shall apply an alternative discharge limit calculated using the combined wastestream formula as provided in this section. The indirect user may change monitoring points only after receiving approval from the control authority. The control authority shall ensure that any change in an indirect user's monitoring point(s) will not allow the indirect user to substitute dilution for adequate treatment to achieve compliance with applicable standards.
- (d) Categorical pretreatment standards may be adjusted to reflect the presence of pollutants in the indirect user's intake water as follows:
 - 1. Any indirect user wishing to obtain credit for intake pollutants must submit a written request to the control authority. Upon such request, the applicable standard will be calculated on a "net" basis (that is, adjusted to reflect credit for pollutants in the intake water) if the requirements of (d)2 and 3 below are met.
 - 2. Criteria adjusting categorical pretreatment standards to reflect the presence of pollutants in the indirect user's intake water are as follows:
 - i. The indirect user shall demonstrate that the control system it proposes or uses to meet applicable categorical pretreatment standards would, if properly installed and operated, meet the standards in the absence of pollutants in the intake waters.
 - ii. Credit for generic pollutants such as biochemical oxygen demand (BOD), total suspended solids (TSS), and oil and grease shall not be granted unless the indirect user demonstrates that the

constituents of the generic measure in the indirect user's effluent are substantially similar to the constituents of the generic measure in the intake water or unless appropriate additional limits are placed on process water pollutants either at the outfall or elsewhere.

- iii. Credit shall be granted only to the extent necessary to meet the applicable categorical pretreatment standard(s), up to a maximum value equal to the influent value. Additional monitoring may be necessary to determine eligibility for credit and compliance with standard(s) adjusted under this section.
- iv. Credit shall be granted only if the indirect user demonstrates that the intake water is drawn from the same body of water as that into which the local agency's treatment works discharges. The control authority may waive this requirement if it finds that no environmental degradation will result.
- 3. The applicable categorical pretreatment standards contained in 40 CFR subchapter N specifically provide that they shall be applied on a net basis.

7:14A-21.5 Variance from categorical pretreatment standards for fundamentally different factors

- (a) Any interested person believing that factors relating to an indirect user are fundamentally different from the factors considered during development of a categorical pretreatment standard applicable to that indirect user and that the existence of those factors justifies a different discharge limit than specified in the applicable categorical pretreatment standard may request a fundamentally different factors variance under this section.
 - 1. A request for a variance based upon fundamentally different factors shall be approved only if:
 - i. There is an applicable categorical pretreatment standard which specifically controls the pollutant for which alternative limits have been requested;
 - ii. Factors relating to the discharge controlled by the categorical pretreatment standard are fundamentally different from the factors considered by USEPA in establishing the standards; and
 - iii. The request for a variance is made in accordance with the procedural requirements of (e) and (f) below.
 - 2. A variance request for the establishment of limits less stringent than

required by the standard shall be approved only if:

- i. The alternative limit requested is no less stringent than justified by the fundamental difference;
- ii. The alternative limit will not result in a violation of any prohibition established under N.J.A.C. 7:14A-21.2(a)1;
- iii. The alternative limit will not result in a non-water quality environmental impact (including energy requirements) fundamentally more adverse than the impact considered during development of the pretreatment standards; and
- iv. Compliance with the standards (either by using the technologies upon which the standards are based or by using other control alternatives) would result in either:
 - (1) A removal cost (adjusted for inflation) wholly out of proportion to the removal cost considered during development of the standards; or
 - (2) A non-water quality environmental impact (including energy requirements) fundamentally more adverse than the impact considered during development of the standards.
- 3. A variance request for the establishment of limits more stringent than required by the standards shall be approved only if:
 - i. The alternative limit request is no more stringent than justified by the fundamental difference; and
 - ii. Compliance with the alternative limit would not result in either:
 - (1) A removal cost (adjusted for inflation) wholly out of proportion to the removal cost considered during development of the standards; or
 - (2) A non-water quality environmental impact (including energy requirements) fundamentally more adverse than the impact considered during development of the standards.
- (b) Factors which may be considered fundamentally different are:
 - 1. The nature or quality of pollutants contained in the raw waste load of the indirect user's process wastewater:
 - 2. The volume of the indirect user's process wastewater and effluent

discharged;

- 3. The non-water quality environmental impact of control and treatment of the indirect user's raw waste load;
- 4. The energy requirements of the application of control and treatment technology;
- 5. The age, size, land availability, and configuration as they relate to the indirect user's equipment or facilities, processes employed, process changes, and engineering aspects of the application of control technology; and
- 6. The cost of compliance with required control technology.
- (c) A variance request or portion of such a request under this section shall not be granted on any of the following grounds:
 - 1. The feasibility of installing the required waste treatment equipment within the time the Act allows;
 - 2. The assertion that the standards cannot be achieved with the appropriate waste treatment facilities installed, if such assertion is not based on factors listed in (b) above;
 - 3. The indirect user's ability to pay for the required waste treatment; or
 - 4. The impact of a discharge on the quality of the local agency's receiving waters.
- (d) Nothing in this section shall be construed to impair the right of any local agency to impose more stringent limitations than required by Federal law.
- (e) Requests for a variance and supporting information shall be submitted in writing to the Department no later than 180 days after the date on which a categorical pretreatment standard is published in the <u>Federal Register</u> for a request based on a categorical pretreatment standard promulgated on or after February 4, 1987.
 - 1. Where the indirect user has requested a categorical determination pursuant to N.J.A.C. 7:14A-21.3(a), the indirect user may elect to await the results of the categorical determination before submitting a variance request under this section. Where the indirect user so elects, he or she must submit the variance request within 30 days after a final decision has been made on the categorical determination.
- (f) Written variance requests shall include:

- 1. The name and address of the person making the request;
- 2. Identification of the interest of the requester which is affected by the categorical pretreatment standard for which the variance is requested;
- 3. Identification of the local agency currently receiving the waste from the indirect user for which alternative discharge limits are requested;
- 4. Identification of the categorical pretreatment standards which are applicable to the indirect user;
- 5. A list of each pollutant or pollutant parameter for which an alternative discharge limit is sought;
- 6. The alternative discharge limits proposed by the requester for each pollutant or pollutant parameter identified pursuant to (f)5 above;
- 7. A description of the indirect user's existing water pollution control facilities;
- 8. A schematic flow representation of the indirect user's water system including water supply, process wastewater systems, and points of discharge; and
- 9. A statement of facts clearly establishing why the variance request should be approved, including detailed support data, documentation, and evidence necessary to fully evaluate the merits of the request, e.g., technical and economic data collected by the USEPA and used in developing each pollutant discharge limit in the pretreatment standard.
- (g) The Department shall act only on written requests for variances that contain all of the information required pursuant to (f) above. Persons who have made incomplete submissions will be notified by the Department that their requests are deficient and unless the time period is extended, will be given up to 30 days to remedy the deficiency. If the deficiency is not corrected within the time period allowed by the Department, the request for a variance shall be denied.
- (h) Upon receipt of a complete request, the Department shall provide public notice of receipt, opportunity to review the submission, and opportunity to comment.
 - 1. The public notice shall be published in a manner designed to inform interested and potentially interested persons of the request, and. shall include mailing notices to:
 - i. The local agency into whose treatment works the indirect user

requesting the variance discharges;

- ii. Adjoining states whose waters may be affected;
- Agencies responsible for areawide Water Quality Management Plan, Federal and State fish, shellfish and wildlife resource agencies; and
- iv. Any other person or group who has requested individual notice, including those on appropriate mailing lists.
- 2. The public notice shall provide for a period not less than 30 days following the date of the public notice during which time interested persons may review the request and submit written comments on the request.
- 3. Following the comment period, the Department will make a determination on the request, taking into consideration any comments received. Notice of this final decision shall be provided to the requester and the indirect user for which the variance is requested, if different, the local agency into whose treatment works the indirect user discharges and all persons who submitted comments on the request.
- (i) Review of requests by the Department is as follows:
 - 1. Where the Department finds that fundamentally different factors do not exist, it shall deny the request and notify the requester (and indirect user where they are not the same) and the local agency of the denial.
 - 2. Where the Department finds that fundamentally different factors do exist, it shall forward the request, with a recommendation that the request be approved, to the USEPA Administrator. (Review of the variance request by USEPA is governed by 40 CFR Part 403.13(l)).
- (j) Requests for an adjudicatory hearing shall be as follows:
 - 1. If the Department denies the variance request, the requester may request an adjudicatory hearing pursuant to N.J.A.C. 7:14A-17.
 - 2. If USEPA denies the variance request, the requester may seek relief pursuant to 40 CFR Part 403.13(m).

7:14A-21.6 Bypass

(a) An indirect user may allow any bypass to occur which does not cause pretreatment standards to be violated, but only if such bypass is for essential maintenance to ensure efficient operation. Such bypasses are not subject to

(b) and (c) below.

- (b) Notice of bypass shall be as follows:
 - 1. If an indirect user knows in advance of the need for a bypass, it shall submit prior notice to the control authority, if possible at least 10 days before the date of the bypass.
 - 2. An indirect user shall inform the control authority by telephone or in person of an unanticipated bypass that exceeds applicable pretreatment standards within 24 hours from the time the indirect user becomes aware of the bypass. A written submission shall also be provided within five days of the time the indirect user becomes aware of the bypass. The written submission shall contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times, and, if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass. The control authority may waive the written report on a case-by-case basis if the information of the bypass by telephone or in person was received within 24 hours of the indirect user's becoming aware of the bypass.
- (c) Bypass is prohibited, and the control authority may take enforcement action against an indirect user for a bypass, unless:
 - 1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - 2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - 3. The indirect user notified the control authority as required under (b) above.
- (d). The control authority may approve an anticipated bypass, after considering its adverse effects, if the control authority determines that it will meet the conditions in (c)1 through 3 above.

7:14A-21.7 Additional requirements for facilities which meet the SIU definition and discharge to a delegated local agency's treatment works

Any indirect user which meets the SIU definition in N.J.A.C. 7:14A-1.2 and

discharges or plans to discharge to a delegated local agency's treatment works shall obtain an IPP permit from that delegated local agency. Delegated local agencies are required pursuant to N.J.A.C. 7:14A-19.3(c)2 to issue IPP permits to such indirect users.

7:14A-21.8 Additional requirements for facilities which meet the SIU definition and discharge to a non-delegated local agency's treatment works

An indirect user which meets the SIU definition in N.J.A.C. 7:14A-1.2 and discharges or plans to discharge to a local agency which is not a delegated local agency as defined at N.J.A.C. 7:14A-1.2 shall obtain an individual NJPDES-SIU permit from the Department pursuant to N.J.A.C. 7:14A-2.4 and 7:14A-4.

7:14A-21.9 Exemptions from the requirements for an individual NJPDES-SIU permit from the Department

- (a) An indirect user authorized to discharge by the local agency is exempt from the requirement to obtain an individual NJPDES-SIU permit from the Department if:
 - 1. The indirect user does not meet the SIU definition; or
 - 2. The indirect user discharges to a delegated local agency's treatment works.
- (b) The Department may, at its discretion, revoke a NJPDES-SIU permit if the permittee meets the exemption criteria of (a) above.
- (c) A permittee may request revocation of an individual NJPDES-SIU permit by submitting to the Department a certification by an authorized representative of the permittee stating the date and describing in detail when and why the permittee became eligible for an exemption pursuant to (a) above.
- (d) The Department shall revoke the NJPDES-SIU permit if the permittee establishes pursuant to (c) above that the permittee qualifies for an exemption under (a) above.
- (e) The terms and conditions of the individual NJPDES-SIU permit, including, but not limited to, the requirement to file a timely application for permit renewal, remain in full force and effect unless and until such permit is revoked consistent with the procedures in N.J.A.C. 7:14A-16.
- (f) If an individual NJPDES-SIU permit is revoked pursuant to this section, the user may continue to discharge and shall comply with any pretreatment requirements of the local agency and this subchapter.

7:14A-21.10 Establishing conditions and effluent limitations for an individual NJPDES-SIU permit issued by the Department

- (a) Effluent limitations for NJPDES-SIU permits shall be developed for the applicable pollutants based on one or more of the following:
 - 1. Applicable or relevant categorical pretreatment standards under 40 CFR Chapter I, Subchapter N, calculated and/or adjusted if applicable in accordance with N.J.A.C. 7:14A-21.4;
 - 2. Local limits developed in accordance with N.J.A.C. 7:14A-19.7;
 - 3. In the absence of local limits developed by the local agency in accordance with N.J.A.C. 7:14A-19.7, limitations will be calculated by the Department to prevent pass through or interference at the receiving local agency's treatment works using the <u>Guidance Manual on the</u> <u>Development and Implementation of Local Discharge Limitations</u> Under the Pretreatment Program, USEPA, (December 1987);
 - 4. Limitations based upon performance of existing and proposed wastewater pretreatment units; and
 - 5. Minimum requirements for all indirect users of local agencies specified in N.J.A.C. 7:14A-21.2.
- (b) In addition to effluent limitations, the individual NJPDES-SIU permit shall contain the following conditions, requirements and/or provisions, as applicable:
 - 1. Reporting and filing requirements in accordance with N.J.A.C. 7:14A-21.3;
 - 2. Slug discharge control plan requirements as specified in N.J.A.C. 7:14A-19.6(a)7.
 - 3. Residuals management requirements pursuant to N.J.A.C. 7:14A-6.15;
 - 4. Treatment Works Approval requirements such as proper maintenance and operation of the pretreatment system and, licensed operator requirements in accordance with N.J.A.C. 7:14A-22;
 - 5. Compliance schedule pursuant to N.J.A.C. 7:14A-6.4(a); and
 - 6. Bypass provisions pursuant to N.J.A.C. 7:14A-21.6.

7:14A-21.11 Violations; closing off of use of sewerage connections

(a) The Department or the local agency may, in instances of indirect user noncompliance, take such steps as may be necessary to seal or close off connections from the local agency to the indirect user until it is satisfied that adequate measures have been taken to prevent the recurrence of noncompliance in accordance with N.J.S.A. 58:11-56.

7:14A-21.12 Requirements for Dental Facilities

(a) This section establishes best management practices and regulatory requirements for owners of dental facilities that generate amalgam waste through the removal or placement of amalgams. The requirements of this section do not apply to a dental facility at which no dentistry is practiced other than any of the following specialties:

Orthodontics;

Periodontics;

Endodontics;

Oral and Maxillofacial Surgery;

Oral and Maxillofacial Radiology; and

Oral and Maxillofacial Pathology.

- (b) Except as provided under (c) below, an owner of any dental facility that generates amalgam waste shall be exempt from the requirement to obtain a NJPDES-SIU permit from the Department or the delegated local agency for the discharge of wastewater into a local agency's treatment works, provided the owner complies with following requirements:
 - 1. The owner of a dental facility shall implement the Best Management Practice described in (d) below no later than October 1, 2008;
 - 2. The owner of the dental facility shall install an amalgam separator to serve every dental chair in the facility where amalgam waste is generated. The amalgam separator must be adequately sized for the maximum expected flow rate. The amalgam separator shall be installed no later than October 1, 2009. The separator shall conform with the ISO 11143 protocol. Each dental facility constructed on or after October 1, 2007 shall include an installed amalgam separator that conforms with the ISO 11143 protocol. A separator shall be deemed to meet the required ISO protocol if it conforms to the ISO 11143 protocol issued in 1999 or later; and

- 3. The owner of a dental facility subject to this section shall register and certify compliance with the requirements of (b)1 and 2 above. This registration and certification shall be submitted annually to the Department on forms or in the format provided by the Department.
- (c) If a local agency conducts a headworks analysis pursuant to N.J.A.C. 7:14A-19.7(a) and determines that additional mercury control measures are necessary to ensure compliance with its NJPDES permit, then the control authority shall impose additional mercury control measures on dischargers to the local agency's treatment works, including, as appropriate, dental facilities subject to this section. Where additional mercury control measures are necessary, all dental facilities discharging to such local agency shall apply for an NJPDES-SIU permit.
- (d) Best management practices require a dental facility to, at a minimum:
 - 1. Use mercury-free material when appropriate;
 - 2. Eliminate all use of bulk elemental mercury;
 - 3. Use precapsulated alloys only;
 - 4. Recycle used disposable capsules containing amalgam;
 - 5. Maintain and operate the amalgam separator when installed according to its manufacturer's specifications;
 - 6. Install chair-side traps in both the vacuum system and cuspidor of each operatory where restoration work is done;
 - 7. Change and clean chair-side traps frequently;
 - 8. Not rinse traps or vacuum pump filters over drains or in the sinks;
 - 9. Not throw or place the disposable trap, sludge from reusable trap, or vacuum pump filter or contents with regular garbage;
 - 10. Not throw or place the disposable trap, sludge from reusable trap, or vacuum pump filter or contents into sharps containers or biohazard bag;
 - 11. Not flush amalgam waste down the drain;
 - 12. Use only non-bleach, non-chlorine cleaners to clean vacuum system lines;
 - 13. Appropriately disinfect and store amalgam pieces from removal and restoration with amalgam waste;

- 14. Store amalgam waste in airtight containers;
- 15. Have a licensed recycling contractor, mail-in service or hazardous waste hauler remove amalgam waste;
- 16. Recycle all amalgam waste containing mercury;
- 17. Train staff in the proper handling, management, and disposal of mercury containing material; and
- 18. Keep records to document that the BMP requirements are being met.
- (e) Those dental facilities that generate amalgam waste and do not comply with the requirements of (b)1 and 2 above shall apply for a NJPDES-SIU permit from the Department or the DLA in accordance with the following:
 - 1. No later than October 1, 2008, when a dental facility fails to comply with (b)1 above; or
 - 2. No later than October 1, 2009, when a dental facility fails to comply with (b)2 above.

SUBCHAPTER 22. TREATMENT WORKS APPROVALS, SEWER BANS, SEWER BAN EXEMPTIONS

7:14A-22.1 General policy and purpose

- (a) It is the purpose of this subchapter to:
 - 1. Establish when a treatment works approval permit is required from the Department;
 - 2. Establish the administrative requirements for treatment works approval applications;
 - 3. Establish the criteria for the imposition of sewer connection bans;
 - 4. Restrict the approval of additional sewer connections, by means of a sewer connection ban, in circumstances when untreated or partially treated wastewater is being discharged in substantial non-compliance with a NPDES or NJPDES permit, or circumstances when inadequate conveyance capacity exists in a collection/conveyance system;
 - 5. Establish criteria for exemptions from sewer connection bans; and
 - 6. Establish a mechanism for actions by local and regional sewerage authorities to provide for adequate sewage conveyance and treatment facilities within their sewer service areas, and to ensure that sewage generating facilities are located within the appropriate sewer service area as determined by the applicable water quality management plans.
- (b) The performance of sewerage facilities, which are generally owned and operated by local and regional sewerage authorities, is dependent, in part, on how they are managed as well as upon controls exercised over the issuance of local approvals and additional sewage connection permits. Adequate monitoring and prudent management of such facilities is essential in order to prevent violations of their NJPDES permits or overflows of conveyance systems. It is the responsibility of the sewerage authority and/or treatment plant owner/operator to implement timely corrective actions and to ensure that additional connections to the treatment works do not result in such occurrences. Whenever the participating municipalities and sewerage authorities fail in this responsibility, the Department may take whatever action that it deems necessary to assure compliance, including, but not limited to, ceasing the issuance of treatment works approval permits and/or the imposition of a sewer connection ban.

7:14A-22.2 Scope

(a) Pursuant to N.J.S.A. 58:10A-6, no person shall build, install, modify or operate any facility (including any sewer extension as defined in this chapter) for the

collection, conveyance, treatment or discharge of any industrial or domestic wastewater except in conformance with this subchapter.

- (b) In a sewer connection ban area, any project involving the construction, operation or modification of a connection, including the modification of a building's projected flow, may not be undertaken except in conformance with this subchapter.
- (c) In addition to any action expressly authorized by this chapter, the Department shall have the authority to pursue other remedial actions and may take enforcement actions under the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., and impose fines or penalties in accordance with the Civil Administrative Penalty Rules, N.J.A.C. 7:14-8, or other applicable statute for failure to comply with the terms, conditions, and requirements of this subchapter.
- (d) These rules shall be liberally construed to permit the Department and its various agencies to administer their statutory functions.
- (e) The Department may, upon notice to all parties and in the public interest, delegate, in accordance with N.J.A.C. 7:14A-22.23, the application of these rules.
- (f) The technical standards for the design and construction of treatment works are contained in N.J.A.C. 7:14A-23.
- (g) When a treatment works is not required to obtain an approval from the Department pursuant to this subchapter, the treatment works is nonetheless required to conform with any applicable requirements of this subchapter and N.J.A.C. 7:14A-23, Technical Requirements for Treatment Works Approvals.
- (h) The Department shall determine within 20 working days of the issuance of a final NJPDES permit or NJPDES permit modification, whether the discharger shall be required to obtain approval in accordance with the subchapter.
- (i) No person shall permit, approve or otherwise allow the construction, installation, modification or operation of any facility or activity that violates the terms, conditions and requirements of this subchapter.

7:14A-22.3 Activities for which a treatment works approval is required

- (a) Except as provided in N.J.A.C. 7:14A-22.4, no person shall engage in any of the following activities except in conformance with a valid treatment works approval from the Department:
 - 1. Building, installing, modifying, or operating any treatment works including, but not limited to, sewer extensions, sewer interceptors,

domestic and industrial wastewater treatment systems, holding tanks, equalization tanks and wastewater treatment and recycling systems.

- 2. Building, installing, modifying or operating any sewer line, pumping station or force main which serves more than two buildings or will convey 8,000 gallons per day or more of flow to a treatment works.
 - i. Increasing the projected flow in an existing sewer line by 8,000 gallons per day or more shall require a treatment works approval permit, irrespective or whether or not additional sewer line construction is involved;
- 3. Building, installing, operating or modifying any residuals treatment units, including, but not limited to, facilities for composting, heat drying, thickening, digestion, air drying, thermal reduction, dewatering and storage of sludge;
- 4. Building, installing, operating or modifying any domestic or industrial treatment works that discharges directly to the surface water or ground water of the State, with the exception of individual subsurface disposal systems exempted pursuant to N.J.A.C. 7:14A-22.4(a)3; or
- 5. Building, installing, operating or modifying any industrial treatment works located in any area of the State where the Department is the control authority (non-delegated area) for an industrial pre-treatment program pursuant to 40 CFR 403 and N.J.A.C. 7:14A-19.
- (b) Industrial treatment works approval applications submitted pursuant to (a)4 and 5 above will generally be processed within 30 days of receipt of a complete application in accordance with N.J.A.C. 7:14A-22.6.
- (c) Projects for which flow is the determining factor for the requirement of a treatment works approval pursuant to this section, the projected flow criteria specified in N.J.A.C. 7:14A-23.3 shall be used.

7:14A-22.4 Activities for which a treatment works approval is not required

- (a) A treatment works approval from the Department is not required for the following activities:
 - 1. Building, installing, modifying or operating any sewer lateral (whether forced or by gravity), which will convey less than 8,000 gallons per day of projected flow;
 - 2. Building, installing, modifying or operating any wastewater pumping equipment which utilizes a lateral force main connection, whether publicly or privately owned, to serve a facility whose projected flow is less than 8,000 gallons per day;

- 3. Building, installing, operating or modifying a septic system or other subsurface disposal system where the aggregate projected flow of the facility, using the criteria established in N.J.A.C. 7:9A, is less than or equal to 2,000 gallons per day of sanitary sewage. Treatment works for such facilities are regulated pursuant to N.J.A.C. 7:9A Standards for Individual Subsurface Sewage Disposal Systems;
- 4. For existing facilities, and regardless of current flow, aggregate increases in the projected flow of less than 8,000 gallons per day over a five year period resulting from internal plumbing modifications, building additions, renovations or changes in use of a facility, providing that the project does not involve construction of a sewer extension or other treatment works which requires a permit pursuant to N.J.A.C. 7:14A- 22.3.
 - i. In sewer ban areas, this exception shall not be construed to exempt the need for a sewer ban exemption prior to construction, if required pursuant to this subchapter;
 - ii. This exception does not apply to projects served by individual subsurface disposal systems or small treatment plants (less than 150,000 gpd) that discharge to groundwater;
- 5. Rehabilitation or the replacement of existing sewer lines providing that the diameter and location of the sewer line will remain unchanged and providing that the slope is either unchanged or changed only as necessary to bring an existing below-slope sewer into conformance with minimum (or greater) Department design standards.
- 6. The replacement of worn, damaged, defective or inoperable wastewater pumps, sewage treatment units or components of residuals treatment and storage units providing that the capacity and location of the pumps or treatment units to be replaced will not change and the replacement treatment unit or wastewater pump station will be utilized to perform the same function as the former unit;
 - i. Existing pumping stations whose capacity is increased through a change in impeller size only, with no other modifications, do not require a treatment works approval.
- 7. Minor modifications of treatment works including, but not limited to, chemical addition for the purpose of improving performance and/or odor control (provided no treatment unit construction is to be undertaken), and modifications to treatment units for repair, maintenance or monitoring providing that the treatment process is not altered;
- 8. Residuals spreading and injection equipment to be utilized to disperse residuals at NJPDES permitted and exempted operations for land application of residuals;
- 9. The following mobile (not stationary) residuals storage installations:

- i. Frac tanks except when fixed into position;
- ii. Tanker trailers; and
- iii. Roll-off containers;
- 10. Mobile street sweepers and payloaders utilized to collect and move residuals at NJPDES permitted and exempted residual operations;
- 11. Provisions for emergency storage of residuals provided said storage is less than 180 days in duration and in accordance with Part 4-VIII of the Statewide Sludge Management Plan;
- 12. Building, installing, operating or modifying handling equipment or storage units for marketable residual products.
- 13. Building, installing, operating or modifying a treatment works for a groundwater recovery and reinjection system which is performed under the authority of the Procedures for Department Oversight of the Remediation of Contaminated Sites, N.J.A.C. 7:26C.
- (b) In addition to (a) above, a treatment works approval or general industrial treatment works approval will not be required for the following facilities:
 - 1. Building, installing, operating or modifying any industrial treatment works discharging into a publicly owned treatment works and located in an area of the State for which the Department is not the control authority (delegated area) for the industrial pre-treatment program pursuant to 40 CFR 403 and N.J.A.C. 7:14A-19;
 - i. Projects involving the construction of a sewer extension require a treatment works approval for the conveyance aspects only and are subject to the conditions of N.J.A.C. 7:14A-22.8;
 - Projects involving additional flow through an existing sewer line of 8,000 gpd or more require a treatment works approval for the conveyance aspects only and may be considered under the provisions of N.J.A.C. 7:14A-22.6;
 - 2. Building, installing, operating or modifying an American Petroleum Institute approved gravity oil/water separator, a retention or detention basin, sand traps or sediment traps that are installed routinely in facilities such as car washes, truck wash bays and other similar discharges, when these systems are authorized under a general NJPDES permit, have been determined not to require a NJPDES permit, or are exempted from obtaining a NJPDES permit pursuant to this chapter or are stormwater management facilities (see (b)3v below);
 - 3. Building, installing, operating or modifying any of the following activities or facilities:
 - i Grease traps for use in restaurants;

- ii. Cooling towers for non-contact water/heat exchange units and necessary associated appurtenances;
- iii Holding tanks for wastewater which is solely industrial in nature and the amount to be hauled to a treatment works will be less than 8,000 gallons per day, and the tank will have a total volume of 21,000 gallons or less;
- iv. Recycling systems for industrial waste only, which do not discharge directly to the surface water or ground water;
- v. Stormwater management facilities, including but not limited to retention basins, detention basins, and oil/water separators that prevent, abate, reduce, collect, convey, store, treat, dispose of, or otherwise manage stormwater runoff;
- vi. Any part of a separate storm sewer system; or
- vii. Treatment units used for pretreatment of water for use in an on-going manufacturing process at the industrial facility;
- 4. Mobile treatment works to be specifically utilized for the treatment of water in relation to a short-term pump test or dewatering associated with an underground storage tank project authorized under a NJPDES category B4B General permit; or
- 5. Building, installing, modifying or operating any system for discharges to ground water that are authorized by permit-by-rule in accordance with N.J.A.C. 7:14A-7.5 or 8.5.
- (c) Notwithstanding the terms of (a) and (b) above, the Department shall have the authority to regulate, at its discretion, any sewer connection or other domestic or industrial treatment works when a sewer connection ban exists or a health emergency so requires.
- (d) The lack of a need to obtain a treatment works approval in accordance with this section does not relieve the project owner and/or sewerage authority from the responsibility to comply with all requirements of a NJPDES discharge permit. The responsibility of determining that additional flows to the treatment works will not result in any unpermitted discharge or NJPDES permit violation rests with the owner of the collection system and treatment facility.
- (e) For projects in which flow is the determining factor for the requirement of a treatment works approval permit pursuant to this section, the projected flow criteria specified in N.J.A.C. 7:14A-23.3 shall be used.

7:14A-22.5 Treatment works approval

(a) A treatment works approval consists of the following three stages:

- 1. Stage I is an optional preliminary or conceptual review of treatment works as prescribed in N.J.A.C. 7:14A-22.7. The Department recommends that a stage I review and approval be obtained for any new sewage treatment plant or plant expansion, or if the proposed treatment works involves a new or innovative design or technology.
- 2. Stage II is an approval to construct, install or modify a treatment works as outlined in this subchapter.
- 3. Stage III is an approval to operate a treatment works that has been constructed or received a stage II approval. In general, separate stage II "construct only" approvals are issued for projects located in sewer ban areas, in future sewer service areas for which no downstream sewers exist, and for construction of some treatment plants. Stage II and stage III approvals are generally issued concurrently as a single document, when operation of the treatment works can occur immediately upon completion of the project.
- (b) The construction, installation, modification or operation of a treatment works in a manner inconsistent with the terms and conditions of the Department's approval constitutes a violation of the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq. and may be subject to penalties and fines pursuant to the above Act, the Civil Administrative Penalty Rules, N.J.A.C. 7:14-8, or other applicable statute.
- (c) The Department may modify, suspend or revoke a treatment works approval in accordance with N.J.A.C. 7:14A-22.11.
- (d) The Department shall approve, condition, or deny an application for a treatment works approval pursuant to this subchapter and N.J.A.C. 7:1C-1, within 90 days of receipt of a complete application by the Department. This time period may be extended for one 30 day period upon the mutual consent of the applicant and the Department.
- (e) The issuance of a treatment works approval by the Department does not relieve the applicant of the continuing responsibility for the successful collection, conveyance, treatment or discharge of pollutants, nor does it relieve the applicant from the responsibility of insuring that all discharges are consistent at all times with the terms and conditions of the applicable NJPDES permit and that no pollutant will be discharged more frequently than authorized or at a level in excess of that which is authorized by the applicable NJPDES permit. The applicant is also responsible for complying with all applicable permits, regulations, statutes, or other laws.
- (f) The applicant and any owner or operator of a treatment works shall provide notice of the terms and conditions of any existing treatment works approval to a prospective purchaser of the treatment works. Upon change of ownership of

the treatment works, the new owner shall assume responsibility for its proper operation and maintenance or closure. Notification to the Department of a change in ownership for the treatment works approval permit is not required.

- (g) The Department's review of applications and submissions is limited to engineering (including hydraulic) features of significance to applicable discharge limits and protection of the environment. The Department will not review structural, mechanical or electrical design, except when it may be significant to achievement of discharge limitations or to the protection of the environment.
- (h) A permit to construct or operate a treatment works, previously issued to the owner or operator pursuant to N.J.S.A. 58:11-10 or 58:12-3 will constitute a treatment works approval for the purpose of this subchapter. The permit and any conditions thereto will continue to be in effect until such time as the permit is revoked, amended or expired.
- (i) The full responsibility for adequate design, construction and operation of the treatment works, and the full responsibility for successful collection, treatment and discharge of pollutants shall be on the applicant.
- (j) Treatment works shall be constructed in a manner which is consistent with the provisions of the appropriate wastewater management plan.
- (k) The Department may grant an emergency approval authorizing the construction and/or operation of a treatment works prior to issuance of a formal treatment works approval in situations such as the modification/rehabilitation of existing treatment and conveyance systems where time delays may threaten the public health or safety. Such approvals shall be subject to the following requirements:
 - 1. The Department and the affected collection system owner and/or treatment plant owner (as appropriate) shall be informed by telephone or in writing, prior to construction, as to the project location, the extent of work to be performed, and the reason for the emergency.
 - 2. Within 15 calendar days of commencing the activity for which an emergency approval is authorized, an application for a treatment works approval and/or sewer ban exemption shall be submitted to the Department for review and issuance of the required permit. "As-built" drawings, if applicable, shall be submitted.
 - 3. The Department reserves the right to deny an emergency approval request if it is determined that an emergency approval request is not justified, the activity would be inconsistent with any applicable rules, or a more prudent alternative is available.
 - 4. Failure to comply with the requirements of (k)1 or 2 above, the construction or operation of treatment works inconsistent with the

emergency authorization, or submission of false information may subject the applicant to enforcement action by the Department, including the imposition of fines or penalties.

(1) For most industrial treatment works, treatment works approvals will be issued in the form of a General Industrial Treatment Works Approval. The submission requirements for a General Industrial TWA are contained in N.J.A.C. 7:14A-22.6, and are administrative in nature. Within 30 days of receipt of a complete General Industrial TWA application, the Department will issue a General Industrial TWA or notify the applicant that due to a potentially significant health risk, environmental impact, or past performance of the facility the project cannot be granted a General Industrial TWA and an individual treatment works approval is required.

7:14A-22.6 Information and submission requirements for general industrial treatment works approvals

- (a) Industrial treatment works not exempt pursuant to N.J.A.C. 7:14A-22.4 shall submit the following information as an application for a General Industrial Treatment Works Approval:
 - 1. The Department's Treatment Works Approval application form (original) signed, dated and imprinted with a seal where applicable;
 - i. The application form shall require information regarding name and address of applicant, applicant's agent and design engineer; project site location; project description; the status of related permit applications; property owner's certification; professional engineer's certification; and proper construction and operation clause.
 - 2. The minimum fee for a treatment works pursuant to N.J.A.C. 7:1C-1.5;
 - 3. A certification signed and sealed by a New Jersey licensed professional engineer stating the following:
 - i. The proposed treatment works, as designed, will enable the facility to meet all applicable Federal, State and local effluent limitations, conditions and/or requirements;
 - ii. The proposed treatment works or contributing facility will not dilute any portion of its waste stream for the purpose of meeting any applicable NJPDES effluent limitation or condition; and
 - iii. The permittee currently holds a valid final NJPDES permit, General permit authorization, or for indirect dischargers, the applicant is specifically exempted by the Department;
 - 4. A completed Licensed Operator Grading sheet;
 - 5. A resolution, certification and/or written statement of consent from the affected municipality, sewerage authority, owner of the receiving

treatment plant; owner/operator of the wastewater conveyance system into which the project will directly connect; and district sludge management lead planning agency (if applicable, see (a)5ii below) or completion of the Department's form WQM003;

- i. Required consents shall be in conformance with N.J.A.C. 7:14A-22.8(a)3.
- ii. A written statement of consent from the district sludge management lead planning agency is required only for applications that involve construction of residual management units at ultimate residuals management sites.
- iii. Written statements of consent from the affected sewerage authority must contain a certification concerning the plant's compliance with the applicable NJPDES permit requirements.
- iv. A written statement of consent from the owner/operator of the conveyance system must certify that the conveyance system has adequate conveyance capacity as defined in N.J.A.C. 7:14A-1.2 to convey the additional flow.
- v. If an applicant is unable to obtain the required endorsement or written statement of consent, then the procedures stated in N.J.A.C. 7:14A-22.8(a)3 shall apply. An application may be considered complete only after the 60 day period of notification, as required in N.J.A.C. 7:14A-22.8(a)3 has elapsed;
- 6. One set, each, of final construction plans and specifications, signed and sealed by a New Jersey licensed professional engineer.
- 7. An engineering abstract containing, at a minimum, the following:
 - i. A description of waste treatment system;
 - ii. The ultimate destination of all wastewater and residuals;
 - iii. A listing of all pollutants, including regular and intermittent flows, which may enter the system;
 - iv. Average and peak flow requirements; and
 - v. The expected composition of effluent from the treatment system; and
- 8. Copies of notification to local agencies by certified mail, return receipt requested, in accordance with N.J.A.C. 7:1C-1.5.
- (b) The Department, within 30 days of receipt of a complete application for an Industrial Treatment Works Approval, shall issue a General Industrial TWA, or notify the applicant that based upon the potential for significant health risk, environmental impact, or past performance of the facility an individual treatment works approval review is required.

- 1. At the time of notification to the applicant that the project does not qualify for a General Industrial TWA, the applicant will also be notified of the additional administrative requirements, if any, necessary for the application to be considered administratively complete pursuant to N.J.A.C. 7:14A-22.8.
- (c) A General Industrial TWA permit shall consist, at a minimum, of the following:
 - 1. The name of the facility and permittee receiving the General Industrial TWA;
 - 2. The General Industrial TWA permit number and applicable NJPDES number or authorization;
 - 3. The licensed operator classification where applicable;
 - 4. The date of authorization for construction, operation or modification of the industrial treatment works; and
 - 5. Such other general conditions as are appropriate.
- (d) For direct dischargers to surface or groundwater or for indirect dischargers required to obtain an SIU permit from the Department, applications for General Industrial TWA's will not be accepted for review unless the applicant has previously obtained a valid NJPDES permit or general permit authorization.

7:14A-22.7 Requirements for preliminary review of applications for treatment works approval--stage I

- (a) Stage I approvals are optional but are recommended for new or expanded treatment plants and for projects involving new or innovative technologies or designs.
- (b) Applications submitted for stage I review shall contain the following:
 - 1. A letter of request for a Stage I review from the applicant or applicant's agent; and
 - 2. A project report which, at a minimum, contains the following:
 - i. Project concept, scope and purpose;
 - ii. Water quality management considerations;
 - iii. A brief description of proposed treatment and/or conveyance methods, and appropriate basis for design;
 - iv. For new or innovative technology application, performance data from similar facilities; and
 - v. A sludge management proposal;

- (c) The Department will respond to the applicant with the review findings for appropriate consideration.
- (d) Any applicant who proceeds to a stage II design, without first obtaining a stage I approval shall bear the full responsibility for the adequacy of design to meet the intended purpose and the Department reserves the right to require the applicant to investigate the feasibility of alternate treatment or conveyance methods during the stage II application process, if the Department determines that drawbacks may exist with the submitted design.

7:14A-22.8 Requirements for construction, installation, or modification of treatment works-stage II

- (a) Persons who propose to build, install or modify treatment works that require the Department's approval pursuant to this subchapter, shall submit the following information and documents in the manner prescribed in this subchapter:
 - 1. The Department's Treatment Works Approval application form, as defined at N.J.A.C. 7:14A-22.6(a)1, (original) signed, dated and imprinted with a seal where applicable; and
 - 2. The appropriate fee, calculated in accordance with N.J.A.C. 7:1C-1.5, made payable to Treasurer, State of New Jersey, Environmental Services Fund;
 - 3. A resolution and/or written statement of consent from the affected municipality, sewerage authority, owner of the receiving treatment plant, owner/operator of the wastewater conveyance system into which the project will directly connect, and district sludge management lead planning agency (if applicable, see (a)3ii below) or completion of the Department's form WQM003.
 - i. Prior to the submission of an application for treatment works approval, the applicant shall submit (return receipt requested) a copy of the application (at a minimum) to the affected sewerage authority (not required for direct dischargers) and to the municipality in which the construction will be located, with a request that they provide a written statement of consent of the application.
 - (1) A written statement of consent by the municipality shall include the statement that the project as proposed is in conformance with the requirements of all municipal ordinances and that the governing body of the municipality accepts and approves of the project as proposed by the applicant. If the statement of consent is signed by anyone other than the mayor, the municipality shall file with the Department an official resolution by the governing body delegating such responsibility to the named individual.

- ii. A written statement of consent from the district sludge management lead planning agency is required only for applications that involve construction of residual management units at ultimate residuals management sites.
- iii. Written statements of consent from the affected sewerage authority shall contain a certification concerning the plant's compliance with applicable NJPDES permit requirements.
- iv. A written statement of consent from the owner/operator of the conveyance system must certify that the conveyance system has adequate conveyance capacity as defined in N.J.A.C. 7:14A-1.2, to convey the additional flow.
- v. If an applicant is unable to obtain the required written statement of consent, then the applicant may choose to follow the procedures stated in (a)3v(1) through (5) below. An application may be considered complete only after the 60 day period of notification, as required in (a)3v(1) through (5) below, has elapsed.
 - (1) The affected sewerage authority or municipality shall submit a written statement of consent to the application or submit written comments to the Department within 60 days of the request for consent. Prior to the expiration of the 60 day period to respond a request for a written statement of consent, the municipality or sewage authority may request a 30 day extension for review of a request for consent.
 - (2) Any document issued by a sewerage authority or municipality which is tentative, preliminary, or conditional approval shall not be considered a statement of consent.
 - (3) When the affected sewerage authority or municipality does not consent to a project, it shall state all reasons for rejection or disapproval in a resolution and send a certified copy of the resolution to the Department.
 - (4) When the affected municipality or sewerage authority expressly denies a request for a written statement of consent for a project, the permit application may be determined by the Department to be incomplete for processing; or in the alternative, the Department may review the reasons for denial. Any such reasons shall be considered by the Department in determining whether to issue a treatment works approval or sewer connection approval in accordance with this subchapter.
 - (5) When the affected municipality or sewerage authority does not issue either a written statement of consent or a denial of the request for consent, the Department, upon receipt of proof that the applicant has delivered to the affected agency a written

request for a written statement of consent, shall review the reasons for the lack of consent or denial, if known on the basis of reasonably reliable information. Any such reasons shall be considered by the Department in determining whether to issue a treatment works approval or sewer connection approval in accordance with this subchapter.

- 4. Copies of notification to local agencies by certified mail, return receipt requested, in accordance with N.J.A.C. 7:1C-1.5;
- 5. For wastewater collection and conveyance systems, an original signed copy of the Department's Engineering Report Form WQM006. The Engineer's Report shall be signed and sealed (embossed) by a New Jersey licensed professional engineer;
- 6. For treatment units, holding tanks, equalization tanks, or treatment works other than collection and conveyance systems, in addition to the Department's form WQM006, the applicant shall prepare and submit a technical report addressing the requirements specified in N.J.A.C. 7:14A-23.5;
- 7. An itemized engineering cost estimate for the proposed treatment works. The cost estimate shall be in sufficient detail to indicate the basis for the estimate and the approximate separation of costs for individual sewerage facilities;
- 8. One set, each, of final construction plans and specifications, signed and sealed by a New Jersey licensed professional engineer, and meeting the requirements stated in N.J.A.C. 7:14A-23.4;
- 9. One original Dry Sewer Affidavit, if applying for a stage II "construction only" permit pursuant to N.J.A.C. 7:14A-22.9;
- 10. A copy of a USGS Quad Map with the project site location boundaries drawn to scale;
- 11. Copies of Pinelands approval or certificate of filing, or Delaware and Raritan Canal Commission approval, if required;
- 12. For sewage holding tank applications, the following additional items are required:
 - i. A letter of consent from the local board of health; and
 - ii. Evidence of contracts with two licensed waste haulers (one as a back-up); and
- 13. For a hauling/diversion treatment works application, the following additional items are required:
 - i. Evidence of contracts with two licensed waste haulers (one as a back-up);

- ii. For projects involving wastewater hauling, a letter of consent from the entity accepting the wastewater for treatment and final disposal and for projects involving wastewater diversion, a letter of consent from the municipality or authority accepting additional flow through its collection system; and
- iii. A statement concerning the frequency and amount of wastewater which will be hauled/diverted. This amount shall be at least equivalent to the project's projected flow pursuant to N.J.A.C. 7:14A-23.3.
- (b) All submissions, including the application, engineer's report, specifications, and plans shall bear an embossed seal of a New Jersey licensed professional engineer.
- (c) Applications shall be signed by the applicant, a responsible official of the applicant as defined in (c)1 below, or an authorized agent providing that an authorization for signature is submitted with the application.
 - 1. A responsible official is an individual meeting the requirements set forth in N.J.A.C. 7:14A-4.9.
 - 2. Signatures older than one year at the time of submission to the Department are not acceptable, except in the case of a previously denied application, in which case the Department shall have the discretion to accept signatures older than one year, or require more recent signatures, depending upon the specific circumstances.

7:14A-22.9 Stage II "construction only" treatment works approvals

- (a) "Dry/construct only" treatment works approvals are stage II approvals, for which operation may not occur until the Department issues a formal stage III approval in accordance with the provisions of this subchapter. Generally, the Department will consider applications for "dry/construct only" facilities in the following circumstances:
 - 1. The proposed project is located in an area that is not currently served by a sewage collection system, and is located within a future sewer service area as identified in the appropriate water quality management plan. In such cases, the application shall include the following:
 - i. Permits for individual septic systems issued by the administrative authority pursuant to N.J.A.C. 7:9A, or a certification from the administrative authority attesting to the suitability of the soils to support on-site subsurface disposal systems in accordance with N.J.A.C. 7:9A; and
 - ii. A statement from the municipality and the person financially responsible for the project, that the septic systems will be abandoned

and connection to the domestic treatment works will occur at such time as sewer lines become available.

- 2. The proposed project is located in an area currently subject to a sewer connection ban and the applicant seeks permission to construct sewage collection and conveyance facilities that will not become operational until the sewer connection ban is rescinded by the Department. The Department's consideration of this request is dependent upon submission and compliance with the following:
 - i. The owner of the receiving sewage treatment plant or downstream collection/conveyance facility which is subject to the sewer ban is in compliance with one of the following:
 - (1) An executed administrative consent order with the Department, which provides a schedule for all corrective work that is necessary for rescission of the sewer connection ban; or
 - (2) A treatment works approval permit has been issued for construction, the completion of which will result in rescission of the sewer connection ban, and a contract with a specific date for the completion of construction has been awarded;
 - ii. Submission of a written statement with appropriate documentation that the project can be financially managed during the expected duration of the sewer connection ban, or submission and concurrent approval of an interim means of sewage disposal pursuant to N.J.A.C. 7:14A-22.13 or 22.14; or
- 3. The project is for the construction of sewer lines in conjunction with a road paving project, will not have any immediate source of contributory flow, and is located in a current or future sewer service area as identified by the appropriate wastewater management plan.
- (b) "Dry/construct only" treatment works approval applications shall include the following:
 - 1. All items identified under N.J.A.C. 7:14A-22.8, for requirements of stage II treatment works approvals, with the exception of non-applicable sections of the Department's WQM003 consent form for treatment plants or collection systems subject to a sewer connection ban; and
 - 2. A Dry Sewer Affidavit signed by (as applicable) the property owner, the municipality in which the project is located, and appropriate official of the receiving sewage treatment plant, stating least the following:
 - i. The affected authority/municipality shall not allow the use of the sewerage facilities without prior written approval from the Department;

- ii. That operation of the treatment works will not be permitted until the sewer connection ban has been rescinded by the Department (if applicable) or adequate downstream sewerage facilities are available as determined by the Department (if applicable);
- iii. That the possibility exists a treatment works approval for operation (stage III) may not be granted, or may be excessively delayed and that the applicant is proceeding at his own risk; and
- iv. The applicant is aware that subsequent construction of the permitted "dry" treatment works, in and of itself, does not qualify the project for a sewer ban exemption pursuant to N.J.A.C. 7:14A-22.22.
- (c) A "dry/construct only" treatment works approval shall be filed with the appropriate county clerk as notice to prospective purchasers of restrictions that may apply to the property. The "dry/construct only" TWA shall remain filed with the deed of record until such time as a treatment works approval for operation (stage III) has been issued by the Department.

7:14A-22.10 Requirements for stage III treatment works approval applications

- (a) No person shall operate a treatment works for which a treatment works approval from the Department is required except in conformance with the provisions of this subchapter.
- (b) For treatment works approvals that have been issued concurrently as stage II and stage III approvals ("construct and operate"), operation of the facilities may occur upon completion of the project, inspection and approval of the facilities by the licensed professional engineer overseeing the construction, approval by the local municipality or sewerage authority, and submission to the Department of Form WQM005, Certification of Approval.
- (c) For treatment works approvals that have been issued as stage II ("construct only"), except for the temporary operation of treatment works for the purpose of performance testing, operation may begin only after written approval in the form of a stage III treatment works approval is issued by the Department. Requirements for a stage III approval include:
 - 1. Inspection and approval of the facilities by the licensed professional engineer overseeing the construction and submission of a properly completed form WQM005 to the Department;
 - 2. Submission of a written request for operation from the applicant or duly authorized agent and a written statement in which proof that all conditions of the stage II TWA to construct have been satisfied;
 - 3. An appropriate fee for a permit modification pursuant to N.J.A.C. 7:1C-1.5; and

4. Submission of "as-built" plans and specifications if different than the approved plans and specifications.

7:14A-22.11 Modifications and revocations of treatment works approvals

- (a) The Department may modify, suspend or revoke a treatment works approval in whole or in part for cause, including, but not limited to:
 - 1. Violation of any term or condition of the treatment works approval;
 - 2. Obtaining a treatment works approval by misrepresentation or failure to disclose fully all relevant facts; or
 - 3. If such treatment works approval is inconsistent with any duly authorized effluent limitation, permit, regulation, statute, or other applicable local, State or Federal law.
- (b) The Department shall determine whether any material changes, design or construction alterations, or changes in flow, which occur after the issuance of a treatment works approval permit will require a modification. When assessing the need for a modification, the Department will evaluate how the proposed changes affect the design or conditions of approval of the original permit. Generally a treatment works approval modification is not required for the substitution of units or materials with others that are structurally, hydraulically, and functionally equivalent, except in cases when a detailed engineering review is needed to determine equivalency. Changes in location or unit sizing and capacity, or increases in flow or project scope, will require a modification or a new TWA, as determined by the Department, depending on the magnitude of the change.
- (c) Unless such a requirement is specifically waived by the Department, a modification request will generally not be considered, and instead, a new treatment works application will be required for major modifications of the project scope including, but not limited to, the addition of a pumping station or alternate treatment units or processes, significant changes to the collection system and the inclusion of sewage generating structures not covered in the original approval.
 - 1. Requests for modifications shall include the following documents:
 - i. An appropriate fee pursuant to N.J.A.C. 7:1C-1.5;
 - ii. A written request from the applicant stating the nature, scope and reasons for the modification;
 - iii. Revised construction plans and specifications (if applicable);
 - iv. A revised WQM006 Engineer's Report (if applicable);
 - v. A copy of the original treatment works approval permit; and

- vi. Written consent from the appropriate sewerage authority if the modification will result in an increase in the project's projected flow, or if the modification requires a change or alteration to the point of connection of the proposed sewer to the existing collection system.
- 2. The Department will accept permit modification requests only for treatment works approvals that are valid (not expired) at the time that the modification request is submitted to the Department. In addition requests for modification will only be considered for a maximum period of two years following the last construction activity on the treatment works conducted in accordance with the Department's original approval.

7:14A-22.12 Extensions of time for treatment works approvals

- (a) Stage II treatment works approvals are valid for an initial period of two years, unless otherwise stated in the approval document. A stage II approval will expire unless building, installing or modifying of the treatment works has begun within the initial approval period stated on the permit, unless the permit is extended pursuant to this subchapter.
- (b) At the Department's discretion, a treatment works approval may be extended beyond the original two year approval date, to a maximum period of five years from the original issuance date. Each extension, if granted, will be for a maximum period of one year.
 - 1. A request for an extension of time must be received by the Department prior to the expiration date of the permit and shall include the following:
 - i. An appropriate fee pursuant to N.J.A.C. 7:1C-1.5(b);
 - ii. A written request from the applicant or authorized agent; and
 - iii. Consent for the time extension from the sewerage authority if the sewerage authority has notified the Department, in writing, that all time extension requests under its jurisdiction must be accompanied by the authority's consent.
 - 2. If the extension request is not received by the Department prior to the expiration date of the permit, then in addition to the information required under (b)1 above, the applicant shall also submit written proof of consent for the time extension from the sewerage authority or municipality which owns the receiving treatment plant, and the minimum fee in accordance with N.J.A.C. 7:1C-1.5. In such cases, if the request is approved, the Department will issue the permit extension in the form of a new TWA valid for one year, but extendible up to a maximum of five years from the issuance date of the original approval.
- (c) The Department's decision on whether or not to grant a time extension is dependent upon the circumstances which exist at the time the request is made, including, but not limited to, the status of any sewer connection ban.

Generally, the request will be denied if a sewer connection ban is in place and the project does not qualify for a sewer ban exemption pursuant to this subchapter.

- (d) The earliest a time extension request will be considered by the Department is one year prior to the permit expiration date.
- (e) Once the construction of sewerage facilities is legally initiated, the TWA is considered to be in effect and further time extensions are not required. However, if construction has been interrupted for a period of more than two years, the Department, at its discretion, may revoke the TWA and deny the extension request. The factors to be considered in making such decisions include, but are not limited to, a sewer connection ban or conveyance problem, time span for which construction is interrupted, the status of the construction, and the reasons for construction interruption.

7:14A-22.13 Administrative requirements for wastewater holding tanks (nonindustrial)

- (a) Wastewater holding tanks for temporary use may be approved by the Department in the following circumstances:
 - 1. Simultaneous or subsequent to the issuance of a Stage II "dry/construct only" treatment works approval issued by the Department pursuant to N.J.A.C. 7:14A-22.9(a), for projects located in sewer ban areas; or
 - 2. To serve a proposed project that is located in an area not presently served by sanitary sewers and where a treatment works approval has been issued and a contract has been awarded which contains a scheduled completion date for the construction of downstream facilities necessary for the elimination of the holding tank.
- (b) An administrative authority may, pursuant to N.J.A.C. 7:9A-3.12, approve the temporary use of a sewage holding tank for a period of up to 180 days for an existing structure served by a malfunctioning septic system that is causing a public health hazard.
- (c) Wastewater holding tanks as a permanent means of sewage disposal may be approved in the following circumstances:
 - 1. The holding tank will be utilized to eliminate a failed subsurface disposal system which has been certified by the local board of health or the Department to be a health hazard, connection to a domestic treatment works is not possible or practical, and the holding tank will not be utilized for additional sources of wastewater flow resulting from a building expansion, change in use, or other source;

- i. For holding tanks to serve a facility with a projected flow of less than 2,000 gallons per day, the applicant shall demonstrate in accordance with N.J.A.C. 7:9A-3.4(d)1 through (d)5, that the existing system was legally constructed and cannot be repaired or rehabilitated and there are no feasible alternatives or substitutes.
- ii. For holding tanks to serve a facility with a projected flow of 2,000 gallons or more, in addition to demonstrating that the existing system cannot be repaired or rehabilitated, an amendment to the appropriate wastewater management plan pursuant to N.J.A.C. 7:15-4.3 may be required, unless in accordance with N.J.A.C. 7:15-4.2 the use of the holding tank is mandated by an administrative consent order executed between the Department and the applicant; or
- 2. The holding tank will be utilized at a marina or dock which serves watercraft that are equipped with marine sanitation devices.
- (d) The holding tank shall meet the technical design requirements specified in N.J.A.C. 7:14A-23.5.
- (e) The entity identified as the receiving treatment plant for the final treatment and disposal of hauled wastewater shall have sufficient capacity to handle the additional flow and not be subject to a sewer connection ban.

7:14A-22.14 Temporary wastewater hauling/diversion

- (a) Wastewater hauling is the removal and transportation of a permitted quantity of wastewater from the headworks of a facility and prior to treatment, by a licensed waste hauler, from a treatment facility which is subject to a sewer ban, to a treatment facility which is not subject to a sewer ban. Wastewater diversion is the re-direction of a permitted quantity of wastewater flow from a collection or conveyance system to an alternate collection system not subject to a sewer connection ban.
 - 1. Flow diversion may be accomplished by constructing various temporary gravity sewers or pumping stations or by modifying an existing collection system so that flows are re-directed to an alternative treatment works.
- (b) The temporary use of wastewater hauling/diversion may be approved by the Department simultaneous or subsequent to the issuance of a stage II "dry/construct only" treatment works approval issued by the Department pursuant to N.J.A.C. 7:14A-22.9(a), for projects located in sewer ban areas, or if authorized by the Department through an administrative/judicial consent order executed by the applicant and the Department.

7:14A-22.15 Requirements for flow equalization tanks

- (a) The use of flow equalization tanks located at the head of treatment plants, regional pumping stations or pre-treatment facilities for the purpose of improving the treatment process is encouraged by the Department, and will be approved providing that all administrative and technical requirements of this subchapter and the technical requirements specified in N.J.A.C. 7:14A-23 are met.
- (b) Flow equalization tanks proposed to serve areas with significant future growth potential will not be approved as permanent facilities. The problems associated with existing conveyance capacity in these areas should be addressed through appropriate corrective measures such as repairing, replacing, or upgrading the existing inadequate sewerage systems, controlling inflow and infiltration or other applicable remedies.
- (c) In addition to the situation specified in (a) above, flow equalization tanks may be approved for permanent use when the following conditions are satisfied:
 - 1. It is shown that a flow equalization tank is the most appropriate means of providing sewer service to the area under consideration, it is designed as an integral part of the sewage conveyance system and there are no other practical or feasible alternatives, and its use will be on a regional basis (not for individual developments); and
 - 2. The use of the flow equalization tank is to serve areas with severely limited potential for growth and for which the applicant has demonstrated to the Department's satisfaction that the upgrading of the existing downstream conveyance system is not economically feasible due to the limited sources of contributory flow anticipated from future connections in the service area.
- (d) To the maximum extent possible, the utilization of flow equalization tanks should be consolidated to accommodate multiple users. In general, the individual use of flow equalization tanks on a project specific basis is discouraged.
- (e) As part of the submission of a treatment works application for a permanent flow equalization tank, the owner of the affected collection system shall submit an engineer's report meeting the requirements of N.J.A.C. 7:14A-23.5.
- (f) If requested by the applicant, upon receipt of the information referenced in (e) above, the Department will conduct a Stage I review pursuant to N.J.A.C.
 7:14A-22.7 and will render a finding as to the acceptability of the proposed permanent flow equalization tank.

(g) Flow equalization tanks may be approved on a temporary basis for the purpose of improving situations when inadequate conveyance capacity exists in a collection system. In such a situation, the eventual elimination of the equalization tank must be assured through either an administrative consent order that contains provisions for the corrective work to enable the elimination of the equalization tank, or through the issuance of a treatment works approval that provides a specific and mandatory schedule for the construction of downstream facilities necessary for the elimination of the equalization tank.

7:14A-22.16 Capacity assurance program

- (a) Whenever the committed flow reaches or exceeds 80 percent of the permitted capacity of a treatment works, the participating municipalities and/or sewerage authorities shall submit to the Department a program to be implemented in order to prevent an overloading of their facility or a violation of their NJPDES permit. This program shall include, but is not limited to, the following:
 - 1. Implementation of water conservation measures;
 - 2. Reduction of inflow and infiltration (I/I) where appropriate. Measures shall be taken, to the satisfaction of the Department, which appropriately identify the causes and course of corrective action within a specified time frame;
 - 3. Implementation of measures to maximize treatment plant capacity at a minimum cost;
 - 4. Construction of improvements;
 - 5. Disconnection of roof leaders, sump pumps and other sources of inflow, from sanitary sewer lines and connect into storm sewer lines where storm sewers are available and to the extent feasible;
 - 6. Submission, on a quarterly basis, of a completed WQM007 Form to the Municipal Finance and Construction Element, Bureau of Financing and Construction Permits, PO Box 425, Trenton, New Jersey 08625-0424; and
 - 7. Preparation for the imposition of a self-imposed sewer connection ban, as required by N.J.A.C. 7:14A-22.17, in the event that it is anticipated that additional flows will result in violations of any pollutant parameter limits contained in the plant's NJPDES or NPDES permit.
- (b) For treatment plants which are subject to excessive inflow and infiltration to the extent that NJPDES permit limits for flow are occasionally exceeded during wet months, the Department will consider issuing TWAs for additional flow if, in the sewerage authority's opinion, the affected sewage treatment plant can treat flows in excess of its permitted capacity and still maintain compliance with the pollutant limits specified in its NJPDES permit. In addition to the requirements in (a)1 through 7 above, the authority shall submit a detailed technical report demonstrating its findings and providing

justification for the issuance of treatment works approvals for additional contributory flows.

- 1. The detailed technical report referenced in (b) above must contain a discussion of the following issues:
 - i. The extent of inflow and infiltration;
 - ii. Dry weather treatment capacity at the plant;
 - iii. The plant's ability to treat additional flows;
 - iv. Water quality issues;
 - v. Status of the current NJPDES permit for the plant; and
 - vi. The effect that such a decision will have upon the discharge limitations contained in future NJPDES permits.
- (c) If the participating municipalities and authorities do not comply with (a) above, then the Department may issue a warning notice. A warning notice shall require the sewerage authority or municipality to prepare and submit a program pursuant to N.J.S.A. 58:10A-6(h)(3) and (a) above, within 45 days of receipt of the notice.
- (d) Upon approval by the Department of a program submitted pursuant to (a) or
 (b) above, the sewage authority and participating municipalities shall give public notice of the program in a manner designed to inform local residents, developers, local planning board and other affected persons. Such notice shall include at least the following information:
 - 1. The name, mailing address and telephone number of the owner of the treatment works;
 - 2. The permitted capacity of the treatment works;
 - 3. The committed flow to the treatment works;
 - 4. A statement that the treatment plant is approaching its permitted capacity and the possibility exists that a sewer connection ban will be imposed if the plant is unable to maintain compliance with its discharge limits; and
 - 5. Description of the service area including the participating municipalities.
- (e) In the event that the committed flow to a sewage treatment plant is at or above 100 percent of the plant's permitted capacity, and the Department determines that issues involved in (a), (b) or (c) above have not been appropriately addressed and that additional flows above the plant's permitted capacity may result in violations of their NJPDES permit, the Department may cease the further issuance of treatment works approvals for additional flow to the plant. In the event that such a decision is made, the Department, at its discretion, may grant exceptions for projects that require a TWA providing the project meets the sewer ban exemption criteria specified in N.J.A.C. 7:14A-12.22.

(f) Neither this section nor the provisions of N.J.A.C. 7:14A-22.17 shall apply to industrial treatment works that are direct dischargers to the waters of the State.

7:14A-22.17 Sewer ban imposition

- (a) A sewer connection ban shall be imposed in accordance with this subchapter, when any one of the following events occurs:
 - 1. The downstream sewerage facilities do not have adequate conveyance capacity as defined in N.J.A.C. 7:14A-1.2;
 - i. If the cause of inadequate conveyance capacity is a one-time overflow occurrence which has been determined to be the result of extreme and unusual precipitation, or equipment malfunction which has been repaired, the owner/operator may notify the Department, Division of Water Quality, in writing within 20 days of the occurrence and request relief from the imposition of the sewer ban.
 - ii. The Department may require any local agency requesting relief pursuant to this provision to provide additional detailed justification, including, but not limited to, a sewer system capacity analysis and evaluation;
 - 2. For a three month consecutive period, a treatment works has discharged effluent to a surface waterwhich violates the limitations for any of the conventional pollutants, as defined in (b) below, of its NJPDES or NPDES permit, as determined by the arithmetic average of the permit parameters for the period;
 - 3. For a three month consecutive period, a treatment works has discharged effluent to the surface water which violates any nonconventional pollutant of its NJPDES or NPDES permit, as determined by the arithmetic average of the permit parameters for the period, and the sewerage authority or municipality does not meet one of the following requirements for relief from the sewer connection ban imposition:
 - i. The treatment plant owner has entered into an administrative/judicial consent order with the Department that contains a schedule for the completion of improvements necessary to enable the treatment facility to comply with all the conditions and limitations of its NJPDES permit; or
 - ii. A treatment works approval permit for the improvements necessary to enable the treatment facility to comply with all conditions and limitations of its NJPDES permit has been issued and a contract for the construction has been awarded; or
 - 4. For a three month consecutive period a treatment works has discharged effluent to ground water which violates any effluent or flow limitations of its NJPDES or NPDES permit, as determined by the arithmetic average of the permit parameters for the period.

- (b) For the purpose of the sewer ban imposition and rescission criteria, "conventional pollutant" shall mean NJPDES discharge permit limitations established for oxygen demanding pollutants (BOD, CBOD, NBOD and TBOD), total suspended solids (TSS), pH and bacterial quality indicators (fecal coliform, total coliform, enterococci).
- (c) For surface water dischargers, violations of NJPDES or NPDES effluent requirements for flow, percent removal or toxicity shall not require the imposition of a sewer connection ban. In the case of a treatment facility at or above 80 percent of its permitted flow, the facility shall be subject to the provisions of the Capacity Assurance Program specified at N.J.A.C. 7:14A-22.16.
- (d) For the purposes of ban imposition and rescission criteria only, if a valid NJPDES permit contains more than one means of measuring an oxygen demanding pollutant (example: CBOD or NBOD or TBOD), then consistent compliance with only one measurement is required.
- (e) In the event that the sewerage authority and/or municipality does not impose the required sewer connection ban, the Department may cease issuing treatment works approval permits, direct the imposition of a sewer connection ban and take other enforcement actions that it deems necessary.
- (f) Sewer connection bans in effect and imposed pursuant to N.J.A.C. 7:14A-22.18 shall remain in full force and effect unless specifically allowed to be rescinded by the Department in writing, and in accordance with N.J.A.C. 7:14A-22.18(f).

7:14A-22.18 Procedures and effective date for the imposition of a sewer connection ban

- (a) Within 20 days of the treatment works becoming subject to a ban pursuant to N.J.A.C. 7:14A-22.17, the owner/operator of the subject treatment works shall:
 - 1. Adopt a resolution imposing the sewer connection ban;
 - 2. Cease the further approval of sewer connections to the subject treatment works as of the effective date of the ban;
 - 3. Notify the affected municipalities that they shall cease the issuance of building permits and condition all other approvals which will require or modify a sewer connection, and which has not already obtained a valid treatment works approval issued by the Department.
 - i. For projects that do not require a treatment works approval and/or sewer ban exemption pursuant to N.J.A.C. 7:14A-22.20, the municipality may issue building permits or other local approvals; and

- 4. Give notice of the sewer connection ban to the Department, to residents of the area that contributes to the subject treatment works, landowners therein, local planning boards, and other persons or legal entities affected by the ban, within 10 days of adoption of the ban imposition resolution, and at intervals of no more than six months in a manner reasonably expected to be received by such persons.
- (b) Other than in (a)3i above, the affected sewerage authority and participating municipalities shall not issue sewer connection approvals or endorse sewer connection applications for specific projects in the affected area unless the following requirements have been met:
 - 1. A sewer connection ban has been implemented in accordance with this subchapter;
 - 2. Sewer connection ban exemption criteria equivalent to, or more stringent than, those contained in N.J.A.C. 7:14A-22.22 have been adopted; and
 - 3. The sewer connection ban ordinance, or resolution, and the sewer ban exemption for the specific project has been approved by the Department.
- (c) Treatment works applications filed with the Department prior to the effective date of the sewer connection ban will be considered for approval provided that at the time of the sewerage authority's certification on the Department's Form WQM003, the receiving treatment works was operating in compliance with all applicable conditions as stated in the WQM003 Form.
- (d) When the participating municipalities and/or affected sewerage authorities have failed to comply with (a) and (b) above, the Department shall cease issuing treatment works approvals and may also direct the imposition of a sewer connection ban, issue administrative orders, assess civil administrative penalties, seek judicial relief, or take any other enforcement action it deems necessary.
- (e) The effective date for any sewer connection ban required to be imposed by this subchapter shall be 20 days following the date upon which the first of either of the following occurs:
 - 1. The due date of the Discharge Monitoring Report which would indicate non-compliance in accordance with N.J.A.C. 7:14A-22.17; or
 - 2. The date of identification of a lack of adequate conveyance capacity as defined in N.J.A.C. 7:14A-1.2.
- (f) The affected sewerage authority or municipality shall apply to the Department for a rescission or modification of a sewer connection ban implemented pursuant to this subchapter at such time as a ban is no longer required in accordance with N.J.A.C. 7:14A-22.17. No ban may be rescinded without written approval from the Department.

7:14A-22.19 General policy and procedure for sewer connection ban exemptions

- (a) Each affected sewage authority, or municipality that owns a treatment works, upon the institution of a connection ban, shall adopt exemption criteria at least as stringent as those included in this subchapter in order to provide relief to persons who qualify for such relief. The burden of proof is upon the applicant for all exemption requests and the Department and each affected sewerage authority shall presume that all applicants have knowledge of the sewer connection ban after the effective date of its imposition.
- (b) No exemption shall be granted to any person who subsequently proceeds with a proposed project, without first obtaining all necessary approvals, and thereby increases or creates a self-imposed hardship.
- (c) For projects which require a treatment works approval pursuant to N.J.A.C. 7:14A-22.3, a sewer ban exemption approval, if required pursuant to this subchapter, shall be obtained from the Department or delegated agency, prior to filing the treatment works approval application.
- (d) Before making a final decision, the Department may request additional documentation or information that is relevant to the project. Failure of the applicant to supply the additional information may serve as a basis for denial of the application.
- (e) Water conservation plumbing is required in all instances of new or modified plumbing or piping. Water conservation plumbing is a condition of the exemption and does not constitute the basis for a sewer ban exemption.
- (f) An exemption granted for a specific project at a determined location is not transferable to any other project or location, and is only transferable to a new owner providing the location, scope and other relevant conditions of granting the original exemption remain unchanged. Transfers to new owners meeting the requirements of this subsection do not require Department approval.
- (g) Projects which have changed in scope or for which the conditions of granting the original exemption have changed are not considered to be exempt. The applicant/owner of such projects shall apply for a new sewer ban exemption in accordance with this subchapter.

7:14A-22.20 Activities which do not require an exemption from the Department

(a) Any project which has proceeded in accordance with a valid stage II and stage III treatment works approval from the Department for the construction and operation of treatment works will not require a sewer ban exemption from the Department provided that construction of the facilities is undertaken in accordance with the Department's approval.

- (b) For projects which do not require a treatment works approval pursuant to N.J.A.C. 7:14A-22.4, a sewer ban exemption from the Department is not required provided that the owner/applicant of the project has obtained a building permit prior to the effective date of the sewer connection ban, and is otherwise lawfully entitled to initiate construction in conformance with previously issued valid approvals.
- (c) Modifications, additions or deletions to the internal plumbing or piping of any lawfully, pre-existing building will not require a sewer ban exemption provided that:
 - 1. The size of the building will not increase (gross area); and
 - 2. The category and scope of use of the building will remain unchanged in accordance with N.J.A.C. 7:14A-23.3, Projected flow criteria.
- (d) The replacement, rehabilitation or modification of existing conveyance and treatment facilities will not require a sewer ban exemption provided that the project does not involve any additional contributory flow, as determined by the Department.

7:14A-22.21 Application procedures for obtaining a sewer connection ban exemption from the Department

- (a) The sewerage authority or municipality imposing the ban shall provide the applicant with the following:
 - 1. A copy of the ban exemption regulations contained in N.J.A.C. 7:14A-22.18 through 22.22;
 - 2. The Department's ban exemption application form, WFR001, entitled: "Application for Exemption from a Sewer Connection Ban";
 - 3. The effective date of the sewer connection ban; and
 - 4. A copy of the authority's sewer ban exemption criteria.
- (b) An applicant requesting an exemption shall submit the Department's application form for an exemption from a sewer connection ban and any other appropriate documentation to the appropriate sewerage authority or municipality, who shall review the request for compliance with the applicable criteria.
- (c) If the affected sewerage authority or municipality determines that the applicant meets the criteria specified in N.J.A.C. 7:14A-22.22, or more stringent criteria that may be locally adopted, the authority shall forward the application package and a written letter of consent, to the Department for a final decision, unless the local authority has been delegated the authority to approve exemption requests pursuant to N.J.A.C. 7:14A-22.23.

- (d) If the sewerage authority or municipality denies the sewer ban exemption request, that decision cannot be appealed to the Department.
- (e) After reviewing the application for a sewer connection ban exemption, the Department will notify the affected sewerage authority of the results of its review.
- (f) Before making a decision, the Department may request that the applicant supply additional documentation. If the additional requested information is not supplied, the Department may deny the exemption request.
- (g) The granting of an exemption by the Department and the affected sewerage authority does not relieve the applicant of the responsibility to comply with all other State and local requirements, including compliance with the appropriate water quality management plan requirements and obtaining a treatment works approval from the Department, if required.

7:14A-22.22 Sewer ban exemption criteria

- (a) A sewer ban exemption may be granted for projects that meet any one of the following criteria:
 - 1. If the proposed project will have a total projected flow of 600 gallons per day or less, calculated in accordance with the Department's flow criteria contained in N.J.A.C. 7:14A-23.3, and meets the following requirements:
 - i. The project will be constructed and/or operated on a tax lot which was in existence prior to the effective date of the ban, or on a tax lot which is the result of a one-time subdivision of a single lot into two lots, subsequent to the date of the ban. In this instance, a total of 600 gallons per day may be approved for the combination of both lots; and
 - ii. The proposed project does not require a sewer extension;
 - 2. If the project will replace a building/facility, at the same location, which was in existence prior to the effective date of the sewer connection ban, and was or is currently connected to the treatment works subject to the ban, and the replacement facility will create flow equal to or less than the former facility, calculated in accordance with either one of the following:
 - i. The projected flow of the proposed building is less than or equal to the projected flow of the existing building based on the criteria contained in N.J.A.C. 7:14A-23.3; or
 - The projected flow of the proposed facility, based on N.J.A.C. 7:14A-23.3, is equal to or less than the actual flow of the existing building, based upon water use records for the most recent 12 month period available;

- 3. If, in the Department's opinion, there exists a sufficient public need for the proposed project such as for health, safety, food or shelter, there are no reasonable alternatives including alternate sites, and the project meets any one of the following:
 - i. The project is publicly owned or operated, including, but not limited to, a long term health care facility which has received a certification of need from the New Jersey Department of Health, a hospital, a fire or police station or a public school or expansion of an existing New Jersey accredited private school for primary, secondary or higher education; or
 - ii. At least 10 percent of the project's operating costs are provided by a public entity such as the State, county, municipality or an agency of such, the project is for the purpose of ensuring the public welfare by a "not-for-profit" organization. Such projects include a volunteer ambulance squad, school or facility for people with disabilities, an emergency shelter for persons in need, and other projects of a similar nature;
- 4. If the project is designed to house people with low or moderate incomes, and the affected sewerage authority or municipality is in compliance with either an administrative consent order with the Department, or a judicial consent order with the U.S. Environmental Protection Agency, or has obtained a treatment works approval and awarded a contract for construction of facilities necessary to eliminate the reasons for the sewer connection ban, and it can be demonstrated that the project meets any one of the following requirements:
 - i. The project is to be occupied exclusively by senior citizens with low incomes, and will be owned or operated by a not-for-profit organization incorporated pursuant to N.J.S.A. 55:14I-1 et seq.; and either
 - The project is to be built with funds provided pursuant to Section 202 of the Federal Housing Act (12 U.S.C.A. 1701q) and the monthly rents will be subsidized by funds provided pursuant to section 8 of the U.S. Housing Act of 1937 (42 U.S.C.A. 1437); or
 - (2) The project is to be built with funds provided pursuant to section 515 of Title V of the Housing Act of 1949 as amended (42 U.S.C.A. 1485), and the monthly rents will be subsidized by funds provided pursuant thereto;
 - ii. The project is a rental housing project which meets all of the following conditions:
 - (1) The project will be located in a municipality which is, or has been at one time, designated as an Urban Aid Municipality as defined by the Department of Community Affairs;

- (2) Twenty percent of the housing units will be occupied by low income households as defined pursuant to the Fair Housing Act (N.J.S.A. 52:27D-301 et seq., N.J.A.C. 5:92-1.3 and N.J.A.C. 5:14-1.3(a));
- (3) The project is receiving, or has a commitment from the Department of Community Affairs to receive grants or loans through either the Urban Multi-Family Production Program, P.L. 1988, c.47, or the Neighborhood Preservation Balanced Housing Program implemented by the Department of Community Affairs at N.J.A.C. 5:14; and
- (4) The housing project consists of buildings or structures to be occupied for residential, rental purposes only, and the units will remain rental for no less than 15 years if the project is receiving or has a commitment to receive a grant or loan through the New Jersey Urban Multi-Family Production Program, or for the amount of time set forth at N.J.A.C. 5:14 if the project is receiving or has a commitment to receive a grant or loan through the Neighborhood Preservation Balanced Housing Program;
- Occupancy of the proposed housing project is limited solely to households of low and moderate income as defined pursuant to the Fair Housing Act, N.J.S.A. 52:27D-301 et seq., and the project meets all of the following conditions:
 - (1) The housing project consists of buildings or structures to be occupied for residential purposes only;
 - (2) The owner of the proposed housing project is, or will be, a public entity or a nonprofit corporation or association, including, but not limited to, a mutual housing sponsor as defined at N.J.S.A. 52:27D-59 et seq.; and
 - (3) The project is receiving, or has a commitment to receive public funding pursuant to the Fair Housing Act, N.J.S.A. 52:27D-301 et seq. in accordance with all applicable rules adopted by the Council of Affordable Housing at N.J.A.C. 5:91 and 5:92, the Department of Community Affairs at N.J.A.C. 5:14 and/or the New Jersey Housing and Mortgage Finance Agency at N.J.A.C. 5:80; or
- iv. Occupancy of the proposed housing project is limited solely to households of low or moderate income, and the project has been approved by the Council on Affordable Housing (COAH) as part of a "Regional Contribution Agreement";
- 5. If an existing building or group of buildings constructed prior to the effective date of the sewer connection ban with lawfully constructed, individual subsurface sewage disposal systems is certified by the

administrative authority and proven to the satisfaction of the Department to be currently creating a health hazard due to sewage overflow, contamination of the waters of the State, or other malfunction and a New Jersey professional engineer, geologist or soil scientist who is knowledgeable of soils and subsurface disposal system design certifies that the system cannot be reasonably rehabilitated and submits appropriate supporting documentation acceptable to the Department;

- 6. If the project is for a ground water remedial action which has been approved by the Department's Site Remediation Program and for which no other feasible discharge alternatives exist including on-site treatment and discharge to ground water, or discharge to an alternate surface water location. Exemptions will not be granted under this category for projects located in areas subject to a sewer connection ban due to inadequate conveyance capacity or in situations where the additional discharge will create bypasses or other health hazards at treatment plants that have reached their design capacity, unless adequate provisions for conveyance are included in the project scope;
- 7. If a project is for a not-for-profit organization that serves a fundamental public need such as providing food/shelter and other essential services regardless of race, creed or religion, to the needy or people with disabilities, meets the criteria for a tax exempt charitable organization under section 501(c)(3) of the Internal Revenue Code, and no alternative to the proposal exists, then the applicant may apply for a sewer ban exemption. The above conditions in this paragraph, by themselves, are not adequate to entitle the applicant to an exemption and the Department shall rule on applications based on the amount of anticipated flow, the progress the affected sewerage authority has made toward resolving the reason for the ban imposition, and the feasibility of alternative discharge methods or alternate facility sites.
- 8. If the municipality, prior to November 3, 1986, has issued a building permit, or preliminary or final subdivision approval, provided that construction of improvements has taken place, the remaining construction covered by such permit or approval may be eligible for an exemption, providing the applicant shows that, in good faith reliance upon the permit or approval, substantial expenditures have been made by the applicant for physical improvements to the property prior to the effective date of the ban.
 - i. The payment of taxes, the purchase price, expenditures for preparation of engineering and architectural plans and for legal fees, and other costs not expended for physical improvements to the land shall be ineligible for consideration in determination of "substantial expenditures."

- ii. All claims for eligible expenditures shall be accompanied by certified true copies of contracts, receipts or invoices. An unverified list of expenses is not acceptable for establishing expenditures. In addition, the applicant shall submit an estimate of the total project cost with a certification that the estimate is true and accurate.
- iii. For the purposes of this paragraph, "substantial expenditures" shall mean those eligible costs in excess of:
 - (1) 25 percent of the cost of those projects whose total cost is equal to or less than \$100,000;
 - (2) \$25,000 plus 10 percent of the costs in excess of \$100,000 for those projects whose total cost is less than \$10,000,000 but more than \$100,000; or
 - (3) \$1,015,000 plus five percent of the project costs in excess of \$10,000,000 for those projects whose total cost exceeds this amount.

7:14A-22.23 Delegation

- (a) Except as stated in (g) below, the Department may delegate its authority to approve or disapprove sewer ban exemption applications, to a municipality or sewerage authority in accordance with the provisions of this subchapter.
- (b) Any municipality or sewerage authority, which is the owner of the affected sewerage facilities, may make an application to the Department to be considered as a delegated agency for the purpose of this subchapter. To be considered for delegation by the Department, the sewerage authority or municipality shall satisfy all of the following:
 - 1. The sewerage authority or municipality shall demonstrate that it is capable of effectively implementing the rules, regulations and standards adopted by the Department for administration of the sewer ban exemption program; and
 - 2. The sewerage authority or municipality shall have sufficient resources, including qualified staff to implement the delegated ban exemption program.
- (c) If the sewer ban exemption program or portion thereof is delegated by the Department, the affected sewerage authority or municipality shall comply with the following:
 - 1. The delegated agency shall adopt an ordinance or resolution containing all required provisions of the rules, and include provisions for enforcement and administration of the program.

- 2. The delegated sewerage authority or municipality shall submit a quarterly report with a list of approvals or denials of projects, including the project scope and location, a certification by the appropriate official that all projects granted approval meet the requirements of this subchapter. If no actions were taken during the quarter, a statement to this effect shall be submitted to the Department.
- 3. The delegated sewerage authority or municipality shall execute a binding memorandum of understanding with the Department specifying, at a minimum, each party's authority and obligations, and the specific review standards, monitoring and record keeping requirements for the delegated agency.
- (d) The Department shall review the delegation arrangement and its effectiveness at least every three years from the date of initial approval, and reserves the right to rescind any previously issued delegation of authority for any valid reason.
- (e) In the event that the Department amends any of the rules in this subchapter, the delegated agency shall implement the amended rules as of their effective date.
- (f) Delegation pursuant to this subchapter shall not waive the Department's right to monitor and inspect any documents or project sites or to seek fines or penalties pursuant to the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq.
- (g) Sewer ban exemption applications submitted pursuant to N.J.A.C. 7:14A-22.22(a)3, (a)6 and (a)7 (public need, ground water remediation and not-for-profit organization projects) shall not be delegated.
- (h) Any sewerage authority or municipality accepting delegation pursuant to these provisions shall review and approve or deny projects in accordance with the provisions of this subchapter and applicable provisions contained in N.J.A.C. 7:14A-23.

7:14A-22.24 Requests for adjudicatory hearings

- (a) Subject to the limitation on third-party hearing rights specified in (e) below, any interested person who considers himself or herself aggrieved by the approval or denial of a treatment works approval may request an adjudicatory hearing in accordance with the procedures specified in N.J.A.C. 7:1C-1.9 of the "Rules and Regulations Governing 90 Day Construction Permits".
- (b) Subject to the limitation on third-party hearing rights specified in (e) below, any interested person aggrieved by the approval or denial of a sewer ban exemption request by the Department may request an adjudicatory hearing

within 30 days of receipt of the Department's denial. Adjudicatory hearing requests shall be in writing and shall be accompanied by:

- 1. A copy of the approval or denial and the same documents that were submitted with the application;
- 2. A statement specifying which of the Department's reasons for denial are contested; and
- 3. Additional statements describing, in detail, how that person is aggrieved by the decision, and which findings of fact and conclusions of law are being challenged.
- (c) Requests for hearing shall be sent to the Department's Office of Legal Affairs, Attention: Adjudicatory Hearing Requests, PO Box 402, Trenton, New Jersey 08625-0402.
- (d) All hearings pursuant to this section shall be conducted in accordance with the Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq., and the Uniform Administrative Procedure Rules, N.J.A.C. 1:1.
- (e) Nothing in this section shall be construed to provide a right to an adjudicatory hearing in contravention of N.J.S.A. 52:14B-3.1 through 3.3 (P.L. 1993, c.359).

SUBCHAPTER 23. TECHNICAL REQUIREMENTS FOR TREATMENT WORKS APPROVAL APPLICATIONS

7:14A-23.1 Purpose

The purpose of this subchapter is to establish technical requirements for the approval of the design, construction and operation of domestic and industrial treatment works so that wastes are properly collected, conveyed and treated before discharge to the waters of the State.

7:14A-23.2 Scope

- (a) These rules apply to individuals, sewerage authorities, municipalities, governmental agencies, private firms and all persons who propose to design, construct and/or operate any treatment works for the collection, conveyance or treatment of domestic or industrial wastes in the State of New Jersey, and for which a treatment works approval from the Department is required pursuant to N.J.A.C. 7:14A-22.
- (b) These rules establish specific criteria and standards for the construction and operation of treatment works. In promulgating these requirements, the Department recognizes that, at times, deviations from these requirements may be necessary to address specific circumstances. The Department will consider deviations from these design criteria provided that appropriate documentation addressing the need for deviation and justification for the proposed design is submitted with the treatment works approval applications and includes a signed and sealed statement from the design engineer attesting to the treatment works ability to meet the purposes intended.
- (c) These rules do not specify any technical standards explicitly for the construction of industrial treatment works due to the high degree of variability of the wastestreams, and treatment process options available to deal with the various pollutants that may be present at an industrial facility. Because of this variability, it would not be prudent to impose specific technical standards on facilities where such standards may not be appropriate. It is the responsibility of the design engineer to design industrial treatment works to meet all applicable Federal, State or local limitations, conditions, and/or requirements, including, but not limited to, the requirements of a facility's NJPDES or NPDES permit. When appropriate, the general technical standards specified in this subchapter for domestic waste treatment and conveyance systems may be used.

7:14A-23.3 Projected flow criteria

(a) The values specified below are to be used in computing the projected flow to wastewater conveyance and treatment facilities and when making an application for a treatment works approval pursuant to N.J.A.C. 7:14A-22. The specific measurement unit listed for each category shall be used as the basis for the projected flow. No additional provisions for inflow and infiltration are required. For the purposes of design only, other values, proposed by the design engineer, through actual water usage data, may be accepted at the Department's discretion, with an appropriate safety factor.

However, all determination concerning whether or not any specific project requires a treatment works approval and/or sewer ban exemption shall be based upon the projected flow criteria established below. These criteria are not mandated to be used by sewerage authorities as a basis for establishing local user fees and/or connection fees.

Type of Establishment	Measurement Unit	Gallons Per Day	
Residential Dwellings (single family home, duplex units, townhouses, condominiums, apartments)			
1 bedroom unit	Per Dwelling	150	
2 bedroom unit	Per Dwelling	225	
3 bedroom unit or larger	Per Dwelling	300	
Transit dwelling units			
Hotels	Bedroom	75	
Lodging houses and tourist homes	Bedroom	60	
Motels and tourist cabins	Bedroom	60	
Boarding houses (max. permitted occupancy)	Boarder	50	
Camps			
Campground/mobile rec. vehicle/tent	Site	100	
Parked mobile trailer site	Site	200	
Children's camps	Bed	50	
Labor camps	Bed.	40	
Day campsno meals	Person	15	
Restaurants (including washrooms and turnover)			
Average restaurant	Seat	35	

Bar/cocktail lounges	Seat	20	
Fast food restaurant	Seat	15	
24 hour service restaurant	Seat	50	
Curb service/drive-in restaurant	car space	50	
Clubs			
Residential	Member	75	
Nonresidential	Member	35	
Racquet club	(per court per hour)	80	
Bathhouse with shower	Person	25	
Bathhouse without shower	Person	10	
Institutions (includes staff)			
Hospitals	Bed	175	
Other institutions	Bed	125	
Schools (includes staff)			
No shower or cafeteria	Student	10	
With cafeteria	Student	15	
With cafeteria and showers	Student	20	
With cafeteria, showers and laboratories	Student	25	
Boarding	Student	75	
Automobile service stations			
	per filling position	125	
Service bays	per bay	50	
Mini-market	Sq. Ft.	0.100	
Miscellaneous			

Office buildings (gross area)	Sq. Ft.	0.100	
Stores and shopping centers (gross area)	Sq. Ft.	0.100	
Factories/warehouses (add process wastewater)	Employee	25	
with showers, (add process wastewater)	Employee	40	
Laundromats	Per machine	580	
Bowling alleys	Alley	200	
Picnic Parks (restrooms only)	Person	10	
Picnic Parks with showers	Person	15	
Fairgrounds (based upon average attendance)	Person	5	
Assembly halls	Seat	3	
Airports (based on passenger use)	Passenger	3	
Churches (worship area only)	Seat	3	
Theater (indoor)	Seat	3	
Dinner theater	Seat	20	
Catering/Banquet Hall	Person	20	
Sports stadium	Seat	3	
Visitor Center	Visitor	5	

(b) Flow for facilities that have combined uses shall be determined by the summation of all appropriate projected flow values for each use.

(c) The Department recognizes that the table in (a) above may not cover all establishments and facilities, and in particular facilities that require an industrial treatment works approval. In the event that a facility is not covered, the applicant shall propose the projected flow based upon operation of similar facilities or best

professional judgment. The Department reserves the right to accept, modify or deny the proposed flow values.

7:14A-23.4 Plans and specifications submitted to the department with treatment works approval applications

- (a) Maps, drawings, plans and profiles submitted as part of a treatment works approval application shall conform to the following:
 - 1. Plans shall be drawn to standard scale and show the entire area of the project, including a general site plan;
 - 2. The name of the New Jersey licensed professional engineer responsible for the design and his or her signature and embossed seal shall appear in the title block of each sheet of the submitted plans;
 - 3. In the event that there is more than one sheet of plans, all shall be bound together and an index provided;
 - 4. Plans shall not exceed 30 inches by 42 inches in size;
 - 5. Streams and wetland areas, if present, shall be clearly indicated;
 - 6. Plans shall show municipal boundaries, property lines, easements and all existing and proposed streets, including the existing and proposed surface elevations at all street intersections where sewer lines are proposed; and
 - 7. All existing and proposed structures, sanitary sewers and combined sewers, both above and below ground, shall be shown and clearly labeled.
- (b) Symbols used on submitted drawings shall conform to the following:
 - 1. Existing and future sewers shall be shown by standard conventions;
 - 2. All topographical symbols and conventions used shall conform to those of the United States Geological Survey; and
 - 3. Elevations shown shall meet the following requirements:
 - i. Elevations of the surfaces of streets shall be placed outside the street lines, opposite their respective locations;
 - ii. Elevations of sewer inverts shall be shown at intersections, ends of lines, and wherever a change in sewer grade occurs;
 - iii. The elevation of sewers shall be written close to the point to which they refer, parallel with the sewer lines and between the street lines;
 - iv. The elevations of surfaces shall be drawn to the nearest 0.1 foot and those of the sewer inverts to the nearest 0.01 foot; and
 - v. All elevations shall be referenced to the North American Vertical Datum of 1988.
- (c) The horizontal distances and stationing between manholes, grades in percent and sewer sizes and materials shall be shown for all proposed sewer lines.
- (d) All sewer appurtenances, such as manholes, siphons and pumping stations shall be designated on the plans by appropriate symbols and referenced by a legend.

- (e) Plans labeled preliminary are not acceptable for review unless a note is added to each sheet submitted stating that the plans are final with respect to sanitary sewer design.
- (f) Plans submitted for treatment works that are already constructed shall show the "asbuilt" conditions (as determined through field investigation) and the title block of each sheet shall include the term "as-built."
- (g) Profiles and construction details shall meet the following requirements:
 - 1. Profiles shall indicate all manholes, pumping stations, sanitary, combined or industrial sewer lines, concrete encasements, sleeves, and any significant crossings such as storm sewers, potable water lines or utility lines.
 - 2. In the case of stream crossings, elevations of stream beds, normal flow lines and the type of sewer pipe with the length of concrete encasement, as required by N.J.A.C. 7:14A-23.6(b), shall be indicated.
 - 3. The size and gradients of sewers, surface elevations and sewer inverts shall be shown at or between each manhole.
 - 4. Profiles of gravity and forced sewer lines shall be drawn to standard scale with all symbols indicated in the legend.
 - 5. Detail drawings of all sewer appurtenances, such as manholes, drop manholes, inspection chambers, siphons, pumping stations, force main connections into manholes and other related items shall accompany the general sewer system plans.
 - 6. For sewage treatment plants, in addition to all other requirements, the plans shall contain the following:
 - i. A general plan showing site boundaries including areas reserved for future expansions;
 - ii. All buildings or building lots within 500 feet of the plant property;
 - iii. A detail plan of the various units and structures which comprise the plant; and
 - iv. Detail plans showing a flow diagram, and longitudinal and transverse sections sufficient to explain the construction of each unit including hydraulic gradient.
- (h) Specifications for the construction of treatment works shall be directly applicable to the engineering (including hydraulic) features of the proposed project and shall meet the following minimum requirements:
 - 1. Detailed information shall be included on the construction methods and materials proposed for use so as to provide the construction contractor with the specific details necessary to satisfy the project design; and
 - 2. Specifications shall address the following:
 - i. The quality of materials and workmanship;
 - ii. The operating characteristics and equipment rating;
 - iii. Allowable infiltration/exfiltration and the testing procedures to be followed;

- iv. Requirements for all mechanical and electrical equipment necessary for the treatment works; and
- v. A program for maintaining the operation of existing sewerage systems during construction.

7:14A-23.5 Engineering design reports to be submitted to the Department with treatment works approval applications

- (a) Engineering reports required to be submitted pursuant to N.J.A.C. 7:14A-22.8 for domestic treatment systems shall, at a minimum, include:
 - 1. A complete description of the selected waste treatment system;
 - 2. For the modification of an existing system which has not previously been granted a treatment works approval, the capacities of the existing units and a brief description of the operation of each, and a statement concerning which units are existing and which are proposed at the time of the application. If there exists a previously issued treatment works approval for the subject facility, the date of issuance and the TWA number shall be provided;
 - 3. The basis and computations for the projected wastewater flow;
 - 4. Hydraulic profiles of the flow of wastewater through the system;
 - 5. A unit by unit mass balance for all discharge parameters;
 - 6. The ultimate disposal location of all effluent;
 - 7. The basis and computations for average and peak flow requirements;
 - 8. The expected composition of the influent and effluent from the treatment system including the average, maximum and minimum values of the pollutant parameters specified in the facility's NJPDES permit;
 - 9. An evaluation of the quantity and quality of any and all residuals generated and projected to be generated, including a hydraulic profile and unit by unit mass balance for the flow of residuals through the system;
 - 10. Documentation of adequate storage and handling facilities for residuals;
 - 11. Provisions for the ultimate management of residuals pursuant to the State Solid Waste Management Plan and/or the Statewide Sludge Management Plan, as applicable. For proposed upgrading or expansion of domestic treatment works, sludge management planning forms may be submitted pursuant to the Statewide Sludge Management Plan, Appendix K, to satisfy this requirement;
 - 12. Details of flow monitoring and control, alarm systems, auxiliary power, storage facilities for treatment chemicals and wastes, and a plan for bypassing units during construction or maintenance; and
 - 13. A signed and sealed statement from the New Jersey licensed professional engineer who designed the treatment works attesting to the proposed treatment works' ability, as designed, to meet the requirements of this subchapter and to attain all applicable discharge limits.

- (b) For treatment works applications involving the temporary or permanent use of holding tanks, the engineering reports required to be submitted by N.J.A.C. 7:14A-22.13 and 22.8 shall include:
 - 1. A description of the high water alarm to be provided to alert the responsible persons that the holding tank has reached 75 percent of its capacity and which will allow sufficient time to take appropriate measures to prevent overflows;
 - 2. A description of provisions for aeration at a rate of two cubic feet per minute per 1,000 gallons to prevent septic conditions and solids settling;
 - 3. Identification of a source of washdown water for routine maintenance and emergency situations, adequately protected by a backflow prevention device;
 - 4. A description of the holding tank area, including adequate measures to protect it from vandalism and safeguards for public health and safety;
 - 5. Engineering drawings containing construction details for all system components;
 - 6. Specifications including construction practices and operation and maintenance procedures; and
 - Sizing of holding tanks which, at a minimum, provides two days of waste storage, as determined in accordance with the projected flow requirements in N.J.A.C. 7:14A-23.3.
- (c) Engineering reports required to be submitted for projects involving the use of equalization tanks within a collection system, pursuant to N.J.A.C. 7:14A-22.15, shall include the following:
 - 1. A description of the method for placing the tank into operation and the timing and procedure for releasing the effluent back into the collection system, including quantity of flow and duration held;
 - 2. Average and peak flow requirements;
 - 3. A description of the high water alarm to be provided to alert the responsible persons that the equalization tank has reached 75 percent of its capacity and which allows sufficient time to take appropriate measures to prevent overflows;
 - 4. A description of the equalization tank area, including adequate measures to protect it from vandalism and safeguards for public health and safety such as covers, overflow protection, fencing, etc.;
 - 5. The engineering drawings containing construction details for all system components; and
 - 6. The specifications including construction practices and operation and maintenance procedures.
- (d) Engineering reports required to be submitted pursuant to N.J.A.C. 7:14A-22.14 and 22.8, for flow diversion, shall include, but are not limited to, the following:
 - 1. The existing and anticipated average and peak flow events within the collection system;

- 2. The ultimate disposal location of all effluent; and
- 3. A report outlining the procedures to be used in the hauling/diversion operation, including, but not limited to, the location at which the wastewater will be withdrawn, the frequency and time of withdrawal, and the effect that the procedure may have upon the treatment capabilities of both treatment facilities.
- (e) Engineering reports required to be submitted pursuant to N.J.A.C. 7:14A-22.8, for industrial treatment works approval applications shall include, but are not limited to:
 - 1. A complete description of waste treatment system;
 - 2. A mass balance and, if temperature change across any unit will exceed 10 degrees Celsius, a heat balance;
 - 3. The ultimate destination of all wastewater, sludge and residuals;
 - 4. Average and peak flow requirements and rationale for design;
 - 5. A listing of all pollutants, including regular and intermittent flows, and expected composition that may enter the system;
 - 6. The composition and quality of all sludge generated, name and registration number of the sludge hauler, frequency and parameters for periodic analysis;
 - 7. Documentation of adequate storage and handling facilities for residuals;
 - 8. Provisions for the ultimate management of residuals pursuant to the State Solid Waste Management Plan and/or the Statewide Sludge Management Plan, as applicable;
 - 9. The expected composition of effluent from the treatment system;
 - 10. A listing of any standards, ordinances, permits, court orders, contracts, etc. which regulate the discharge;
 - 11. An evaluation of the capability of the system to meet the most stringent applicable effluent limitation for each pollutant parameter from the NJPDES permit or other authorizations such as an administrative or judicial consent order;
 - 12. Potential spills from within the industrial facility which may enter the treatment system and provisions for treatment and containment;
 - 13. Provisions for metering and monitoring of the effluent;
 - 14. A discussion of: instrumentation, reliability of system components, storage and handling facilities, provisions for treatment during construction, safety features, laboratory facilities and analytical capabilities; and
 - 15. A plan for bypassing units during maintenance or down time.

7:14A-23.6 Sanitary sewer design

(a) Proposed sewerage systems shall connect into downstream sewer lines and pump stations that have adequate conveyance capacity.

- (b) Gravity sanitary sewers, including outfalls, shall be designed to carry at least twice the estimated average projected flow when flowing half full. In the case of large interceptor sewer systems, consideration may be given to modified designs. In addition, sanitary sewer conveyance systems shall meet the following requirements:
 - 1. Materials used in sewer construction shall be acceptable to the Department for the purposes and conditions they are intended to serve;
 - 2. Sewers shall be designed with the following minimum hydraulic slopes (grades producing velocities of greater than 10 feet per second are not recommended unless supported by adequate justification acceptable to the Department):

PVC Pipe (Polyvinylchloride)	Fall in feet per	
	100 feet of sewer	
Pipe diameter (based on Kutter's or Manning's		
formula with n=0.01)		
8 inches	0.30	
10 inches	0.20	
12 inches	0.15	
14 inches	0.12	
15 inches	0.10	
16 inches	0.09	
18 inches	0.075	
20 inches	0.065	
21 inches	0.06	
24 inches	0.05	
27 inches	0.042	
30 inches	0.035	
36 inches	0.028	

Pipe diameter	Fall in feet per 100 feet of sewer
8 inches	0.40
10 inches	0.29
12 inches	0.22
14 inches	0.17
15 inches	0.16
16 inches	0.14
18 inches	0.12
20 inches	0.10
21 inches	0.095
24 inches	0.080
27 inches	0.067
30 inches	0.058
36 inches	0.046

- i. When grades or sizes less than those specified in this paragraph are proposed, justification for the use of such grades shall be provided with the treatment works approval application.
- ii. The minimum diameter of sewer extensions shall be eight inches, however, consideration will be given to the use of smaller diameter sewers for lateral connections;
- 3. Sewers crossing streams and/or located within 10 feet of the stream embankment, or where site conditions so indicate, shall be constructed of steel, reinforced concrete, ductile iron or other suitable material;
- 4. Sewers conveying sanitary flow, combined sanitary and stormwater flow, or industrial flow shall be separated from water mains by a distance of at least 10 feet horizontally. If such lateral separation is not possible, the pipes shall be in separate trenches with the sewer at least 18 inches below the bottom of the water main, or such other separation as approved by the Department;
 - i. Where appropriate separation from a water main is not possible, the sewer shall be encased in concrete, or constructed of ductile iron pipe using mechanical or slip-on joints for a distance of at least 10 feet on either side of the crossing. In addition, one full length of sewer pipe should be located so both joints will be as far from the water line as possible. Where a water main crosses under a sewer, adequate structural support for the sewer shall be provided. The Department may also require additional structural support for storm sewers crossing over sewer lines;
- 5. Any sewer within 100 feet of a water supply well or a below-grade reservoir shall be constructed of steel, reinforced concrete, ductile iron or other suitable material, shall be completely watertight and shall be tested for watertightness after installation;
- 6. The construction of sewer lines through storm sewer pipes or manholes will not be approved;
- 7. Sewer lines, including force mains and laterals, shall be constructed at least three feet below the proposed grade (as measured from the top of the pipe to the grade elevation);
- 8. Sewer pipes, including force mains and laterals, shall be sized to adequately convey the projected contributory flow in accordance with this subchapter. In general, sewer lines that are larger than hydraulically necessary to carry the projected flow and for which the larger size is proposed only for the purpose of achieving the minimum slope requirements specified in this section are not permitted;
- 9. Sewer lines shall not be approved for the use of storage or detention of sewage unless they are designed as an integral part of an existing combined sewerage system (sanitary/storm) where in-line storage is being proposed as a corrective measure to prevent the discharge of untreated wastewater from the treatment works;

- 10. New sewerage systems or extensions shall be designed as separate systems, in which all water from roofs, cellars, streets and other areas is excluded; except that separate connections to an existing combined system may be approved when it is demonstrated to the satisfaction of the Department that no other alternative is feasible. In addition, the Department may permit, on a case-by-case basis, the introduction of contaminated stormwater from containment areas into sanitary sewers;
- 11. To minimize the development of septic conditions, the Department may require special operational and/or maintenance procedures for treatment works if the initial contributory flows to the treatment works will be substantially below the design capacity; and
- 12. When a smaller sewer joins a larger one, the invert of the larger sewer should be lowered sufficiently, or the smaller pipe raised sufficiently, to maintain the same energy gradient. An approximate method for securing these results is to place the 0.8 depth point of both sewers at the same elevation.
- (c) For sewers other than circular in cross section, the submitted data shall include the geometrical shape, dimensions and hydraulic characteristics of the proposed sewer.
- (d) Approval for curved sewers will be considered by the Department only under the following circumstances:
 - 1. Areas where curved streets comprise the general layout, or the use of curved sewers would permit substantial savings in cost to avoid deep cuts due to rocks or obstructions;
 - 2. The minimum diameter of the sewer is eight inches and the minimum radius of curvature is 100 feet; and
 - 3. Manhole spacing does not exceed 300 feet.
- (e) All sanitary sewers, manholes, and cleanouts shall be tested by an infiltration, exfiltration or pressure test after being flushed and before being placed into use. The maximum rate of infiltration/exfiltration shall not exceed 100 gallons per inch diameter per mile per day.

7:14A-23.7 Inverted siphons

- (a) Inverted siphons shall be constructed of ductile iron or other approved material and shall not have less than two barrels.
- (b) Provisions shall be made for rodding and flushing.
- (c) A velocity of 3.0 feet per second shall be maintained and flow control gates in chambers shall be provided.

7:14A-23.8 MANHOLES

(a) Manholes shall be provided at the ends of each sewer line and at intersections and at all changes in grade, size or alignment.

- (b) Distances between manholes shall not exceed 400 feet for sewers 18 inches or less in diameter and 500 feet for sewers greater than 18 inches in diameter.
- (c) A drop pipe shall be provided for sewers entering manholes above the manhole invert whenever the difference in elevation is two feet or more.
- (d) No manholes or connections to a sanitary sewer system are permitted within 100 feet of a public water supply well or a below-grade reservoir.
- (e) Adequate provisions shall be made for ventilation.
- (f) Watertight manhole covers are required for all street elevations less than 10 feet above the North American Vertical Datum of 1988 and/or wherever the top of a manhole may be flooded by street runoff or high water. These manholes shall be properly protected, of watertight construction, and shall be inspected for adequacy after installation.
- (g) The minimum diameter of manholes is 48 inches; larger diameters are preferable for large diameter sewers. A minimum access diameter of 22 inches shall be provided.

7:14A-23.9 Outfalls

- (a) Ocean outfalls from municipal wastewater treatment works shall extend at least 1,000 feet in length beyond the mean low water mark. Manholes are required on the shore end of all gravity outfalls.
- (b) Outfalls, other than those to the ocean, shall be submerged and so located as to accomplish effective dispersion of flow.

7:14A-23.10 Wastewater pumping stations

- (a) Raw sewage pumping stations shall conform to the following requirements:
 - 1. Sewage shall be screened before pumping. Comminutors may be approved in lieu of screens, however, the requirement for screening raw sewage may be waived, at the Department's discretion, for individual, privately owned pumping stations;
 - 2. Pumping stations shall provide for stage pumping, preferably by the use of variable speed pumps, so as to eliminate, as far as practical, surges of flow to or through the treatment plants;
 - 3. Pump stations shall be provided with two power sources, one as a back-up;
 - 4. Automatic sound alarms, operating independently of the main power system, shall be installed to give warning of high water, power failure, or breakdown. Such alarm systems shall be telemetered to a police station or other staffed location so that competent emergency assistance can be obtained on a 24 hour basis;
 - 5. Pumping stations shall be protected against flooding and adequate provision shall be made for access to the stations during storm events;
 - 6. Adequate light and ventilation shall be provided at all pumping stations;
 - i. Where operational or maintenance duties are required in enclosed areas or pits, forced ventilation by appropriate means shall be provided with sufficient capacity to induce at least 12 air changes per hour;

- ii. Appropriate equipment to guard against explosion shall be utilized; and
- 7. Adequate fresh-water facilities shall be provided to permit routine washdown and cleaning operations at all pumping stations;
 - i. Where a domestic water service connection is provided to a pumping station, the water supply shall be adequately protected by a backflow prevention device;
 - ii. Connections between potable water lines and wastewater pumps or sewers is not permitted.
- (b) At least two pumps, each designed to handle peak flows equivalent to 2.5 times the average daily flow (using the Department's projected flow criteria specified in N.J.A.C. 7:14A-23.3) shall be provided. If more than two pumps are provided their capacities shall be such that, upon failure of the largest pump, the remaining pumps can handle peak flows.
- (c) When ejectors are provided as the method of raising sewage, at least two compressor units (one as a standby) are required and shall be so interconnected that the standby unit will commence operation in the event of failure of the one in use.
- (d) Pumps installed in dry wells shall operate under a positive suction head unless specifically designed and manufactured with appropriate features to allow for proper operation otherwise.
- (e) A means of flow measurement shall be provided in municipally owned, regional pumping stations.
- (f) Shut-off valves shall be provided on suction and discharge piping, which shall be flanged or otherwise removable, and check valves shall be provided on all discharge lines. Shut-off valves shall be accessible during all operating conditions.
- (g) Force main velocities of less than two feet/second at normal pumping rates will not be approved. Properly designed air release valves shall be provided on the high points of the force main and cleanouts are recommended on low points of the force main in cases where necessary for operational and maintenance reasons.
- (h) The use of low pressure force mains is permitted in only those circumstances when all other means of sewage conveyance have been explored and it has been demonstrated to the satisfaction of the Department that the use of low pressure force mains is the most prudent alternative available.

7:14A-23.11 Submersible wastewater pumps

- (a) In addition to the requirements specified at N.J.A.C. 7:14A-23.10, submersible wastewater pumps shall meet the following additional requirements:
 - 1. Submersible pumps and motors shall be designed specifically for raw sewage use, including total submersion during a portion of each pumping cycle;
 - 2. Submersible pumps shall be readily removable and replaceable without dewatering the wet well or disconnecting any piping in the wet well;

- 3. The motor control center shall be located outside the wet well and be protected by a conduit seal or other appropriate measures meeting the requirements of the National Electrical Code, to prevent the atmosphere of the wet well from gaining access to the control center. The seal shall be so located that the motor may be removed and electrically disconnected without disturbing the seal; and
- 4. Winch and guide rails shall be provided to facilitate pump removal.
- (b) An effective method to detect shaft seal failure or potential seal failure shall be provided, and the motor shall be of squirrel-cage type design without brushes or other arc-producing mechanisms.

7:14A-23.12 Dry wells and wet wells

- (a) The construction of dry wells and wet wells for sewage pumping stations shall meet the following requirements:
 - 1. Dry and wet wells shall be completely separated and have adequate ventilation and drainage;
 - 2. Dry wells and wet wells shall have a means of entrance and exit, preferably by a stairway;
 - 3. Dry wells shall have sufficient accessible space for the repair and removal of pumps;
 - 4. The detention time of a wet well shall not exceed ten minutes when the flow is at the average dry weather rate. The detention time is calculated by dividing the volume of the wet well (volume between the pump on and the pump off switch levels) by the projected flow for the pumping station;
 - i. Wet well detention times greater than 10 minutes may be approved by the Department for small pump stations that cannot meet this requirement due to the minimum available size of the wet well and an estimated low volume daily wastewater flow. If longer detention times are proposed, additional measures necessary to prevent the development of septic conditions may be required;
 - ii. To minimize the development of septic conditions during the early phases of pump station operation, the Department may require special operational and/or maintenance procedures particularly when the initial contributory flows will be substantially below the approved design flow;
 - 5. The base of pump station wet wells shall slope at least 45 degrees toward the pump suctions to prevent solids accumulation; and
 - 6. A sump pump or other effective method to drain accumulated water from the dry well to the wet well and to prevent sewage from entering the valve pit during surcharged wet weather conditions shall be provided.

7:14A-23.13 Wastewater treatment plants

(a) Adequate treatment shall be provided for all wastewater before discharge into the waters of the State.

- 1. The minimum level of sewage treatment shall be as specified by the Department in the applicable NJPDES permit.
- 2. The design of the proposed treatment system shall be adequate to meet all NPDES or NJPDES permit requirements, and shall take into consideration the topography of the plant site, receiving waters, operating costs and effects of any industrial waste component.
- (b) Treatment plants shall be designed to produce an effluent which will consistently meet the limitations specified in the applicable NPDES or NJPDES permit and be conducive to the attainment and maintenance of such water quality criteria for the various classifications of surface and ground waters of the State.
- (c) Siting requirements for wastewater treatment plants are as follows:
 - 1. Treatment plants shall be located as far from existing or future residential structures as practical;
 - 2. To the extent possible, the treatment plant units shall not be situated within 500 feet of the plant property lines. If this is not possible the Department may impose additional requirements concerning plant design, location, landscaping and operation;
 - 3. Treatment plants shall be raised above the flood elevation level, or adequately flood proofed. For the purposes of this requirement, the flood elevation level is considered to be one foot above the 100 year flood elevation for non-delineated waterways and up to the Flood Hazard Design Flood Elevation for delineated waterways (see N.J.A.C. 7:13); and
 - 4. The plant layout shall be designed for ease of operation, safety and accessibility.
- (d) A suitable operating building shall be provided meeting the following requirements:
 - 1. The building shall be heated, ventilated and lighted and contain an office, workshop, laboratory, storage space, drinking water, toilet, lavatory, and shower facilities;
 - 2. An adequate supply of water under pressure shall be installed. Any domestic service connection shall be protected by an approved backflow prevention device acceptable to the Department; and
 - 3. Taps supplying non-potable water shall be clearly labeled "Unfit for Drinking."
- (e) Treatment plant sites shall be appropriately landscaped and graded.
- (f) Drains shall be installed and soil stabilized to prevent washing into tanks, basins or filters and to prevent erosion.
- (g) The following safety features shall be incorporated into the treatment plant design:
 - 1. At a minimum, railings, guards, and handrails shall be provided;
 - 2. Flame traps at all gas outlets, a blower and hose, and adequate ventilation of enclosures shall be provided;
 - 3. Non-slip treads on stairs shall be provided;

- 4. Warning signs shall be posted in hazardous locations;
- 5. A readily accessible first aid kit shall be provided; and
- 6. The plant site shall be secure and enclosed by a fence with lockable gates.
- (h) Treatment plants shall be provided with an adequate auxiliary source of power that is capable of maintaining the necessary plant functions to assure compliance with the facility's NJPDES permit.
 - 1. When a plant is not staffed on a 24-hour basis, the auxiliary source of power shall have the ability to be automatically activated.
 - 2. Emergency generators shall be tested regularly and maintained in proper working order at all times.
- (i) An alarm system operating on an independent source of power shall be provided for all treatment plants when 24-hour supervision is not provided.
 - 1. The alarm system shall extend to a police station or other location where competent 24-hour assistance can be obtained in an emergency.
- (j) All electrical equipment work shall comply with the Fire Underwriters' regulations and with the National Electrical Code.
- (k) Adequate means shall be provided for dewatering all treatment units for inspection and maintenance while still maintaining NJPDES permit compliance.
- (1) Piping located under plant units shall be encased in concrete.
- (m) Plant designs which propose the use of bypass lines that would circumvent treatment units and allow untreated or partially treated wastewater to be discharged will not be approved by the Department. The need for such bypassing is to be eliminated by providing adequate auxiliary treatment facilities.
- (n) Treatment units should be designed for the population and wastewater flow that is anticipated 10 years or more after the completion of construction.
- (o) Unless accurate data justifying a lesser design are submitted and approved by the Department, the hydraulic design of piping, channels, flumes and pumps shall be based on not less than 250 percent of projected flow, and treatment units shall be designed so as to provide adequate treatment to meet all NJPDES permit effluent conditions.
 - 1. Where recirculation is employed, the resulting additional flow from this source shall be considered in the design.
 - 2. Organic loading shall be based upon a minimum five-day B.O.D. content of 250 mg/l for domestic sewage, to which B.O.D. values for industrial wastes shall be added. For existing sewer systems, higher B.O.D. values may be used if an analyses based on composite samplings indicate a higher actual B.O.D.
 - 3. For systems designed to treat wastewater from proposed or recently constructed buildings which have been equipped with water conservation devices or designed to be served by wastewater treatment and recycling systems, appropriate

adjustments for higher B.O.D. values and reduced volume of wastewater should be considered in the treatment unit design.

(p) Flow equalization at the treatment facility is suggested in cases where the ratio of peak (maximum instantaneous) to average daily flow exceeds 2.5.

7:14A-23.14 Measuring, recording, and sampling requirements at treatment plants

- (a) At treatment plants, a means for continuous measuring, indicating and recording of the sewage flows shall be installed.
- (b) Meters shall be installed in such a manner and location so as to provide a true indication of actual flow.
- (c) All wastewater treatment plant designs shall include provisions in terms of number and location for sampling and monitoring as required by its NJPDES permits, Sludge Quality Assurance Reports, Bioassay, and Local Pretreatment Discharge Limits.
 - 1. At a minimum, all wastewater treatment facilities shall be designed and constructed to provide for the collection of representative samples as follows:
 - i. Influent quality before introduction of recycled waste which may be incorporated within the wastewater facility's processes (for example, wastewater quality prior to introduction of supernatant from sludge thickening or digestion and prior to the introduction of scrubber water from sludge incineration etc.);
 - ii. Effluent quality after the last treatment plant unit at the point of discharge;
 - iii. Sludge at a location meeting the requirements established under the Sludge Quality Assurance Regulations, N.J.A.C. 7:14C. In addition, the provisions for sludge sampling shall meet the following minimum requirements:
 - Sludge sampling points shall be established at a location which assures homogeneity and best represents the physical and chemical quality of all sludge which is removed from the treatment works for ultimate management;
 - (2) Sludge sampling points shall provide for sample collection at the frequency required under the Sludge Quality Assurance Regulations; and
 - (3) Sampling equipment shall be constructed of materials which will not contaminate or react with the sludge (for example, galvanized or zinc coated items may not be used); and
 - iv. Wastewater quality after every treatment unit.
 - 2. In specific cases, the Department may require the installation of additional sampling points and equipment to assure adequate collection of technical data relevant to protection of the environment or public health.
- (d) Monitoring chambers shall meet the following minimum requirements:
 - 1. The monitoring chamber shall be constructed of a permanent and durable material with an opening large enough for access by both sampling personnel and equipment.
 - i. The sampling chamber shall have a minimum seven foot ceiling clearance;

- ii. Electrical outlets shall be provided so that 24 hour sampling equipment can be accommodated; and
- iii. The access door or manhole shall have a minimum opening of 24 inches and shall be lockable;
- 2. An accurate flow measuring device with a totalizer and recording equipment with a documented regular calibration program shall be provided;
- 3. High water alarms shall be included in all sumps;
- 4. Pickup probes for all monitoring and sample collection devices shall be provided;
- 5. All influent streams into the public sewer which are required to be monitored by the applicable permit shall be free of external sources of water (for example, supernatant return, stormwater runoff, unless such runoff is being monitored, tidal water, etc.);
- 6. A back flow prevention device shall be installed if pumping or flowing to a force main;
- 7. If the sampling chamber is not in a secured area, it shall be surrounded by a chain link fence;
- 8. The sampling chamber shall be accessible by motor vehicle; and
- 9. Adequate lighting and ventilation shall be provided and the area shall be free of any safety hazard.

7:14A-23.15 Screening and comminution

- (a) All sewage treatment plants shall be provided with a means for screening or comminuting coarse material in the sewage. Except in small plants with a design capacity of less than 150,000 gallons per day, screening equipment shall be of the mechanical type.
- (b) Operation of mechanically cleaned devices shall be continuous or automatically controlled.
- (c) Bar screens shall conform to the following:
 - 1. Bars of nonmechanical screens preceding treatment plants shall be spaced so that the maximum clearance between bars is not greater than 1½ inches and not less than one inch;
 - 2. Clear openings for mechanically cleaned screens shall not be less than 5/8 inch;
 - 3. Bar clearance for coarse racks or screens preceding mechanically cleaned screens or comminutors shall not exceed 1 3/4 inches;
 - 4. At sewage pumping stations, openings in bar screens shall be at least one inch smaller than the solid size which can be handled by the pump;
 - 5. Motors shall be of the type suitable for operation in a damp atmosphere if placed below ground;

- 6. The screen chamber shall be designed to provide a velocity through the screen of not less than one foot per second at average flow and not more than three feet per second, based on the screen openings projected vertically between the invert and the crown;
- 7. Hand-cleaned screens shall be inclined from 30 degrees to 45 degrees from horizontal; and
- 8. Where only one mechanical screen is provided, auxiliary hand-cleaned screens shall be provided for use in case of failure of the mechanically cleaned screens.
- (d) Disposal of screenings shall be in conformance with the following:
 - 1. Adequate facilities shall be provided for prompt removal, handling and sanitary disposal of screenings;
 - i. A platform shall be provided at the top of hand-raked screens; and
 - ii. Appropriate containers shall be provided for removal of screenings;
 - 2. An appropriate method shall be provided for drainage of screenings, both on the platform and in containers, such that water content is not a limitation to ultimate disposal. The disposal and treatment method for the drainage from the screenings shall be indicated;
 - 3. Where screen chambers are located substantially below grade, a suitable hoist shall be provided. Such chambers shall have a stairway and adequate lighting; and
 - 4. Screen chambers shall be adequately ventilated. Where required, forced draft fans with explosion-proof motors shall be installed.
- (e) Comminutors shall be in conformance with the following:
 - 1. Comminuting devices shall have slots not less than 1/4 inch wide and be designed to cut or shred material below the surface of the sewage. Comminuting capacity shall be adequate to handle peak flows when the largest unit is out of operation;
 - 2. A bypass screen shall be provided except where there are multiple units; and
 - 3. Gates shall be provided to isolate each channel, and provisions shall be made for the removal of mechanisms for repair and maintenance.

7:14A-23.16 Grit removal equipment

- (a) Except in small sewage treatment plants with a design flow of less than 150,000 gallons per day, mechanical grit removal devices shall be provided.
- (b) Grit chamber channels and flumes shall be designed to produce velocities of not less than 0.5 foot per second and not greater than one foot per second. Detention shall be adequate to deposit grit coarser than 0.20 millimeters.
- (c) All grit chambers shall be provided with a means for washing the grit and return of washwater to wastewater flow.
- (d) Grit removal facilities shall include adequate means for the collection and temporary storage of grit material prior to sanitary disposal.

- 1. A stairway or ladder shall be provided for entrance if the unit is four feet or more below ground level.
- 2. Adequate lighting and ventilation shall be provided.
- 3. Provisions for dewatering shall be made such that water content is not a limitation to ultimate disposal.
- 4. Provisions for the treatment and disposal method for drainage of the grit shall be provided.

7:14A-23.17 Settling tanks

- (a) Multiple units or independent compartments shall be provided except in small installations of less than 150,000 gpd design flows.
- (b) Channels shall be designed to maintain a velocity of one foot per second at 50 percent of design flow.
- (c) Baffling shall be provided to dissipate inlet velocity and diffuse flow equally across the cross section of the tank. Baffles shall also be provided to retain scum in primary tanks. Scum collectors shall be provided.
- (d) Weirs shall be adjustable.
- (e) The minimum slope of the side walls of sludge hoppers shall be 1.7 vertical to 1.0 horizontal.
- (f) The use of upward flow settling tanks may be considered when accompanied by supporting data on their hydraulic characteristics and results of operation in actual plants.
- (g) Walls of settling tanks shall extend at least 18 inches above the surrounding ground surface.
- (h) Mechanical means shall be provided for the collection and removal of sludge from settling tanks, and shall meet the following design requirements:
 - 1. Primary tanks, except those preceding the activated sludge process, shall have a surface settling rate that does not exceed 600 gallons per square foot per day of design flow, and a minimum water depth of six feet;
 - 2. Inlets shall be designed to dissipate inlet velocity promptly so as to diffuse the flow and to prevent short-circuiting; and
 - 3. Adjustable outlet weirs shall be provided.

(i) Final settling tanks shall be designed according to the following:

Side Water Depth	C	Maximum Surface
		Settling Rate
		gals./sq. ft.day
		(At Design Flow)
6 feet minimum		1,000
8 feet minimum		800
8 feet minimum		800
	6 feet minimum 8 feet minimum	6 feet minimum 8 feet minimum

and less design flow)Activated Sludge (Over 2.010 feet minimum1,000m.g.d. design flow)

7:14A-23.18 Chemical coagulation

- (a) This method of sewage treatment is considered to be a degree of treatment intermediate between sedimentation, and sedimentation plus oxidation. Chemical coagulation will not be considered as a substitute for oxidation.
- (b) Coagulants shall be applied to the sewage in a suitable and approved form proportional to the sewage flow.
- (c) A chamber or tank for the rapid and thorough mixing of the sewage and coagulants shall be provided with a detention period of not less than one minute based on design flow.
- (d) Two or more flocculation tanks, with individual controls, shall provide a combined detention period of between 20 and 30 minutes. Diffused air or paddles with a slow rotary motion shall be provided for continuous agitation of the full content of the flocculation tanks.
- (e) The automatic control of apparatus for feeding chemicals shall include equipment to provide variation in chemical dosage with variation in sewage flow.

7:14A-23.19 Trickling filters

- (a) Trickling filters of the "standard rate" or "high rate" type may be used for the treatment of sewage amenable to treatment by a biological process.
- (b) Filters shall be preceded by effective preliminary treatment and shall be followed by individually controlled and mechanically cleaned settling tanks.
- (c) When the average five-day B.O.D. of the raw sewage exceeds 325 parts per million, two stages of trickling filter treatment are required, with or without intermediate sedimentation. Consideration may be given to designs providing supplementary preliminary treatment in the case of strong sewages or industrial wastes.
- (d) The sewage shall be distributed uniformly over the filter so that at least 95 percent of the surface area receives sewage directly.
 - 1. Distribution devices may be actuated by twin siphons, pumps or gravity discharge from preceding treatment plant units.
- (e) The filter media may be crushed rock, manufactured material, or other approved material. Manufactured media shall be resistant to ultraviolet degradation, disintegration, erosion, aging, all common acids and alkalies, organic compounds, and fungus and biological attack. In addition, manufactured media shall be structurally capable of supporting a person's weight or a suitable walkway shall be provided to allow for distributor maintenance.

- 1. Where applicable, the upper 18 inches of the filter bed shall have a loss, measured by the 20-cycle sodium sulfate test, of less than ten percent and the balance shall pass the 15-cycle test.
- 2. Wear shall not exceed 20 percent after 500 revolutions of Los Angeles Rattler Test as determined by the current ASTM Standard, Designation No. C-131.
- 3. Rock media shall be approximately cubical in shape, free from dust, clay, sand or fine material and of a size that passes a four-inch screen and is retained on a 2 1/2 inch screen.
- 4. Material shall be screened or forked, and washed to remove fine grains and shall be so placed as to avoid breaking the underdrains.
- (f) The underdrainage system shall be resistant to the action of sewage wastes and shall cover the entire floor. Inlet openings into the underdrains shall have an unsubmerged gross combined area equal to at least 15 percent of the surface area of the filter. Use of half-tile for underdrains will not be approved.
 - 1. Lateral underdrains shall have a minimum slope of one percent.
 - 2. Main underdrain and effluent channels shall be designed to provide a velocity of not less than two feet per second.
 - 3. The entire underdrainage system shall be designed to permit free passage of air, and be of such size that not more than 50 percent of the cross sectional area of the flow channels in the underdrains will be submerged during operation of the filter at the maximum design rate. Provisions shall be made for flushing lateral underdrains from the main drain or head channel.
- (g) Standard rate trickling filters shall be designed as follows:
 - 1. The volume of sewage to be treated by standard rate filters shall not exceed 14,400 gallons per day per 1,000 cubic feet of filtering media and the average rate of organic loading shall not exceed 15 pounds of five-day B.O.D. per thousand cubic feet per day.
 - 2. The average rate of application during dosing periods shall not exceed 22 gallons per thousand cubic feet of media per minute. The time intervals between dosing cycles to the filter shall not exceed five minutes at design flow.
 - 3. The minimum depth of filtering media at any point in the filter, measured from the top of the underdrains to the surface of the media, shall not be less than five feet, and the maximum depth shall not exceed eight feet.
 - 4. Means for Psychoda fly control, such as provisions for backflooding and filter flushing, shall be provided. The application of chemicals is discouraged unless other forms of control have been ineffective and the use of chemicals shall be in conformance with all other applicable laws, ordinances and regulations.
 - 5. Means shall be provided for recirculating a portion of the effluent from intermediate or final settling tanks during periods of low flow.

- 6. The Department will consider other suggested loading rates to address manufactured media if supported by appropriate engineering documentation.
- (h) High rate trickling filters shall be designed as follows:
 - 1. Organic loading to high rate filters shall not exceed 67 pounds of five-day B.O.D. per thousand cubic feet of filter media per day, based on the total volume of the filters.
 - 2. The depth of filtering media at any point in the filter, measured from the top of the underdrain block to the surface of the media, shall not be less than five feet nor more than eight feet. The distributor shall clear the media by not less than eight to nine inches; and the filter retaining walls shall not be less than three inches higher than the media.
 - 3. High rate trickling filters shall be equipped with rotary distributors and flushing devices shall be provided at the outer end of each distributor arm.
 - 4. Provisions shall be made for controlled recirculation to maintain a continuous application rate of not less than 230,000 gallons per 1,000 square feet per day. Devices to measure flows to the filter and the recirculated effluent shall be provided.
 - 5. The number and capacities of the recirculation pumps shall be such that the conditions of (h)4 above can be met if the largest pump for each point of return is out of service unless other provisions are made which will achieve adequate and effective degree of treatment if power or pump failure occurs.
 - 6. The Department will consider other suggested loading rates to address manufactured media if supported by appropriate engineering documentation.
- (i) Under conditions where treatment of unusually strong sewage is necessary and twostage filtration is adopted, intermediate settling tanks may be required, with suitable sludge and scum removal devices to provide a detention period of one hour based upon projected flow.

7:14A-23.20 Rotating biological contactors

- (a) Rotating biological contactors (RBC) process may be used when wastewater is amenable to biological treatment.
- (b) RBCs shall be preceded by properly designed settling facilities. Efficient grease and scum removal devices shall be provided.
- (c) At least four stages shall be provided for secondary treatment applications. Additional stages may be necessary for nitrification and additional BOD removal.
- (d) Permanent buildings or covers shall be used to protect the RBC units from sunlight and winter weather. Provisions shall be made for access to the RBC units for observation and repairs. Buildings shall have adequate ventilation, heating, and humidity control, and an internal hoisting device for the removal of the shaft/media assembly. Covers shall be made in removable sections, or have some other means of allowing removal and replacement of the shaft/media assembly.

- (e) Drive systems shall be variable speed and may be mechanical or air driven. Air driven systems shall have positive air flow metering and control to each RBC unit.
 - 1. Bearing units shall be self-aligning and shall be located outside of media covers to allow easy access for lubrication and maintenance.
 - 2. A provision for auxiliary power during power outages is required.
- (f) Operation and maintenance requirements, including biofilm control, drive train and radial support arm maintenance and repair, and media/shaft repair and replacement, shall be considered in the design and layout of RBC treatment systems. Provisions shall be made for positive flow control to each stage, allowing flexibility in feeding and discharge. Tank depth and configuration shall be such that solids are not deposited in the tank; also, provisions shall be made for draining the tank.
- (g) To avoid system failure, flexibility shall be considered in RBC designs. Flexibility can be achieved by having variable rotational speed, the ability to periodically reverse rotational direction, supplemental aeration, or the potential for chemical addition (for example, hydrogen peroxide or chlorine).
- (h) Final settling shall provide a detention time of not less than 90 minutes, with a maximum surface settling rate of 600 gpd/sq. ft. and a weir overflow rate not greater than 5,000 gallons per day per linear foot. Higher surface settling and weir overflow rates may be used if the contactor is to be followed by tertiary treatment.

7:14A-23.21 Activated sludge

- (a) The activated sludge process may be used when wastewater is amenable to biological treatment.
- (b) The design data outlined in this section are presumed to achieve a removal of 90 percent or more of the B.O.D. and suspended solids susceptible to treatment from sewage of normal characteristics and may not be appropriate where only partial removals are intended.
- (c) Provisions for pre-chlorination of the raw sewage shall be made depending on the condition of the influent.
- (d) The design of plants which may receive abnormally strong concentrations of wastewater, or require an unusual aeration period or special equipment, may be considered for approval as an activated sludge process upon presentation of appropriate supporting data obtained from existing installations that demonstrate the efficiency of the process.
- (e) Settling tanks for the activated sludge process shall be designed in conformance with the following:
 - 1. A skimming tank, or equivalent, shall be provided for wastewater which contains greater than 100 milligrams per liter (mg/l) of oil or grease;
 - 2. Except in small sewage treatment plants with a design capacity of less than 150,000 gallons per day, a minimum of two preliminary settling tanks shall be provided with a total capacity that provides a detention period of 90 to 150

minutes and a maximum surface settling rate of 1,000 gallons/square foot/day based upon design flow;

- 3. For plants having a design capacity of 2.0 M.G.D. or less, final settling tanks shall have a minimum eight foot side water depth and a maximum surface settling rate of 800 gallons per square foot per day. For plants with a design capacity of more than 2.0 M.G.D. final settling tanks shall have a minimum 10 foot side water depth and a maximum surface settling rate of 1,000 gallons per square foot per day;
- 4. Final settling tanks shall be provided in multiple units except in small installations;
- 5. Mechanical means shall be provided for the collection and removal of sludge from all settling tanks; and
- 6. The use of upward flow settling tanks may be considered when accompanied by supporting data on their hydraulic characteristics and results of operations in actual plants.
- (f) If the incoming wastewater to an activated sludge system contains less than 2.0 parts per million dissolved oxygen, pre-aeration of the pre-settled wastewater is required before the admixture of returned sludge.
- (g) Aeration tanks for the activated sludge process shall be designed in conformance with the following:
 - 1. Multiple units, capable of independent operation, shall be provided for all installations;
 - 2. Total required detention period of aeration tanks, based upon 125 percent of design flow, shall not be less than six hours. If provisions are made for the reaeration of the returned sludge before admixture with the pre-settled sewage, a lesser detention period in the aeration tanks can be considered (the greater the return sludge aeration period, the less the required mixed liquor detention period);
 - 3. Applied loading shall not exceed 38 pounds of B.O.D., exclusive of return sludge, per 1,000 cubic feet of tank volume;
 - 4. Liquid depths of not less than 10 feet, nor more than 15 feet, shall be provided; and
 - 5. Means to minimize foaming in aeration tanks shall be provided.
- (h) All inlets and outlets shall be equipped with suitable devices for controlling the flow to each tank unit and to withdraw any unit from service. Velocity between bays or around baffles shall not exceed 0.5 feet per second.
 - 1. Channels and pipes shall be designed to provide self-cleaning velocities, or shall be equipped with mechanical devices for maintaining solids in continuous suspension.

- (i) Devices shall be provided for indicating rates of flow of presettled effluent, return sludge, air to each tank unit, and total volume of wasted sludge. These devices shall also totalize and record as well as indicate flows.
- (j) Requirements for air supply are as follows:
 - 1. Air requirements at all times shall be sufficient to:
 - i. Maintain at least two parts per million of dissolved oxygen in all parts of the aeration tank;
 - ii. Maintain sufficient turbulence to maintain intimate contact of sludge particles with sewage; and
 - iii. Prevent deposition of solids in any part of aeration unit.
 - 2. Aeration capacity at standard temperature and pressure shall be at least 1.5 cubic feet per gallon of incoming raw sewage plus the capacity required for reaeration of returned sludge.
 - 3. Blowers shall be in multiple units and of such capacity that full operation requirements can be met with the largest unit out of service.
 - 4. Blower capacity required to deliver air to channels, sludge pumps, foam-control pumps, or similar demands shall be in addition to that required for tank aeration as specified in 1 above.
 - 5. The air diffuser system shall be capable of delivering 150 percent of normal requirements. Normal requirements are considered to be 1,000 cubic feet per pound of B.O.D. to be removed from the sewage entering aeration tanks.
 - 6. Air filters shall be capable of supplying a continuous air supply having a dust content of not more than 0.5 milligrams per 1,000 cubic feet.
 - 7. Each blower shall be equipped with a silencer.
 - 8. Aeration plates, tubes or jets shall be designed to permit removal for inspection or cleaning, and for maintaining an even distribution of air throughout the aeration tanks.
 - 9. Individual assembly units of diffusers shall have a substantially uniform pressure loss and shall be equipped with control valves with indicator markings.
- (k) Return activated sludge pumps or air lifts shall have variable combined capacity, capable of pumping at least 25 percent of the projected flow with the largest single unit out of service. Normal return sludge capacity shall be at least 50 percent of the average dry-weather sewage flow.
 - 1. In addition to capacity required for return sludge pumping, waste sludge pumping facilities shall be provided with a minimum capacity not less than 0.5 percent of design flow, or 10 gallons per minute, whichever is larger.
 - 2. The means for the further treatment and management of waste activated sludge shall be specified.
- (l) Extended aeration systems shall be designed in accordance with the following:

- 1. Screening equipment consisting of a comminuting device with a bar screen in parallel is required.
- 2. Aeration tanks shall provide a detention period of at least 24 hours based upon design flow without recirculation. At least two tanks shall be provided in plants with design capacities of 100,000 gallons per day or more.
- 3. Air blower equipment shall be at least in duplicate and shall have capacity with the largest unit out of service to provide either at least three cubic feet per minute per foot length of aeration tank or at least 2,100 cubic feet of air per pound B.O.D. of raw sewage, whichever is greater. Equipment shall provide for variation in the volume of air to be delivered in at least three steps. Additional air capacity shall be provided if required for air lifts or other needs.
- 4. Provisions shall be made for the future installation of froth-breaking spray equipment, if necessary.
- 5. Final settling tanks shall provide at least a 3.5 hour detention period based upon design flow without recirculation.
 - i. Two or more tanks shall be provided on installations having capacities of 100,000 gallons per day or more.
 - ii. For tanks with hopper bottoms, the upper third of depth of hopper may be considered as effective settling capacity.
- 6. Return sludge capacity of at least 100 percent of design sewage flow shall be provided.
- 7. Appropriate means, such as a V-notch weir, shall be provided for measurement of sewage flow. For installations having capacities of 100,000 gallons per day or more, indicating-recording-totalizing equipment is required.
- 8. Waste sludge holding tanks with a capacity of at least one cubic foot per capita shall be provided.

(m) Contact stabilization systems shall be designed in accordance with the following:

- 1. Screening equipment consisting of a comminuting device with a bar screen in parallel is required.
- 2. Combined volumes of the contact aeration and sludge reaeration tanks shall provide a detention period of at least nine hours based on design flow without recirculation.
 - i. Aerobic digester tanks shall provide a capacity of at least three cubic feet per capita.
 - ii. At a minimum, duplicate tanks shall be provided in sewage treatment plants with design capacities of 100,000 gallons per day or more.
 - iii. When anaerobic digestion is employed, the design of the drying beds must be in conformance with N.J.A.C. 7:14A-23.28.
- 3. Air blower equipment shall be at least in duplicate, and shall have capacity with the largest unit out of service to provide at least 1,600 cubic feet of air per pound

B.O.D. of raw sewage for contact aeration sludge reaeration and aerobic digester requirements.

- i. The proposed equipment shall provide for variation in the volume of air to be delivered in at least three steps.
- ii. Additional air capacity shall be provided if required for air lifts or other needs. The air supply requirements stated in (j)1 through 9 above also apply to contact stabilization.

7:14A-23.22 Intermittent sand filters

- (a) For intermittent sand filters, at least two filter units shall be provided.
- (b) Sod and similar coverings over intermittent sand filters are prohibited.
- (c) Loading requirements for intermittent sand filters are as follows:
 - 1. Organic loading of five-day B.O.D. shall not exceed 3.8 pounds per 1,000 square feet per day;
 - 2. With acceptable primary treatment of normal sewage, volumetric loading shall not exceed 2,875 gallons per 1,000 square feet per day. For stronger sewage the rate of filtration shall be proportionately lower.
 - 3. For chemical coagulation and sedimentation the volumetric loading shall not exceed 5,750 gallons per 1,000 square feet per day.
 - 4. For standard or high rate trickling filters or activated sludge followed by secondary settling tanks, the volumetric loading shall not exceed 9,200 gallons per 1,000 square feet per day.
 - 5. For schools, camps, and institutions, not having a full-time treatment plant operating staff, volumetric loading should not exceed 1,150 gallons per 1,000 square feet per day for primary tank effluent.
- (d) Intermittent sand filter media shall be in conformance with the following:
 - 1. Clean graded gravel shall be placed in at least three layers over the entire floor of the bed and around the underdrains and to a depth of at least six inches. Grading for the three layers shall be 1 1/2 inches to 3/4 inch, 3/4 inch to 1/4 inch and 1/4 inch to 1/8 inch.
 - 2. Underdrains shall have maximum spacing not exceeding six feet and shall be at least four inches in diameter, or of equivalent area.
 - 3. Pipes shall be laid on a firm base with open joints with a space of approximately 1/4 inch between ends.
 - i. A single layer of muslin, cheese cloth, burlap or other suitable material shall be wrapped around each joint of open joint underdrains.
 - ii. Tar paper or other waterproof material may not be used.
 - iii. Perforated clay or other approved perforated pipe may be used for underdrains.

- 4. Sand with an effective size of 0.3 to 0.6 millimeters and a uniformity coefficient of not more than 3.5 shall be provided to a depth of at least 30 inches. The sand shall be free from clay, loam or silt.
- (e) Intermittent sand filter dosing shall be in conformance with the following:
 - 1. A dosing tank or its equivalent with a capacity to dose each filter at least twice a day shall be provided. Where practical, a dosing tank or equivalent shall have a maximum detention time of two hours based upon the design flow.
 - 2. The dosing tank volume shall be such that each filter bed will be covered to a depth not less than two nor more than four inches with each dose.
 - 3. Siphons shall have a discharge capacity, at minimum head, of at least 100 percent in excess of the maximum rate of inflow to the dosing tank, and at average head, at least one cubic foot per second per 5,000 square feet of each filter bed.
- (f) Intermittent sand filter distribution shall be in conformance with the following:
 - 1. A rotary distributor may be used if nozzles are adjusted so flow will not erode the sand bed.
 - 2. Troughs or piping used for distribution of the settled sewage over the filter surface shall be so located that the maximum lateral travel distance is not more than ten feet. Provision shall be made at each discharge port for adjustment of the flow.
 - 3. Splash slabs shall be provided at each point of discharge.
 - 4. A drain opening from troughs or discharge piping shall be provided.
- (g) The base of the filter shall be either enclosed with concrete or lined with a material that has a permeability no faster than 10^{-7} cm/sec.
- (h) Rapid sand filter design shall be in conformance with the following:
 - 1. The use of rapid sand filters may be considered where treatment beyond secondary treatment is required and where skilled operational personnel will be present.
 - 2. In general, rates shall not exceed three gallons per square foot per minute; backwash facilities shall be provided; the sand bed should not be less than 20 inches in depth; and suitable underdrainage of graded gravel shall be provided.
 - 3. Operating head on the filter shall not exceed eight feet.
- (i) The use of micro-strainers is acceptable when additional treatment such as reduction in B.O.D. and suspended solids is required after secondary treatment and final settling, and will be considered when accompanied by an engineer's report that contains complete data on the installation and accompanied by suitable plans.

7:14A-23.23 Chlorination

- (a) Chlorination devices shall be of the solution feed type, installed in duplicate or with duplicate essential parts. Chlorinators shall be of an automatic feed type for sewage treatment plants with a design capacity of greater than 150,000 gallons per day.
- (b) Chlorinating devices shall be designed in accordance with the following:
 - 1. The devices shall be placed in separate rooms with an outside entrance only and shall be provided with adequate ventilation.
 - 2. Rooms containing chlorinating devices shall have doors that open outward.
 - 3. Provisions for heating during the winter season are required.
 - 4. Suitable gas masks shall be provided and maintained in good operating condition, and shall be stored in an accessible location outside the chlorine room.
 - 5. An automatic alarm and observation window to permit visual inspection without opening the door, should be provided.
- (c) For reduction in fecal coliform, a chlorine contact period of at least 30 minutes, based upon design flow, shall be provided in a separate baffled tank, and a contact period of not less than 20 minutes shall be provided during peak hourly flow. For reduction of enterococci or other pathogenic indicators increased contact periods and/or application rates may be required.
- (d) Provisions shall be made for the thorough mixing of the disinfectant and the sewage before discharge to the chlorine contact tank.
- (e) Scales shall be provided for determining chlorine consumed, and a suitable means for measuring residual shall also be provided.
- (f) If hypochlorite feeders are provided, duplicate solution tanks each having at least 36 hours storage capacity are recommended.
- (g) Automatic chlorinators with residual recorders and alarm systems to indicate chlorinator failures are required.
- (h) Capacity of chlorinators shall be in conformance with the following:
 - 1. For disinfection, the capacity of chlorinators shall be adequate to produce a concentration of residual chlorine in the effluent so as to dependably and consistently reduce the fecal coliform concentration to that specified in the applicable discharge permit. For normal domestic sewage the following minimum dosing capacities are required:

Type of Treatment	Dosage (Based on Average Design Flow)
Raw Sewage	30 ppm
Primary Sedimentation Effluent	20 ppm
Trickling Filter Plant Effluent	15 ppm
Activated Sludge Plant Effluent	10 ppm

Sand Filter Effluent 10 ppm

2. For reduction of enterococci or other pathogenic indicators increased contact periods and/or application rates may be required.

7:14A-23.24 Dechlorination

- (a) Dechlorination chemicals shall be applied in an area where the flow is turbulent and short circuiting is minimal, immediately preceding discharge of the effluent. A contact period of one to five minutes is recommended.
- (b) If sulfur dioxide is utilized for dechlorination, safety precautions similar to those for chlorination systems are required, including the provision of self-contained breathing apparatus. Steps shall be taken to prevent the accidental interconnection of chlorine and sulfur dioxide lines to avoid an explosion hazard.

7:14A-23.25 Ultraviolet disinfection

- (a) The following provisions apply to the design of ultraviolet disinfection (UV) systems:
 - 1. The turbidity and color of the wastewater shall be addressed in the design. Treatment of the influent wastewater prior to the UV units by intermittent sand filtration, or other filtration, as approved by the Department, is recommended. Removable screens, located upstream of the UV unit, are recommended to prevent debris from entering the system.
 - 2. Wastewater shall pass over the UV source in a thin film, so that the maximum depth of penetration is no greater than two inches. The UV contact time shall be dictated by water absorbance and film thickness.
 - 3. A UV intensity sensor shall be installed at the maximum depth from the source with an alarm to alert operators when the UV level falls below acceptable levels. The UV intensity reading shall be displayed by a meter on the control panel. UV sensors shall be properly maintained to insure reliable, accurate readings.
 - 4. The UV unit shall be protected from dust, excessive heat, and freezing temperatures. Adequate ventilation of heat-generating electrical components shall be provided.
 - i. An alarm system shall be provided to alert the operator of excessive temperatures in the ballast power panel.
 - 5. When utilizing a closed channel UV system two separate units, or one UV unit and another approved form of disinfection, each capable of treating peak flow, shall be provided.
 - 6. Open channel UV systems shall be equipped with a sufficient number of bulbs such that a safety factor of at least 125 percent will be provided. Separate electrical racks shall also be provided to permit maintenance of the system without removing the entire unit from service.
 - 7. Electrical wiring shall be properly sized and the wire covering shall be resistant to UV radiation effects.

- (b) UV lamps/sleeves shall be chemically cleaned semi-annually if automatic wipers are present, or three to four times per year if automatic wipers are not present. A clean water supply equipped with a back flow prevention device shall be available at all times.
- (c) UV bulbs shall be replaced when dead life occurs (60 percent of initial emission).

7:14A-23.26 Anaerobic sludge digestion and management

- (a) The Department does not examine plans covering fire and explosive hazards, heat controlling equipment or safety devices and such safeguards are the responsibility of the design engineer.
- (b) Supernatant liquor from sludge digestion tanks shall be returned downstream of the influent monitoring points to the raw sewage except that at activated sludge plants, or other plants utilizing air as a method of biological treatment, provisions may be made for disposal in aeration or reaeration tanks. The wastewater treatment facility shall be designed to treat the increased pollutant concentration and hydraulic loading of the supernatant or means shall be provided for separate treatment.
- (c) The minimum diameter of all sludge pipes shall be eight inches for gravity flow and six inches for sludge pumping.
- (d) A fresh-water hydrant near the sludge digestion tanks is recommended, and, if present, shall be provided with a suitable backflow-prevention device.
- (e) Provisions shall be made for the introduction of chemicals into all sludge storage or digestion tanks.
- (f) Digesters which are proposed to be utilized to satisfy stabilization requirements shall be designed to meet the requirements for pathogen reduction and vector attraction reduction in accordance with N.J.A.C. 7:14A-20.
- (g) Sludge digestion tanks shall be in conformance with the following:
 - 1. Two or more separate units shall be provided, a single digestion tank may be approved if the plan and report show all emergency provisions and the proposed use is for small installations (design capacity of less than 150,000 gpd) where alternate sludge storage is available for emergency use without creating a local nuisance, and where pumps and piping are available for such emergency.
 - 2. Suitable equipment to insure mixing or circulation of the tank contents shall be provided for primary digesters.
 - 3. The proportion of tank depth to area shall be such as to permit the formation of a reasonable depth of supernatant liquor.
 - 4. Tank bottoms shall slope toward the withdrawal pipe not less than three inches per foot. Flat bottom tanks will not be approved.
 - 5. At least two access manholes of adequate size shall be provided in the top of the digester in addition to the gas dome. An access manhole in the side wall of the tank is recommended.

- 6. In the case of multiple tanks, a provision shall be made to direct the raw sludge to any tank. In circular tanks the raw sludge inlet shall be at a point that is removed from the overflow or supernatant draw-offs by a distance at least equal to the radius of the tank. In rectangular tanks the raw sludge inlet shall be at the opposite end from the overflow and digested sludge draw-off lines.
- 7. An emergency overflow shall be provided. Provisions shall be made for sampling and removal of supernatant from several levels.
- 8. Means shall be provided for sampling of digested sludge in accordance with N.J.A.C. 7:14A-23.14. Digested sludge withdrawal piping shall extend from the center and bottom of circular tanks. Means shall be provided for backflushing digested sludge withdrawal piping. Adequate transfer piping shall be provided.
- 9. Unheated primary anaerobic digestion tanks will not be approved.
- 10. The mixing of the contents of anaerobic digesters by air is prohibited.
- (h) Separate sludge digestion capacity shall be in conformance with the following:
 - 1. Separate sludge digestion capacity shall be as follows, unless acceptable justification is submitted for an alternate design:

Type of Plant	Minimum Cubic Feet per Capita
Primary	2 to 3
Primary plus standard filter	2.5 to 3
Primary plus high rate filter	3 to 4
Chemical coagulation	4 to 6
Activated sludge	4 to 6

- 2. Larger volumes of sludge digestion capacity shall be provided for smaller plants.
- 3. The sludge digestion capacity shall be increased when industrial wastes and/or garbage solids are present, and may be reduced if the sludge is thickened. Volumes shall be computed on the basis of the bottom sloping up 30 degrees from the horizontal unless mechanical sludge collection is employed.
- (i) Anaerobic digestor gas collection shall meet the following general requirements:
 - 1. Waste gas burners shall be provided for excess gas.
 - i. Burners shall be placed at least 25 feet away from structures if placed at ground level, or may be located on roofs of buildings provided they are remote from digestion tanks.
 - ii. Burners shall be equipped with pilot lights and means for igniting manually, and shall be equipped with flame traps.
 - 2. All enclosures containing gas piping or apparatus shall be equipped with forced draft ventilation either of the wind-driven or motor-operated type. If of the motor

type, the design shall be such that the motor does not come in contact with gases; or spark-proof motors shall be used.

- 3. A gas meter shall be provided and a bypass installed.
- 4. Boilers utilizing gas shall be located in a separate enclosure having adequate means of ventilation and preferably located at ground level.
- 5. All gas lines shall have suitable flame traps and other safety equipment.
- (j) Anaerobic digestor heating shall meet the following general requirements:
 - 1. Preference shall be given to means of external heating by means of a heat exchanger. Heating capacity shall be adequate to maintain sludge at 85 to 95 degrees Fahrenheit at all times. Suitable controls shall be provided for automatic operation.
 - 2. Thermometers shall be provided to show temperatures of sludge in the digester, and the sludge going to and from the heat exchanger. Thermometers shall also be provided to show the temperature of the water going to and from the heating coils or heat exchanger.
 - 3. An auxiliary fuel shall be provided, such as oil or commercial gas.

7:14A-23.27 Sludge pumps

- (a) Duplicate sludge pumps shall be provided and shall be so arranged with appropriate valves such that either may be used, in emergencies, for handling either raw or digested sludge.
- (b) The capacity of each pump for handling raw sludge shall be such as to remove sludge from hoppers of settling or concentration tanks in not less than one hour nor more than two hours. Pump capacity shall be adjustable.
- (c) A minimum positive head of 24 inches shall be provided at the suction side of centrifugal pumps and is desirable for all types of pumps. Maximum dynamic suction lift of plunger pumps shall be 10 feet.
- (d) Sludge sampling facilities shall be provided in accordance with N.J.A.C. 7:14A-23.14. The size of valve and piping shall be at least 1 1/2 inches.
- (e) Pressure gauges shall be provided on the discharge line of sludge pumps to denote pumping and to indicate unusual discharge heads due to clogging.

7:14A-23.28 Drying beds for residuals

(a) The following table of requisite areas applies to domestic sewage, the sludge of which is digested by an anaerobic method. Based upon the physical and chemical characteristics of the residual (for example, domestic/industrial, solids concentration, and/or method of prior stabilization) appropriate adjustments can be made to the following table. Written justification for any adjustments or alternative designs shall be provided in the engineer's report. However, under most circumstances drying beds will not be approved for dewatering unstabilized sewage sludge unless appropriate provisions to control odors have been included.

Area in sq. ft./capita

Type of Treatment	Open Beds	Glass Covered Beds
Primary	1.50	60 percent
Standard Rate Filter	1.75	of the area
High Rate Filter	1.75	of open
Activated Sludge	2.00	beds
Chemical Precipitation	2.25	

- (b) The following are minimum requirements governing the design of drying beds and phragmites reed beds:
 - 1. Not less than two beds or compartments shall be provided;
 - 2. For conventional sand drying beds:
 - i. Gravel shall be at least 12 inches deep with the top at least six inches above underdrains. Gravel shall be graded from 1/8 to one inch in effective diameter; and
 - ii. Depth of sand shall be at least six inches and shall consist of clean coarse sand.
 - 3. All drying beds shall be provided with underdrains of bell and spigot vitrified clay tile pipe, porous tile, perforated pipe, or other suitable material or drainage. Lateral drains shall be at least four inches in diameter laid with open joints. An acceptable engineering fabric shall be provided around joints. Drains shall be spaced not more than eight feet apart on center and have a minimum slope of one percent.
 - 4. The permeability of the bottom and side walls shall not be greater than 1 x 10-7 cm/sec and shall extend 15 to 18 inches above the sand surface. Walls shall be at least six inches above the surrounding ground elevation to prevent soil from washing on beds;
 - 5. Means shall be provided to facilitate the removal of dried sludge from drying beds;
 - 6. Influent piping shall provide for uniform distribution of residuals across the entire drying bed area. Splash slabs shall be provided.
 - 7. Residual bed effluent shall be treated and suitable means shall be provided for the satisfactory management of the residual cake.
 - 8. The capacity of the beds shall be sufficient to process the residuals generated to prevent any day to day accumulations.
 - 9. Drying beds proposed to be utilized to satisfy stabilization requirements shall be designed to meet the requirements for pathogen reduction and vector attraction reduction in accordance with N.J.A.C. 7:14A-20. For Phragmites reed beds, a minimum capacity to allow three weeks between loadings to the same bed at the projected sludge production shall be provided. Additional capacity to allow for bed evacuation is recommended.

7:14A-23.29 Residual dewatering lagoons

- (a) The use of lagoons for the drying or residuals is permissible provided that:
 - 1. The lagoons shall be sufficiently isolated from existing and possible future residences as to afford such residences reasonable protection from odors or other nuisances which may arise from the operation of such lagoons;
 - The permeability of the bottom and sides of the lagoon shall not exceed 1 x 10-7 cm/sec, for solid waste classes I.D. 12, 73, and 74 as defined by N.J.A.C. 7:26-2.13(g). For other solid waste I.D. classes of residuals, the bottom and side permeability shall be approved by the Department, on a case-by-case basis, after evaluating the specific chemical characteristics of the residuals to be dewatered;
 - 3. The area provided shall be at least double that specified for open drying beds, and a sufficient number of lagoon units shall be available to permit withdrawals from service and cleaning at necessary intervals. The means provided for residual removal, ultimate management and resting intervals shall be indicated;
 - 4. Shallow residual dewatering lagoons shall meet the requirements of N.J.A.C. 7:14A-23.32(d);
 - 5. Residuals shall be properly stabilized for pathogen reduction and vector attraction reduction in accordance with N.J.A.C. 7:14A-20 prior to discharge to the lagoon; and
 - 6. Means shall be provided for obtaining representative samples of the residual prior to discharge to the residual lagoon pursuant to the measuring, recording, and sampling requirements in N.J.A.C. 7:14A-23.14.

7:14A-23.30 Mechanical dewatering of residuals

- (a) For installations where residuals are mechanically dewatered, mechanical dewatering equipment shall be provided in duplicate unless nuisance-free storage of residuals is provided in a manner approved by the Department.
 - 1. Duplicate installation shall include duplicate conditioning equipment, conveyors, feeders and other appurtenances.
 - 2. Capacity shall be sufficient to process the residuals generated to prevent any day-to-day accumulation.
 - 3. The engineer's report shall include complete data on capacity, residual volume to be handled, conditioning methods, and equipment, chemical storage and satisfactory management of residual cake.
 - 4. The plans shall show provisions for housing the dewatering equipment, for ventilation and odor control, for handling and/or loading the residual cake and the area and method proposed for ultimate management.
 - 5. Filtrate collection and treatment shall be provided and indicated.

7:14A-23.31 Stabilization residuals

- (a) All residuals stabilization equipment shall be designed to meet the requirements for pathogen reduction and vector attraction reduction in accordance with N.J.A.C. 7:14A-20.
- (b) New residual stabilization operations, or expansions shall be designed in accordance with the following requirements:
 - 1. Residual stabilization and curing operations shall be enclosed and vented and shall be in compliance with the Department's air pollution control rules at N.J.A.C. 7:27. For residual stabilization operations which process less than one dry ton per day, the Department shall waive the requirement for enclosure of the residual stabilization operation, in full or in part, where the control of the effects of odor or climatic conditions are otherwise satisfactorily addressed as part of the permit application consistent with N.J.A.C. 7:14A-20.6.
 - 2. All transfer conveyors and associated equipment shall be constructed of fire resistant materials.
 - 3. Composting systems shall be designed to produce a sludge derived product that has a final solids content between 50 and 60 percent.
 - 4. The aeration system shall be designed to distribute air evenly throughout the composting mass, to maintain aerobic conditions, and to control temperatures within acceptable ranges in active composting pursuant to (a) above.
 - 5. The process monitoring system shall be designed to monitor all process criteria (such as temperature, pH, or percent solids) as required pursuant to (a) above.
 - 6. Leachate collection and treatment shall be provided.
 - 7. Equipment capable of adequately mixing bulking agent and dewatered sludge to the desired porosity, structure, and moisture content prior to composting shall be provided.
 - 8. Storage capacity for a minimum of 30 days production of stabilized residuals shall be provided, unless suitable alternative contingency arrangements, as acceptable to the Department, are demonstrated.
 - 9. The minimum time for compost curing shall be 30 days. Compost curing capacity shall be developed independent of finished compost storage capacity.
 - 10. For active composting, the maximum height of a static pile shall not exceed seven feet.
 - 11. Process and curing pads shall provide for drainage away from piles and shall have a minimum slope of two percent.
 - Compost curing pile designs shall provide aeration either through the installation of aeration equipment, or through mechanical turning at least two times per week. For compost curing on pads, the maximum height of the curing piles shall not exceed 10 feet.

7:14A-23.32 Storage of residuals or septage; and septage handling

- (a) All new, upgraded, or expanded domestic treatment works shall be designed to provide adequate residuals storage capacity based on anticipated downtimes (that is weather, maintenance closures, etc.) of the ultimate residual management alternative. This design shall insure the continual, uninterrupted operation of all residual production/processing activities when the ultimate residual management alternative cannot be utilized.
- (b) The design of sludge or septage storage facilities shall:
 - 1. Prevent overtopping from normal or abnormal operations, overfilling, wind and wave action, precipitation, run-on and run-off, malfunctions of equipment, and human error;
 - 2. Specify materials that have the appropriate physical and chemical properties, wall thickness, and structural integrity to prevent massive failure due to climatic conditions, pressure gradients, and daily operational stresses;
 - 3. Provide for the periodic removal of stored residuals, cleaning, and inspection;
 - 4. Prevent the migration of residuals to ground water and/or surface waters;
 - 5. Provide for adequate collection and treatment of supernatant or leachates where applicable;
 - 6. Permit residuals sampling and collection pursuant to N.J.A.C. 7:14A-23.14; and
 - 7. Include overflow prevention devices and/or high level alarms and automatic shut off valves on influent lines.
- (c) Slurry tanks shall be designed to provide for mechanical mixing equipment capable of homogenizing stored residuals for removal and sampling.
- (d) Surface impoundments shall be designed in accordance with the following conditions:
 - 1. A depth indicator (gauge) which indicates residuals quantities in storage shall be provided.
 - 2. A fence shall be provided around the surface impoundment to prevent unauthorized access or entry.
 - 3. Surface impoundment liners shall conform to the following design requirements:
 - i. The permeability of the liner materials shall be no greater than 1×10^{-7} cm/sec for the material being contained. Permeability shall be determined by utilizing the liquid portion of the intended contents to be stored.
 - ii. The liner shall be adequately supported by a foundation or base so as to resist any pressure gradients that may cause settlement, compression, or uplift.
 - iii. Liners shall be of materials that are capable of resisting failures caused by: pressure gradients, including static head and hydrogeologic forces, physical contact with the contents, climatic conditions, and stresses associated with installation and daily operations.
 - 4. The design shall provide for a minimum freeboard level of two feet.

- 5. Mechanical mixing equipment capable of homogenizing stored residuals for removal and sampling shall be provided.
- 6. When flow is to, from, or between impoundments, all interconnections shall be piped or lined with an impervious material and other appropriate safeguards to prevent both the degradation/erosion of impoundment banks or dikes, and discharges to groundwater.
- 7. Surface impoundments shall be utilized to store only stabilized residuals that have met the stabilization requirements for pathogen reduction and vector attraction reduction specified in N.J.A.C. 7:14A-20.
- 8. Surface impoundments require an application be submitted for a NJPDES permit for potential groundwater discharges pursuant to N.J.A.C. 7:14A-10.7.
- (e) Bunker silos, pads, and storage sheds shall be in conformance with the following:
 - 1. The storage surfaces of bunker silos, pads, and storage sheds shall be designed with a minimum slope of two percent to permit the drainage of leachate away from storage piles for collection and treatment.
 - 2. The management and treatment method for the drainage from bunker silos, pads or storage sheds shall be indicated.
 - 3. Storage surfaces shall be constructed of reinforced concrete, asphalt, or other suitable material capable of preventing discharges to groundwater.
- (f) Septage handling/receiving facilities shall be designed to provide the following:
 - 1. An unloading ramp for the haul trucks with a hard surface sloped to a drain to facilitate the cleaning of any spillage and washing the haul truck, connector hoses, and fittings. The ramp drainage shall be a tributary to treatment facilities and shall exclude excessive stormwater;
 - 2. A flexible hose fitted with an easy connect coupling to provide a direct connection from the haul truck to the receiving facility;
 - 3. Washdown water with adequate pressure, a hose, and a spray nozzle for cleaning the receiving station and the haul trucks. If a potable water source is utilized, it shall be protected with a suitable backflow prevention device;
 - 4. An adequate off-line septage receiving tank which allows for the collection of representative samples from any truckload of waste accepted for discharge at the wastewater treatment plant. The receiving tank shall be designed to provide complete draining and cleaning by means of a sloped bottom equipped with a drain sump. The design shall also provide for adequate mixing, testing, uniform septage strength, and chemical addition for treatment or odor control purposes;
 - 5. Screening, grit, and grease removal as appropriate to protect downstream treatment units;
 - 6. Valving and piping designed with sufficient operational flexibility so as to control the flow rate and point of discharge of septage to the wastewater treatment plant;

- 7. Laboratory facilities for determining septage strength and/or toxicity to the wastewater treatment processes; and
- 8. Any pumps provided for the handling of septage shall be of the non-clogging design and shall be capable of passing three inch diameter solids.

7:14A-23.33 New treatment methods and technologies

- (a) Designs for new treatment methods or for methods not included in these rules shall be accompanied by detailed supporting data from full scale tests performed under competent supervision. In evaluating the acceptability of applications for new treatment methods, or for technologies not included in these rules, the Department shall utilize the best available information including, but not limited to, texts, reports and U.S. Environmental Protection Agency publications that contain research, test, and design information relevant to the applicant's proposal.
- (b) The Department may disapprove new treatment methods if in its opinion such disapproval is in the interest of environmental protection.

7:14A-23.34 Closure requirements for wastewater treatment units

- (a) This section applies to any and all wastewater and sludge facilities and equipment permanently removed from use or operation at NJPDES permitted facilities or at facilities for which a NJPDES permit has been revoked or an application for renewal denied, unless a judicial or administrative stay is in effect. The intent of this section is to protect public safety and health and to assure that no contamination of ground or surface water will occur as a result of removing such facilities and equipment from service either through the act of closure or through continuing the discharge of pollutants into or through equipment; or through leaking, leaching, or discharge of pollutants from wastewater or residuals remaining in facilities or equipment which has been removed from use but remains on site.
- (b) The closure of a wastewater treatment facility or equipment means either the termination of the source of wastewater or sludge, or the permitted conveyance of wastewater or sludge to an alternate location (such as a regional facility) in such a manner that no further treatment storage or conveyance of wastewater or sludge is performed by the facility.
- (c) Wastewater treatment works closures shall conform with the following procedures:
 - 1. On or before 60 calendar days prior to taking the facility or certain operating equipment out of service a permittee shall:
 - i. Submit to the Division of Water Quality's Watershed Permitting Element the following information concerning closure activities:
 - (1) The date the facility will cease operation or the date that discharge to specific operating equipment will cease;
 - (2) The date the influent and effluent pipes will be sealed;
 - (3) Plans (signed and sealed by a New Jersey licensed professional engineer) for final disposition of the physical facilities, including all treatment units, outfall line, and all mechanical and electrical equipment and piping;

- (4) Plans (signed and sealed by a New Jersey licensed professional engineer) for elimination of all equipment and/or conditions that could possibly pose a safety hazard, either during or after shut-down of operations;
- (5) Verification that there are no lines in the collection system which are cross connected (receiving both sanitary and stormwater) or which do not contain adequate conveyance capacity as defined in N.J.A.C. 7:14A-1.9;
- (6) The name of the licensed individual responsible for the maintenance and operation of the wastewater pumping station and/or wastewater collection or treatment systems that are still to be maintained; and
- (7) Proof of a request to the Water Compliance and Enforcement Element for a site inspection to verify cessation of the discharge. The Water Compliance and Enforcement Element may be contacted by writing to: Administrator

Water Compliance and Enforcement Element PO Box 422

Trenton, New Jersey 08625-0422; and

ii. Notify the Division of Water Quality's Watershed Permitting Element, in writing, concerning any deactivated lagoons or other actual or potential discharges to ground water which may exist at the site. TheWatershed Permitting Element may be contacted by writing to:

Assistant Director Watershed Permitting Element PO Box 029 Trenton, New Jersey 08625-0029

- 2. Proper management and/or removal of all residual materials (collected grit and screenings, scums, sand bed material, and dried or liquid sludges), as well as filter media, and all other solids from the treatment process that may remain in the abandoned treatment works is required.
 - i. The permittee shall submit to Watershed Permitting Element proof of ownership of or contractual arrangement with an operation or operations permitted to manage all such waste materials. A contract with a hauler will only be accepted as proof of proper waste management if documentation of management at an approved site or sites is included. In addition, all necessary State or Federal permits/approvals must accompany the submission.
 - ii. Sludge quality assurance reports which are representative of the sludge removed following closure shall be submitted. Where quality information is not available, new samples shall be obtained and analyzed upon closure. All sludge samples and analyses shall be prepared in accordance with the Sludge Quality Assurance Regulations, N.J.A.C. 7:14C.
 - iii. All residual material shall be removed within 180 calendar days after the facility is taken out of service. Proof of proper residuals management shall be submitted to the Watershed Permitting Element within 30 calendar days after their removal. The dates of removal and quantities removed shall be specified.

- 3. Upon completion of closure activities, a permittee must complete a "Certification of Closure" form (form can be obtained by contacting the Water Compliance and Enforcement Element) which will provide certification that all waste materials have been properly managed, and that the remaining components of the facility have been properly secured regarding public health and safety. This form shall be completed after closure activities cease, signed in the presence of a Notary Public, and submitted to the Watershed Permitting Element. Incomplete Certifications of Closure are unacceptable and will be returned to the permittee.
- (d) Upon satisfaction of closure requirements specified in (c) above, the Water Compliance and Enforcement Element shall be contacted, in writing, to schedule a final site inspection of any treatment works which had a NJPDES discharge permit to verify that influent and effluent pipes have been sealed and that all solid and residual materials related to the treatment process have been removed.
- (e) Upon satisfactory completion of the items specified in (c) and (d) above, an "Application for Termination" (application may be obtained from the Division of Water Quality or the Water Compliance and Enforcement Element) from the New Jersey Pollutant Discharge Elimination System shall be completed and submitted to the Division of Water Quality, Bureau of Permit Management with a copy to the appropriate permitting bureau. The application form includes information concerning the facility, its NJPDES permit number, the nature of the discharge, and a certification to the effect that the closure has been performed in accordance with all submissions made to the Department. Applications received before completion of items (c)1 through 3 above, shall not be processed and shall be returned for resubmission upon satisfactory completion of all closure requirements by the permittee.

SUBCHAPTER 24. ADDITIONAL REQUIREMENTS FOR CERTAIN STORMWATER DISCHARGES

7:14A-24.1 Scope

This subchapter sets forth additional requirements applicable to any stormwater DSW and stormwater DGW for which a NJPDES permit is required under N.J.A.C. 7:14A-24.2.

7:14A-24.2 Stormwater discharges for which a NJPDES permit is required under this subchapter; exemptions

(a) A NJPDES permit under this subchapter is required for the following stormwater DSW and DGW:

1. Stormwater DSW for which a permit was issued under Section 402 of the Federal Act (33 U.S.C. §1342) prior to February 4, 1987 (see N.J.A.C. 7:14A-24.7(a) and (c));

2. Stormwater DSW associated with industrial activity from point or nonpoint sources (see N.J.A.C. 7:14A-24.7(a) and (b));

3. Stormwater DSW associated with small construction activity from point or nonpoint sources (see N.J.A.C. 7:14A-24.7(a));

4. Stormwater DSW and DGW that are from concentrated animal feeding operations and for which a NJPDES permit is required under N.J.A.C. 7:14A-2.13 (see N.J.A.C. 7:14A-4.7 and 4.8);

5. Stormwater DSW from large or medium municipal separate storm sewer systems (see N.J.A.C. 7:14A-25.10);

6. Stormwater DSW and DGW from small municipal separate storm sewer systems (small MS4s) identified under N.J.A.C. 7:14A-25.2(a) or (b) (see N.J.A.C. 7:14A-25.5);

7. Stormwater DSW from point or nonpoint sources (other than activities identified under N.J.A.C. 7:14A-2.5(a)4 or 5) for which either the Department or the USEPA Regional Administrator determines (also see N.J.A.C. 7:14A-24.7(a) and (c), 25.2(a)4, and 25.5) that:

i. Stormwater controls are needed for the point source discharge based on total maximum daily loads (TMDLs) that address the pollutant(s) of concern; or

ii. The point or nonpoint source discharge, or category of discharges within a geographic area, contributes to a violation of a surface water quality standard, or is a significant contributor of pollutants to surface water;

8. Stormwater DSW and DGW from agricultural and silvicultural nonpoint sources regulated under N.J.A.C. 7:14A-2.5(d); and

9. Stormwater DGW otherwise exempt under N.J.A.C. 7:14A-7.4(a)5i or ii, if the Department determines that the discharge is likely to contravene the Groundwater Quality Standards at N.J.A.C. 7:9C, or may result in violation of the Surface Water Quality Standards at N.J.A.C. 7:9B (see N.J.A.C. 7:14A-4.7, 25.2(a)4, and 25.5).

(b) Whenever it is determined that a NJPDES permit is required under (a)7 or 9 above, or under both (a)3 above and paragraph 2 of the N.J.A.C. 7:14A-1.2 definition of "stormwater discharge associated with small construction activity," the Department shall notify the operating entity in writing of the reasons for such a determination, and shall include instructions on how to apply for a NJPDES permit. In such a case, and if the operating entity has applied for an individual NJPDES permit, comment regarding the appropriateness of the initial determination may be received during the public comment period under N.J.A.C. 7:14A-15.11 and in any subsequent hearing, unless the reason for that determination was a decision made by USEPA under 40 C.F.R. 122.26(a)(9)(i)(C), (a)(9)(i)(D), or (b)(15)(ii), or under 40 C.F.R. 123.35(b) or (c). The operating entity shall apply for a NJPDES permit in accordance with N.J.A.C. 7:14A-24.4.

(c) The following stormwater discharges are exempt from the requirement to obtain a NJPDES permit from the Department:

1. Stormwater DSW not identified under (a) above;

2. Stormwater DSW from mining operations or oil and gas exploration, production, processing or treatment operations or transmission facilities, composed entirely of flows which are from conveyances or systems of conveyances (including, but not limited to, pipes, conduits, ditches, and channels) used for collecting and conveying precipitation runoff and which are not contaminated by contact with or that has not come into contact with, any overburden, raw material, intermediate products, finished product, byproduct or waste products located on the site of such operations; and

3. Stormwater DGW that are from municipal separate storm sewers, residential areas (including residential streets, parking lots, easements, and open space), commercial areas other than areas of high pollutant loading as described under N.J.A.C. 7:14A-7.4(b)5ii, or animal feeding operations, but that are not through underground injection regulated under N.J.A.C. 7:14A-8 and not identified under (a) above.

(d) The permit requirements for large and medium municipal separate storm sewer systems, and for stormwater discharges associated with industrial activity that discharge through such systems, contained in 40 C.F.R. 122.26(a)(3) and (a)(4) are incorporated into this chapter by reference.

(e) For stormwater discharges associated with industrial activity which discharge through a privately owned and operated separate storm sewer system (private conveyance system), the Department shall either:

1. Issue a single NJPDES permit (or a single authorization under a general NJPDES permit) to the operating entity for the portion of the private conveyance system that discharges to surface water, with each discharger to the private conveyance system a copermittee to that permit (or to an authorization under a general permit); or

2. Issue individual permits (or authorizations under a general permit) to each discharger of stormwater associated with industrial activity through the private conveyance system.

3. Where there is more than one operating entity for a single private conveyance system, all operating entities for stormwater discharges associated with industrial activity shall submit applications (or requests for authorization under a general permit).

4. Any permit authorizing more than one operating entity shall identify the effluent limitations, or other permit conditions, if any, that apply to each operating entity.

(f) Combined sewer systems that discharge to waters of the State are point sources that require NJPDES permits applied for in accordance with N.J.A.C. 7:14A-4, and are not subject to the provisions of this subchapter or N.J.A.C. 7:14A-25. Stormwater discharges to combined or sanitary sewer systems are not subject to the provisions of this subchapter or N.J.A.C. 7:14A-25.

(g) Whether a stormwater discharge from a municipal separate storm sewer is or is not subject to regulation under this subchapter or N.J.A.C. 7:14A-25 shall have no bearing on whether the owner or operating entity for the discharge is eligible for funding under title II, title III or title VI of the Federal Act. See 40 C.F.R. part 35, subpart I, appendix A(b) H.2.j.

7:14A-24.3 Petitions

(a) Any operating entity for a municipal separate storm sewer system may petition the Department to require a separate NJPDES permit for any discharge into the municipal separate storm sewer system.

(b) Any person may petition the Department to require a NJPDES permit for a point source DSW which is composed entirely of stormwater which contributes to a violation of a surface water quality standard or is a significant contributor of pollutants to waters of the State.

(c) The owner of or operating entity for a municipal separate storm sewer system may petition the Department to reduce the Census estimates of the population served by such separate system or the population within an urbanized area to account for stormwater discharged to combined sewers as defined by 40 C.F.R. 35.2005(b)(11) that is treated in a publicly owned treatment works. In municipalities in which combined sewers are operated, the Census estimates of population may be reduced proportional to the fraction, based on estimated lengths, of the length of combined sewers over the sum of the length of combined sewers and municipal separate storm sewers where an applicant has submitted the NJPDES permit number associated with each discharge point and a map indicating areas served by combined sewers and the location of any combined sewer overflow discharge point.

(d) Any person may petition the Department for the designation of a large or medium municipal separate storm sewer system as defined by paragraph 4 of the definitions of "large municipal separate storm sewer system" or "medium municipal separate storm sewer system" in N.J.A.C. 7:14A-1.2.

(e) The Department shall make a final determination on any petition received under this section within 90 days after receiving the petition, except as provided in (e)1 below.

1. For petitions under (a) or (b) above to require a NJPDES permit under N.J.A.C. 7:14A-25.2(a) for a stormwater discharge from a small MS4, the Department shall make a final determination on the petition within 180 days after its receipt.

7:14A-24.4 Deadlines to apply for NJPDES permit for stormwater discharges

(a) Any operating entity for a stormwater DSW or DGW identified under (a)1 through 8 below that does not have an effective NJPDES permit authorizing its stormwater discharges shall submit a request for authorization for a general NJPDES permit, or an application for an individual NJPDES permit, in accordance with the following deadlines:

1. Except as provided in (a)1i through vii below, for any "stormwater discharge associated with industrial activity" as defined in N.J.A.C. 7:14A-1.2 that is not authorized by a stormwater general permit, the request for authorization for a stormwater DSW

general permit, or an application for an individual stormwater DSW permit made pursuant to N.J.A.C. 7:14A-24.7, shall have been submitted by April 1, 1993.

i. For any stormwater discharge associated with industrial activity from a facility (other than an airport, powerplant, or uncontrolled sanitary landfill) that is owned or operated by a municipality with a population of less than 100,000, the request for authorization or individual permit application shall be submitted by March 3, 2004.

ii. Facilities that are owned or operated by a municipality and that were rejected by the USEPA as members of part 1 group application under 40 C.F.R. 122.26(e)(2) shall have submitted the request for authorization or individual permit application no later than 180 days after the date of receipt of the notice of rejection or April 1, 1993, whichever was later.

iii. If the discharge is from a nonpoint source and is not identified under (a) liv below, the request for authorization or individual permit application shall have been submitted by November 3, 1997. No NJPDES permit shall have required pollutants in such a discharge to be controlled before November 3, 1997.

iv. If the Department classifies the discharge as a "stormwater discharge associated with industrial activity" under paragraph 2 in the definition of that term in N.J.A.C. 7:14A-1.2, the request for authorization or individual permit application shall be submitted within 180 days of receipt of written notice of such classification, unless the Department approves a later date.

v. A group application submitted to USEPA under 40 C.F.R. 122.26(e)(2) does not qualify under this paragraph as a request for authorization under a NJPDES general permit, or as an application for an individual NJPDES permit. If a facility was approved by the USEPA as a member of a group application pursuant to 40 C.F.R. 122.26(e)(2), or if a facility which was a participant of a group application was not approved or rejected by the USEPA pursuant to 40 C.F.R. 122.26(e)(2) by April 1, 1993, the facility shall have either have submitted a written request for authorization under an applicable NJPDES general permit, or applied for an individual NJPDES permit, by October 1, 1993 (except as provided in (a)1i above).

vi. When an individual permit application for discharges of stormwater is submitted pursuant to N.J.A.C. 7:14A-24.7 for a facility that already has an individual DSW permit that does not authorize all of those discharges, then that application shall be submitted in the following manner:

(1) If that DSW permit has expired, or is due to expire within 180 days of the submission of that application, then that application shall be submitted as part of the application for renewal of that DSW permit (such submission may supplement a renewal application previously submitted to the Department).

(2) If that DSW permit has not expired and is not due to expire within 180 days of the submission of that application, then that application shall be submitted either as part of the application for renewal of that DSW permit, or in a request under N.J.A.C. 7:14A-16.4 to modify that DSW permit to authorize all of those discharges of stormwater.

vii. The following is applicable to entities proposing new discharges of stormwater associated with industrial activity. General permits for such discharges shall specify deadlines for submitting requests for authorization under such permits. An entity submitting an individual permit application for such a discharge shall submit an application at least 180 days before that entity intends to commence industrial activity which may result in a discharge of stormwater associated with that industrial activity (unless (a)1vii(1) below is applicable, or the Department approves a later date).

(1) An entity submitting an individual permit application for a stormwater discharge from construction activity as described under subparagraph 1x of the definition of "stormwater discharge associated with industrial activity" in N.J.A.C. 7:14A-1.2 shall submit an application at least 90 days before the date on which construction is to commence (unless the Department approves a later date).

2. Entities with existing NJPDES DSW permits for stormwater discharges associated with industrial activity shall maintain these permits unless these entities obtain different NJPDES permits for these discharges. (These existing NJPDES permits are subject to N.J.A.C. 7:14A-2.7 and 2.8, and may be renewed, modified, revoked and reissued, suspended, or revoked in accordance with the applicable requirements of N.J.A.C. 7:14A-15, 16, and 17.) Any entity planning to continue its stormwater discharges associated with industrial activity after the expiration date of its NJPDES permit for that discharge shall comply with N.J.A.C. 7:14A-4.2(e)3 and 24.7.

3. The following is applicable if a large or medium municipal separate storm sewer system is designated under paragraphs 3 or 4 of the definitions of "large municipal separate storm sewer system" or "medium municipal separate storm sewer system" in N.J.A.C. 7:14A-1.2. Part 1 of the application under N.J.A.C. 7:14A-25.10(a) shall be submitted within 12 months after designation of a "large municipal separate storm sewer system," or within 18 months after designation of a "medium municipal separate storm sewer system." Based on information received in the part 1 application the Department will approve or deny a sampling plan under 40 C.F.R. 122.26(d)(1)(iv)(E) within 90 days after receiving the part 1 application. Part 2 of the application shall be submitted to the Department within 12 months after the deadline for submitting the part 1 application.

4. For a stormwater DSW or DGW that is the subject of a notice under N.J.A.C. 7:14A-24.2(b), or that is subject to N.J.A.C. 7:14A-24.7(a)5, a request for authorization for a stormwater general permit, or an application for an individual permit, shall be submitted within 180 days of notice, unless the Department approves a later date.

5. For stormwater DSW and DGW from nonpoint sources regulated under N.J.A.C. 7:14A-2.5(d), the discharger shall apply for a NJPDES permit in accordance with the deadline contained in that subsection.

6. Except as provided in (a)6i below, the deadline to obtain NJPDES permit authorization for all stormwater DSW identified under paragraph 1 of the definition of "stormwater discharge associated with small construction activity" in N.J.A.C. 7:14A-1.2 is March 3, 2004, or the date on which construction commences, whichever is later. General permits for such discharges shall specify deadlines for submitting requests for authorization under such permits. An entity submitting an individual permit application for such discharges shall submit an application at least 90 days before the date on which construction is to commence (unless the Department approves a later date), or by March 3, 2004, whichever is later.

i. The deadline to obtain NJPDES permit authorization for stormwater discharge associated with small construction activity at oil and gas exploration, production, processing, and treatment operations or transmission facilities is March 10, 2005, or the date on which construction commences, whichever is later. General permits for such discharges shall specify deadlines for submitting requests for authorization under such permits. An entity submitting an individual permit application for such discharges shall submit an application at least 90 days before the date on which construction is to commence (unless the Department approves a later date), or by December 10, 2004, whichever is later.

7. The deadline to apply for a NJPDES permit for all stormwater DSW and DGW from small municipal separate storm sewer systems (small MS4s) identified under N.J.A.C. 7:14A-25.2(a) is March 3, 2004, except as provided in N.J.A.C. 7:14A-25.4(a)1 through (a)3.

8. The deadline for Tier B municipalities to apply for the Tier B Municipal Stormwater General Permit under N.J.A.C. 7:14A-25.8 (for stormwater DSW and DGW from certain small MS4s) is March 3, 2004, except as provided in N.J.A.C. 7:14A-25.8(b)1 and (b)2.

(b) The Department shall issue or deny individual permits (or authorization under general permits) for the following DSW composed entirely of stormwater in accordance with the following schedule:

1. The Department shall issue or deny individual NJPDES permits (or authorization under general NJPDES permits) for stormwater discharges associated with industrial activity no later than April 1, 1994, or for new sources or existing sources which did not submit a complete NJPDES individual permit application or request for authorization by April 1, 1993, one year after receipt of a complete NJPDES individual permit application or request for authorization (unless the general permit specifies a shorter time period); and

2. The Department shall issue or deny permits for large or medium municipal separate storm sewer systems by the deadlines contained in 40 C.F.R. 122.26(e)(7)(ii) and (iii), which are incorporated into this chapter by reference.

7:14A-24.5 Requests for information about stormwater discharges associated with industrial activity

(a) The Department may, by written notice, request any person whom the Department has reason to believe may own or operate a facility with a "stormwater discharge associated with industrial activity" as defined in N.J.A.C. 7:14A-1.2 to either:

1. Declare to the Department that person's intent to obtain a DSW permit for a "stormwater discharge associated with industrial activity";

2. Submit a "Permanent No Exposure Certification" form to the Department under N.J.A.C. 7:14A-24.6; or

3. Provide other information to the Department that explains why, in that person's judgment, that person is not required to obtain, for property or operations owned or operated by that person, a DSW permit for a "stormwater discharge associated with industrial activity" as defined in N.J.A.C. 7:14A-1.2. Such information may include:

i. Information about the nature, source, and location of the stormwater discharge from such property or operations; or

ii. Information concerning that person (for example, information explaining why that person does not have a duty under N.J.A.C. 7:14A-4.2(c) to obtain a NJPDES permit).

(b) A written notice under (a) above shall include a statement that such notice was sent pursuant to this section and the State Act, and that failure to respond to such notice in the manner required by this section is a violation of the State Act. Such notice shall also briefly explain why the Department has reason to believe that person may own or operate a facility with a "stormwater discharge associated with industrial activity" as defined in N.J.A.C. 7:14A-1.2. (For example, one sufficient reason is information indicating that the person may own or operate an establishment classified under a Standard Industrial Classification (SIC) code expressly listed in the definition of "stormwater discharge associated with industrial activity," or a landfill, steam electric power generating plant, treatment works treating domestic sewage, or construction operation that results in the disturbance of land.) Such notice may also require the person's response to be on a form provided by the Department, and to include a certification substantially equivalent to that required in a permit application under N.J.A.C. 7:14A-4.9(d).

(c) Upon receipt of a written notice under (a) above, the person shall provide a written response in accordance with this section within 60 days, unless the notice specifies a longer time period. The Department, in its discretion, may also extend the time allowed for submitting a response for good cause shown.

(d) Nothing in (a) through (c) above shall exempt any person from any deadline to apply for a NJPDES permit under N.J.A.C. 7:14A-4.2(e) and 24.4, or prevent the Department from making other requests for information under N.J.A.C. 7:14A-2.11 or the State Act.

7:14A-24.6 "Permanent No Exposure" of industrial activities and materials to stormwater

(a) Subject to the limitations and provisions in (g), (i), and (j) below, an operating entity for an industrial facility is excluded from the requirement to obtain a NJPDES DSW permit for discharge(s) composed entirely of stormwater if:

1. There is "Permanent No Exposure" of industrial materials and activities to rain, snow, snowmelt and/or runoff and runon discharged to surface water; and

2. The operating entity satisfies the conditions in (d) below.

(b) Discharges that qualify for this exclusion are not "stormwater discharges associated with industrial activity" as defined in N.J.A.C. 7:14A-1.2.

(c) For purposes of this section:

1. "Permanent No Exposure" means that all industrial materials are stored and/or all industrial activities are performed inside a permanent building or permanent structure that is anchored to a permanent foundation, and that is completely roofed and walled (except as provided in (f) below).

2. "Industrial materials and activities" include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, by-product, final product or waste product.

(d) To qualify for this exclusion, the operating entity for the industrial facility shall:

1. Attain the condition of "Permanent No Exposure" identified under (a)1 above;

2. Complete and sign in accordance with N.J.A.C. 7:14A-4.9 the Department's "Permanent No Exposure Certification" form (see (h) below);

3. Submit the signed certification to the Department once every five years;

4. Allow the Department to inspect the facility to verify that the operating entity meets the applicable conditions, and to make inspection reports available to the public upon request; and

5. For facilities that discharge through a municipal separate storm sewer system (MS4), and at the request of that MS4's operating entity, submit a copy of the "Permanent No Exposure Certification" to that entity, and allow inspection and public reporting by that entity.

(e) The exclusion is not transferable. In the event that the operating entity changes, the new operating entity must submit a new "Permanent No Exposure Certification" and is subject to the same conditions in (d) above.

(f) To qualify for this exclusion, a permanent building or permanent structure is not required for:

1. Dumpsters or other rigid containers of similar or larger size, that are used only for routine collection and temporary storage of industrial or other waste materials generated at the facility, and that are watertight, leak proof, and covered, with no visible residue or contamination on the external exposed surfaces;

2. Adequately maintained vehicles in normal operating condition used in material handling; and

3. Pipe that is not deteriorated and does not leak, and that is installed for use in the transportation or conveyance of materials at or through the facility. For purposes of this paragraph, "pipe" does not include pumps, inlet valves, or outlet valves.

(g) This exclusion is subject to the following limitations:

1. Stormwater discharges from construction activities as described under subparagraph 1x of the definition of "stormwater discharge associated with industrial activity" in N.J.A.C. 7:14A-1.2, and "stormwater discharge associated with small construction activity" as defined at N.J.A.C. 7:14A-1.2, are not eligible for this exclusion.

2. This exclusion is available on a facility-wide basis only, not for individual outfalls or drainage areas.

3. If circumstances change and industrial materials or activities become exposed to rain, snow, snowmelt, and/or runoff and runon discharged to surface water (except as provided in (f) above), the conditions for this exclusion no longer apply. In such cases, a NJPDES permit shall be obtained for the discharge and the discharge becomes subject to enforcement as an unpermitted discharge of stormwater associated with industrial activity unless and until a permit is obtained.

i. Any conditionally exempt discharger who anticipates changes in circumstances should submit an application or RFA and obtain a NJPDES permit authorization prior to the change of circumstances.

4. Notwithstanding the provisions of this section, the Department retains the authority to require an operating entity to submit an application or RFA (and deny this exclusion) upon making a determination that any stormwater discharge from the facility causes, has a reasonable potential to cause, or contributes to an excursion in surface waters above an applicable surface water quality standard, including designated uses.

5. This section does not exclude any operating entity for a municipal separate storm sewer system (MS4) from any requirement under N.J.A.C. 7:14A-24 or 25 to obtain a NJPDES permit for stormwater discharge from the MS4.

(h) A completed "Permanent No Exposure Certification" shall include all of the following information, and must be submitted on a form provided by the Department:

1. The name, mailing address and phone number of the operating entity;

2. The name, address, and location of the facility;

3. A statement that the person signing the certification has read and understands the eligibility requirements for claiming a condition of "Permanent No Exposure" and obtaining this exclusion; and

4. A statement that the operating entity has attained the condition of "Permanent No Exposure" identified under (a)1 above, and understands its obligation to comply with all applicable conditions for the exclusion under (d) above, and to apply for a NJPDES permit prior to any discharge of stormwater associated with industrial activity from the facility.

(i) For an operating entity that is authorized to discharge stormwater under a valid NJPDES permit, the Department shall perform an inspection to confirm that all applicable conditions for the exclusion under (d) above have been met prior to modifying the permit to delete such discharge in accordance with N.J.A.C. 7:14A-16.4(b)1, revoking the permit in accordance with N.J.A.C. 7:14A-16.6(a)4, or revoking authorization under a general permit in accordance with N.J.A.C. 7:14A-6.13(j).

1. If the Department confirms that all applicable conditions for the exclusion have been met, the modification or revocation shall be effective as of the date of the Department's receipt of the "Permanent No Exposure Certification."

i. Until the operating entity receives a final modification or revocation from the Department, the operating entity's authorization under the NJPDES permit and all conditions of the permit, including any monitoring and reporting requirements, remain fully effective and enforceable with respect to the stormwater discharge.

2. Based on an inspection of the facility, if the Department determines that one or more applicable conditions for the exclusion have not been met, the Department will respond in

writing with the reasons for the denial. The operating entity's authorization under the NJPDES permit and all conditions of the permit remain fully effective and enforceable.

(j) For an operating entity that is not authorized to discharge stormwater under a valid NJPDES permit, the conditional exclusion shall be effective as of the date of the Department's receipt of the "Permanent No Exposure Certification" if the conditions of this section have been satisfied.

1. If the Department inspects the facility in accordance with (d)4 above and determines that any condition of this section has not been satisfied, the Department shall deny the conditional exclusion and require the operating entity to submit a permit application or RFA for the stormwater discharge associated with industrial activity.

7:14A-24.7 Permit application requirements for stormwater discharges associated with industrial activity or small construction activity, and for certain other stormwater DSW

(a) Operating entities for stormwater discharges associated with industrial activity or small construction activity (from point or nonpoint sources), and for industrial or commercial stormwater DSW (from point or nonpoint sources) identified under N.J.A.C. 7:14A-24.2(a)1 or 7, shall apply for an individual NJPDES DSW permit or request authorization under a final stormwater general NJPDES DSW permit in accordance with the deadlines set forth at N.J.A.C. 7:14A-24.4. Any such operating entity that is required or seeks to obtain an individual DSW permit shall submit an individual permit application in accordance with the requirements of N.J.A.C. 7:14A-4 as modified and supplemented by this section and N.J.A.C. 7:14A-24.8. Except as provided in (a)2 and (b) below, this individual permit application shall include (for discharges composed entirely of stormwater) the NJPDES-1 Form, NJPDES Form RF, and NJPDES Form R, Part A (the facility's residual use or residual disposal practices may require the completion of additional sections of Form R). If this individual permit application is for a stormwater discharge mixed with domestic sewage and/or an industrial nonstormwater discharge that requires a NJPDES-DSW permit, the operating entity shall comply with N.J.A.C. 7:14A-4, but is exempt from the requirements of (a)1 and 2 below, and shall not submit NJPDES Form RF.

1. Except as provided in (a)2 through 4, (a)6 and (b) below, an individual permit application for a stormwater DSW under this subsection shall include the following:

i. A site map showing:

(1) The facility boundaries;

(2) Topography (or indicating the outline of drainage areas covered in the application if a topographic map is unavailable) of the facility, including generalized stormwater flow and drainage patterns;

(3) The location and size (approximate size for earthen structures or channels) of each of the facility's drainage and discharge structures and natural drainage channels;

(4) The location, drainage area, and identification number of each stormwater outfall;

(5) The location and identification number of each drainage area not served by a stormwater outfall;

(6) Paved areas and buildings within each drainage area;

(7) Each area known to be used at present or in the three years prior to the submittal of this application for outdoor storage or disposal of "significant materials" as defined in N.J.A.C. 7:14A-1.2;

(8) Each existing structural control measure to reduce pollutants in stormwater runoff;

(9) Materials loading and access areas;

(10) Areas where pesticides, herbicides, soil conditioners and fertilizers are applied;

(11) Each of the facility's onsite residual or hazardous waste treatment, storage or disposal facilities (including each area not required to have a RCRA permit which is used for accumulating hazardous waste under 40 C.F.R. 262.34);

(12) The location (to the extent practicable) where solid, liquid, or hazardous waste is stored at the facility;

(13) Springs, streams, rivers, canals, lakes, ponds, bays, the ocean, or other surface water bodies which receive stormwater discharges from the facility; and

(14) Each sampling location for stormwater sampling data reported in the application;

ii. An 8.5 inch x 11 inch copy of a portion of a U.S. Geological Survey Topographic Map(s), 7.5 minute Quadrangle Series extending one mile beyond the facility boundaries. The facility boundaries must be marked on the copy;

iii. The latitude and longitude to the nearest second of each stormwater outfall, and the name of the receiving surface water(s) of each stormwater outfall and each drainage area not served by a stormwater outfall;

iv. If stormwater is discharged to receiving surface water(s) through an offsite public or private storm drainage system, the name of the owner(s) of that system;

v. An estimate of the area of impervious surfaces (including paved areas and building roofs) and the total drainage area of each outfall and of each area not served by an outfall and a narrative description of the following on-site features at the facility:

(1) "Significant materials" (as defined in N.J.A.C. 7:14A-1.2) known by the applicant to have been treated, stored or disposed in a manner to allow exposure to stormwater;

(2) Method of treatment, storage or disposal of such materials;

(3) Materials management practices employed currently (and in the past, if the applicant has information), to minimize contact by these materials with stormwater runoff;

(4) Materials loading and access areas;

(5) The location, manner and frequency in which pesticides, herbicides, soil conditioners and fertilizers are applied;

(6) The location and a description of existing structural and non-structural control measures to reduce pollutants in stormwater runoff; and

(7) A description of the treatment the stormwater receives, including the ultimate disposal of any solid, hazardous, or fluid wastes other than by discharge;

vi. A certification that all outfalls (and all drainage areas not served by outfalls) that should contain stormwater discharges associated with industrial activity have been tested or evaluated for the presence of non-stormwater discharges which are not authorized by a NJPDES permit; tests for such non-stormwater discharges may include smoke tests, fluorometric dye tests, analysis of accurate schematics, as well as other appropriate tests. The certification shall include a description of the method used, the date of any testing, and the on-site drainage locations that were directly observed during a test;

vii. Existing information the applicant has regarding significant leaks or spills of toxic or hazardous pollutants at the facility, including the approximate date and location of the spill or leak, and the type and amount of material released. For purposes of the preceding sentence, significant leaks or spills at a facility generally include releases of oil or hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act, 33 U.S.C. §1321 (see 40 C.F.R. 110.10 and 40 C.F.R. 117.21) or Section 302 of CERCLA (see 40 C.F.R. 302.4);

viii. Quantitative data based on samples collected during storm events and collected in accordance with N.J.A.C. 7:14A-24.8 from all outfalls (and all drainage areas not served by outfalls) containing a stormwater discharge associated with industrial activity for the following parameters:

(1) Any pollutant limited in an effluent guideline to which the facility is subject;

(2) Any pollutant specifically limited in the facility's NJPDES DSW permit for its process wastewater (if the facility is operating under an existing NJPDES DSW permit);

(3) Oil and grease, pH, BOD₅, COD, TSS, total phosphorus, total Kjeldahl nitrogen, and nitrate plus nitrite nitrogen;

(4) Any information on the discharge required under N.J.A.C. 7:14A-4.4(b)5i and ii and (b)6. For purposes of those provisions, an applicant is expected to know or have reason to believe that a pollutant is present in an effluent based on an evaluation of the expected use, production, manufacturing of an intermediate or final product or byproduct, or storage of the pollutant, or on any previous analyses for the pollutant. (For example, any pesticide manufactured by a facility may be expected to be present in contaminated stormwater runoff from the facility.);

(5) Measurements or estimates of the maximum flow rate and of the total amount of discharge for the storm event(s) sampled, and the method of flow measurement or estimation. (This information and the information required under (a)1viii(6) below is required only for the storm event(s) which resulted in any maximum pollutant concentration reported under (a)1viii(1) through (4) above for the flow-weighted composite sample.); and

(6) The date and duration (in minutes) of the storm event(s) sampled, rainfall measurements or estimates of the storm event (in inches) which generated the sampled runoff and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event (in hours);

ix. The source(s) (if known) of each pollutant (except pH) listed in the application pursuant to (a)1viii above;

x. In preparing an individual permit application under (a)1 above, both outfalls and drainage areas not served by outfalls shall be regulated in the same manner as "outfalls" for purposes of (a)1viii(4) above and N.J.A.C. 7:14A-4.4(b) and 24.8;

xi. Any operating entity for a discharge composed entirely of stormwater is exempt from the requirements of N.J.A.C. 7:14A-4.3(a)15, 16, 17, 21 and 22, and 4.4(a), (b)3i and ii and (b)7; and

xii. Any operating entity for a new source or new discharge (as defined in N.J.A.C. 7:14A-1.2) composed in part or entirely of stormwater shall include estimates for the pollutants or parameters listed in (a)1viii above instead of actual sampling data, along with the source of each estimate. Any operating entity for a new source or new discharge composed in part or entirely of stormwater must provide quantitative data for the parameters listed in (a)1viii above within two years after commencement of discharge, unless such data has already been reported under the monitoring requirements of the NJPDES permit for the discharge. Any operating entity for a new source or new discharge composed entirely of stormwater is exempt from the requirements of N.J.A.C. 7:14A-4.3(a)15, 16, 17, 21iii and 22, and 4.4(b)3 through 7.

2. Except as provided in (a)5 below, the operating entity for an existing or new stormwater discharge that is associated with construction activity solely under subparagraph 1x of the definition of "stormwater discharge associated with industrial activity" in N.J.A.C. 7:14A-1.2, or solely under the definition of "stormwater discharge associated with small construction activity" in N.J.A.C. 7:14A-1.2, is exempt from the requirements of (a)1 above and N.J.A.C. 7:14A-4.3(a)11, (a)15 through 22, (c) and (d) and 4.4, and shall not submit NJPDES Form RF. Such operating entity shall, if applying for an individual NJPDES DSW permit, submit the NJPDES-1 Form, NJPDES Form RFC, and NJPDES Form R, Part A (the facility's residual use or residual disposal practices may require the completion of additional sections of Form R). The application shall include the following:

i. A narrative description of:

(1) The location and nature of the construction activity;

(2) The nature of fill material used or disturbed during the construction activity; and

(3) Existing data describing the soil or the quality of the stormwater discharge;

ii. An 8.5 inch x 11 inch copy of a portion of a U.S. Geological Survey Topographic Map(s), 7.5 minute Quadrangle Series extending one mile beyond the facility boundaries. The facility boundaries must be marked on the copy;

iii. If the facility is within the Pinelands Area (as defined by N.J.S.A. 13:18A-11), documentation that the Pinelands Commission has reviewed and approved the facility, or that the Pinelands Commission will not review the facility based upon a certification or approval issued under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq.;

iv. A stormwater pollution prevention plan for the construction activity. This stormwater pollution prevention plan shall include:

(1) The total land area of the site (in acres);

(2) The land area of the site (in acres) that is expected to be cleared, graded, excavated, or otherwise disturbed during the term of the permit;

(3) The name of the receiving surface water(s);

(4) If stormwater is discharged to receiving surface water(s) through an offsite public or private storm drainage system, the name of the owner(s) of that system;

(5) A site map showing:

(A) Facility boundaries;

(B) Areas of land disturbance (existing and proposed);

(C) Areas where land will not be disturbed;

(D) The approximate location of the kinds of soil present (applicants may mark the facility boundaries on a copy of a detailed soil map published by the United States Department of Agriculture where available);

(E) Existing and proposed land cover (for example, wooded area, open grassed area, pavement, buildings);

(F) Generalized drainage patterns and approximate slopes (existing and proposed);

(G) Locations of major drainage and discharge features (existing and proposed) and natural drainage channels;

(H) Locations of soil storage piles (existing and proposed);

(I) Each existing onsite residual or hazardous waste treatment, storage or disposal facility;

(J) The location (to the extent practicable) of all storage or disposal sites at the facility for solid or liquid waste;

(K) Locations of proposed major structural and nonstructural best management practices (BMPs) to control stormwater pollutants during and after construction;

(L) Surface water bodies which receive stormwater discharges from the facility; and

(M) Whether the drainage system immediately receiving stormwater discharged from the facility is a surface water body, an offsite public or private storm drainage system, or other system as applicable;

(6) A narrative description of proposed BMPs to control pollutants in stormwater discharges during construction, including:

(A) Appropriate erosion and sediment control BMPs that at a minimum meet standards established under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq., (and implementing rules). The narrative description shall include a brief description of applicable State and local erosion and sediment control requirements; and

(B) BMPs to control waste such as discarded building materials, concrete truck washout, chemicals, litter, sanitary waste, and other solid or hazardous waste at the construction site;

(7) Copies of approved State or local requirements for BMPs under (a)2iv(6) above;

(8) Maintenance procedures and inspection procedures for BMPs under (a)2iv(6) above; and

(9) Identification of non-stormwater discharges;

v. An estimate of the post-construction runoff coefficient of the site, and the increase in the area of impervious surface after the construction addressed in the individual permit application is completed; and

vi. A narrative description of proposed BMPs to control pollutants in stormwater discharges that will occur after construction operations have been completed, including a brief description of applicable State or local stormwater management controls and erosion and sediment control requirements.

3. The operating entity for an existing or new discharge composed entirely of stormwater from an oil or gas exploration, production, processing, or treatment operation, or transmission facility is not required to apply for a NJPDES DSW permit in accordance with this section, unless the facility:

i. Has had a discharge of stormwater resulting in the discharge of a reportable quantity for which notification is or was required pursuant to 40 C.F.R. 117.21 or 40 C.F.R. 302.6 at anytime since November 16, 1987;

ii. Has had a discharge of stormwater resulting in the discharge of a reportable quantity for which notification is or was required pursuant to 40 C.F.R. 110.6 at any time since November 16, 1987; or

iii. Contributes to a violation of a surface water quality standard.

4. The operating entity for an existing or new discharge composed entirely of stormwater from a mining operation is not required to apply for a NJPDES DSW permit in accordance with this section, unless the discharge has come into contact with any overburden, raw material, intermediate products, finished product, byproduct or waste products located on the site of such operations.

5. Applicants shall provide such other information as the Department may reasonably require under N.J.A.C. 7:14A-4.3(e) to determine whether to issue a NJPDES DSW permit. The Department may require any operating entity subject to (a)2 above to comply with (a)1 above and submit NJPDES Form RF.

(b) A group application submitted to USEPA under former 40 C.F.R. 122.26(c)(2) does not qualify under (a) above as an application for an individual NJPDES permit, or as a request for authorization under a NJPDES general permit. However, if a facility was approved by the USEPA as a member of a group application pursuant to 40 C.F.R.

122.26(e)(2) and applies to the Department for an individual NJPDES permit for a stormwater discharge associated with industrial activity, the Department may accept the quantitative data in Part 2 of that group application in lieu of quantitative data collected at the applicant's facility for that stormwater discharge, provided that:

1. The quantitative data in Part 2 of that group application is submitted to the Department by the entity that prepared the group application or by the applicant; and

2. The USEPA has not informed that entity that the quantitative data in Part 2 that was submitted to the Department is inaccurate or incomplete.

(c) Operating entities for stormwater DSW (from point or nonpoint sources) that are identified under N.J.A.C. 7:14A-24.2(a)1 or (a)7, but that are not from industrial or commercial facilities or from small MS4s, shall apply for an individual NJPDES DSW permit or request authorization under a final stormwater general NJPDES DSW permit in accordance with the deadlines set forth at N.J.A.C. 7:14A-24.4(a)4. Any such operating entity that is required or seeks to obtain an individual DSW permit shall submit an individual permit application in accordance with the requirements of N.J.A.C. 7:14A-4 (except N.J.A.C. 7:14A-4.3(a)11, (a)15 through 24, (c) and (d) and 4.4). This individual permit application shall include:

1. The NJPDES-1 Form;

2. Other information required under N.J.A.C. 7:14A-4.3 (except as exempted above in this subsection);

3. An 8.5 inch x 11 inch copy of a portion of a U.S. Geological Survey Topographic Map(s), 7.5 minute Quadrangle Series extending one mile beyond the facility boundaries. The facility boundaries must be marked on the copy; and

4. Such other information as the Department may reasonably require under N.J.A.C. 7:14A-4.3(e).

7:14A-24.8 Sample collection procedures for individual stormwater DSW permit applications

(a) When "quantitative data" for a pollutant are required under N.J.A.C. 7:14A-24.7(a)1viii (or under N.J.A.C. 7:14A-25.10(a) and 40 C.F.R. 122.26(d)(2)(iii)) in an individual NJPDES permit application for a stormwater DSW, the applicant shall collect samples in accordance with N.J.A.C. 7:14A-4.4(b) (also see N.J.A.C. 7:14A-24.7(a)1x) and the following paragraphs (procedures or requirements in (a)1 through 4 below are subject to change under (a)5 below):

1. All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inch and at least 72 hours from the previously measurable (greater than 0.1 inch) storm event. Where feasible, the variance in the duration of the event and the

total rainfall of the event should not exceed 50 percent from the average or median rainfall event in that area.

2. For all pollutants requiring analysis under N.J.A.C. 7:14A-24.7, quantitative data must be reported for a grab sample taken during the first 30 minutes (or as soon thereafter as practicable) of the stormwater discharge.

3. For all pollutants requiring analysis under N.J.A.C. 7:14A-24.7 (or under N.J.A.C. 7:14A-25.10, where applicable), quantitative data must be reported for a flow-weighted composite sample (except as provided in (a)3i and ii below). This sample must be taken for either the entire stormwater discharge or for the first three hours of the stormwater discharge. (Notwithstanding N.J.A.C. 7:14A-4.4(b)2ii, a 24-hour composite sample of the stormwater discharge is not required.) Only one analysis of the composite of aliquots is required.

i. A minimum of one grab sample may instead be taken for stormwater discharges from holding ponds or other impoundments with a retention period greater than 24 hours.

ii. Flow-weighted composite samples shall not be taken for pH, temperature, cyanide, total phenols, chlorine produced oxidants, oil and grease, petroleum hydrocarbons, all volatile organics, and fecal coliform, fecal streptococcus, and other bacterial indicators.

iii. The flow-weighted composite sample shall be:

(1) Taken with a continuous sampler;

(2) A combination of a minimum of three sample aliquots taken in each hour of discharge for the entire discharge; with each aliquot being separated by a minimum period of fifteen minutes; or

(3) A combination of a minimum of three sample aliquots taken in each of the first three hours of the discharge, with each aliquot being separated by a minimum period of 15 minutes.

4. Notwithstanding N.J.A.C. 7:14A-4.4(b)5ii, stormwater permit applicants are not required to report the daily maximum or daily average for any pollutant. Notwithstanding N.J.A.C. 7:14A-4.4(b)3vi, stormwater permit applicants are not required to report as total mass:

i. Any sampling data from grab samples; or

ii. Any sampling data for flow, or for any pollutants that cannot be appropriately expressed in terms of mass (including but not limited to pH, acute and chronic whole effluent toxicity, temperature, and fecal coliform, fecal streptococcus, and other bacterial indicators).

5. The Department may allow or establish (in the Pollutant Analysis Summary in NJPDES Form RF or elsewhere) appropriate site-specific sampling procedures or requirements, including:

i. Sampling locations, the season in which the sampling takes place, the minimum duration between the previous storm event and the storm event sampled, the minimum or maximum level of precipitation required for an appropriate storm event, and the form of precipitation sampled (snowmelt or rainfall); and

ii. The type of sampling (for example, grab sample or flow-weighted composite sample), whether and how to measure (or estimate) and report flow, protocols for collecting samples that may differ from protocols for collecting samples under 40 C.F.R. 136 or N.J.A.C. 7:18, time duration between the collection of sample aliquots in flow-weighted or other composite samples, mode of reporting sampling results (for example, concentration or loading) or other sampling or storm event information, and additional time for submitting data on a case-by-case basis.

7:14A-24.9 Monitoring requirements for certain stormwater discharges

(a) For small municipal separate storm sewer systems, and for stormwater discharges associated with industrial activity or small construction activity that are not subject to an effluent limitation guideline that establishes monitoring requirements or numeric effluent limitations, monitoring requirements shall be established on a case-by-case basis depending upon the nature and effect of the discharge. The permittee shall be required to monitor such discharges in accordance with N.J.A.C. 7:14A-11.2(a)2, or, at a minimum:

1. For small municipal separate storm sewer systems subject to N.J.A.C. 7:14A-25.6 or 25.8, the permittee shall comply with the requirements for evaluation, recordkeeping, and reporting in N.J.A.C. 7:14A-25.6(j) or 25.8(i), respectively.

2. For stormwater discharges associated with industrial activity or small construction activity:

i. The permittee shall conduct an annual inspection of the facility to identify areas contributing to a stormwater discharge associated with industrial activity or small construction activity and evaluate whether measures to reduce pollutant loadings identified in a stormwater pollution prevention plan are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed;

ii. The permittee shall prepare a report summarizing the result of the annual inspection conducted under (a)2i above. This report shall be accompanied by an annual certification that the facility is in compliance with its stormwater pollution prevention plan and the permit, except that if there are any incidents of non-compliance, those incidents shall be identified in the certification. If there are incidents of non-compliance, the report shall identify the steps being taken to remedy the non-compliance and to prevent such incidents from recurring. The permittee shall maintain this report and certification for a period of at least five years from the date of the report. This period may be extended by written request from the Department at any time; and

iii. Such report and certification shall be signed by a person described in N.J.A.C. 7:14A-4.9.

iv. Permittees that are not required to submit monitoring reports at least annually pursuant to this subsection shall report to the Department at least annually all instances of non-compliance not reported under N.J.A.C. 7:14A-6.7, 6.8 and 6.10.

(b) The operating entity for a large or medium municipal separate storm sewer system shall include, in its annual report, a summary of data, including monitoring data, that is accumulated throughout the reporting year, in accordance with N.J.A.C. 7:14A-25.10(b) and 40 C.F.R. 122.42(c).

7:14A-24.10 Additional requirements for stormwater discharges associated with construction activity

(a) This section sets forth additional requirements applicable to "stormwater discharge associated with small construction activity" as defined at N.J.A.C. 7:14A-1.2, and to stormwater discharge associated with construction activity described under subparagraph 1x of the N.J.A.C. 7:14A-1.2 definition of "stormwater discharge associated with industrial activity." The Department may issue general and/or individual NJPDES permits for such discharges. The NJPDES permit program for such discharges shall be designed to reduce pollutants in such discharges. The program components include:

1. NJPDES permit conditions requiring that operating entities for construction sites implement appropriate erosion and sediment control BMPs. NJPDES permits shall require compliance with the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq., and implementing rules;

2. NJPDES permit conditions requiring that operating entities for construction sites control waste such as discarded building materials, concrete truck washout, chemicals, litter, sanitary waste, and other solid or hazardous waste at the construction site that may cause adverse impacts to water quality;

3. For construction activities described under subparagraph 1x of the N.J.A.C. 7:14A-1.2 definition of "stormwater discharge associated with industrial activity," NJPDES permit conditions imposing any additional requirements necessary to achieve the applicable technology-based standards of "best available technology" and "best conventional technology" based on the Department's best professional judgment, effluent limitations and standards promulgated under Section 301 of the Federal Act (33 U.S.C. §1311), or new source performance standards promulgated under Section 306 of the Federal Act (33 U.S.C. §1316);

4. NJPDES permit conditions requiring that operating entities for construction sites develop, submit for review, and implement a stormwater pollution prevention plan for construction activity. (This stormwater pollution prevention plan shall include site descriptions, descriptions of appropriate control measures, copies of approved State or local requirements, maintenance procedures, inspection procedures, and identification of non-stormwater discharges.);

5. The review of stormwater pollution prevention plans, including the consideration of potential water quality impacts of construction activity;

6. The implementation of applicable provisions of N.J.A.C. 7:50-4.81 through 4.85 (coordinated permitting in the Pinelands Area);

7. The receipt and consideration of information submitted by the public; and

8. Site inspection and enforcement of control measures.

SUBCHAPTER 25. MUNICIPAL STORMWATER REGULATION PROGRAM

7:14A-25.1 Scope

(a) This subchapter sets forth requirements applicable to the Municipal Stormwater Regulation Program, which regulates discharges to surface water and groundwater of stormwater from large, medium, and small municipal separate storm sewer systems.

(b) For purposes of this subchapter, "municipality" means a "municipality" as defined in the Municipal Land Use Law at N.J.S.A. 40:55D-5, that is, any city, borough, town, township, or village.

7:14A-25.2 Identifying municipalities, public complexes, and highways or other thoroughfares regulated under the small MS4 program

(a) A NJPDES permit is required for the stormwater discharges to surface water or groundwater identified in (a)1 through (a)4 below. The operating entities for those discharges shall apply for a NJPDES permit in accordance with N.J.A.C. 7:14A-25.4(a) and 25.5(a).

1. Tier A municipalities: All stormwater discharges from small MS4s that are owned or operated by and located in a municipality that is assigned to Tier A under N.J.A.C. 7:14A-25.3(a)1;

2. Public complexes: All stormwater discharges from small MS4s that are owned or operated by a county, State, interstate, or Federal agency at a "public complex" located entirely or partially in a municipality that is assigned to Tier A under N.J.A.C. 7:14A-25.3(a)1, or in a municipality that receives a waiver under (d) below. For purposes of this subsection, a "public complex" is a single lot (or two or more lots that are contiguous or on a college or university campus) which contains at least two buildings owned or operated by the same governmental entity, and:

i. Is at a campus of a college or university which Statewide has a combined total of at least 1,000 employees (usually present at least six hours per day on weekdays) or full-time students; or

ii. Is at any other public facility (for example a military base, hospital, prison, or general administration facility), and has a combined total of at least 1,000 employees, military personnel, or residents (including patients or prisoners) usually present at least six hours per day on weekdays.

3. Highways or other thoroughfares: All stormwater discharges from small MS4s that are owned or operated by a county, State, interstate, or Federal agency at a highway or other thoroughfare (including a maintenance or service facility or rest area for such a thoroughfare). For purposes of this subsection, a "highway or other thoroughfare" does not include:

i. Any thoroughfare confined to the grounds of a single building, or of two or more buildings that are not a "public complex" as described under (a)2 above (unless that building(s) is a maintenance or service facility for a highway or other thoroughfare not confined to such grounds);

ii. Any thoroughfare confined to the grounds of a "public complex" (each such thoroughfare is instead considered part of the "public complex"); or

iii. Any thoroughfare (other than the Palisades Interstate Parkway) confined to an officially designated park, forest, recreational area, natural area, wildlife management area, or area set aside for water supply protection.

4. Special designations: All of the following stormwater discharges from municipal separate storm sewers (which for purposes of this paragraph does not include "large" or "medium" municipal separate storm sewer systems, or separate storm sewers in very discrete areas, such as individual buildings):

i. All stormwater discharges from municipal separate storm sewers that the Department designates as "small MS4s that contribute substantially to the pollutant loadings of a physically interconnected municipal separate storm sewer that requires a NJPDES permit" under this subsection, or under N.J.A.C. 7:14A-24.2(a)5, 7 or 9;

ii. All stormwater discharges that are from municipal separate storm sewers, and that are designated under N.J.A.C. 7:14A-24.2(a)7 or 9;

iii. All stormwater discharges that are from municipal separate storm sewers, and that are determined to require a NJPDES permit in response to a petition under N.J.A.C. 7:14A-24.3;

iv. All stormwater discharges whose operating entity is granted a waiver under (d) below, but that are subsequently determined to require a NJPDES permit under (e) below; and

v. All stormwater discharges from municipal separate storm sewers designated by USEPA under 40 C.F.R. 123.35(b).

(b) Each municipality that is assigned to Tier B under N.J.A.C. 7:14A-25.3(a)2, and that operates a small MS4 that discharges to surface water or groundwater, shall apply for the Tier B Municipal Stormwater General Permit under N.J.A.C. 7:14A-25.8.

(c) All stormwater discharges to surface water or groundwater that are from small MS4s but not identified under (a) or (b) above are exempt from the requirement to obtain a NJPDES permit from the Department, except as provided in N.J.A.C. 7:14A-8.3, Prohibition of underground injection.

(d) The duty to obtain a permit under section 402 of the Federal Act (33 U.S.C. §1342) is waived for all operating entities for each small MS4 that is:

1. Owned or operated by and located in a municipality that is assigned to Tier B under N.J.A.C. 7:14A-25.3(a)2; and

2. Located within an urbanized area as determined by the 2000 Decennial Census by the Bureau of the Census or a subsequent and superseding Decennial Census.

3. This waiver applies solely to stormwater discharges from the small MS4s meeting the criteria at (d)1 and 2 above to surface waters of the State, and is subject to (e) below. This waiver does not exempt any Tier B municipality from the duty to obtain the Tier B Municipal Stormwater General Permit where required under (b) above.

4. The Department shall publish in the New Jersey Register a notice of administrative change revising (as appropriate under this subsection or (e) below) the list of municipalities in the table below, and shall mail notice of such revision to the affected municipality(ies) and county(ies). Each notice under this subsection shall identify the reason for the revision. The list in this table is for informational purposes only. Any person may obtain the most current list of municipalities to which the waiver applies and which are assigned to Tier B from the Department's Division of Water Quality, Bureau of Nonpoint Pollution Control at PO Box 029, Trenton, New Jersey 08625, or from the Division's website (http://www.state.nj.us/dep/dwq).

Municipalities to which Waiver Applies and which Are Assigned to Tier B

Atlantic County

Estelle Manor City

Bergen County

Ridgefield Park Village Rockleigh Borough Teterboro Borough

Burlington County

Chesterfield Township Fieldsboro Borough Springfield Township

Camden County Pine Valley Borough Tavistock Borough

Cumberland County

Deerfield Township

Gloucester County

Elk Township Woolwich Township

Hudson County

Hoboken City

Hunterdon County

Bethlehem Township Bloomsbury Borough East Amwell Township Franklin Township Lebanon Township Tewksbury Township Union Township West Amwell Township

Monmouth County

Interlaken Borough Upper Freehold Township

Morris County

Harding Township

Salem County

Oldmans Township Upper Pittsgrove Township

Somerset County

Far Hills Borough Millstone Borough Rocky Hill Borough

Sussex County

Andover Borough Fredon Township

Warren County

Allamuchy Township Harmony Township

(e) The waiver under (d) above is based on the fact that the small MS4s identified do not have any of the characteristics set forth in (e)1 or 2 below, and based on the presumption that those small MS4s are of such minimal extent and serve such a small population that none of their stormwater discharges have any of the characteristics set forth in (e)3i through iii below. An operating entity to which the waiver applies may subsequently be required to apply for a NJPDES permit under (a) above if circumstances change. The Department shall require any operating entity to which the waiver applies to apply for a NJPDES permit under (a) above for a stormwater discharge from that entity's small MS4 if:

1. The municipality in which the small MS4 is located is reassigned from Tier B to Tier A in accordance with N.J.A.C. 7:14A-25.3(a)1 (for a reason other than the review under this subsection of the operating entity's waiver);

2. That stormwater discharge is identified under (a)4ii, iii, or v above (special designations); or

3. Information specific to the small MS4 demonstrates to the Department's satisfaction that the stormwater discharge from the small MS4:

i. Contributes substantially to the pollutant loadings of a physically interconnected MS4 (see (a)4i above) that requires a NJPDES permit under (a) above;

ii. Contains a pollutant(s) for which stormwater controls have been established as part of a USEPA approved or established "total maximum daily load" (TMDL) that addresses the pollutant(s) of concern; or

iii. Requires an individual UIC permit under N.J.A.C. 7:14A-8.5(d).

(f) Whenever a NJPDES permit is required under (a)4 above (special designations), or a municipality is assigned to Tier A under N.J.A.C. 7:14A-25.3(a)1v, the Department shall notify the operating entity in writing of the reasons for such a determination, and shall include instructions on how to apply for a NJPDES permit.

1. If the operating entity applies for an individual NJPDES permit in response to such notice, comment regarding the appropriateness of the initial determination may be received during the public comment period under N.J.A.C. 7:14A-15.11 and in any subsequent hearing, unless the reason for that determination was a decision made by USEPA under 40 C.F.R. 122.26(a)(9)(i)(C) or (a)(9)(i)(D), or under 40 C.F.R. 123.35(b) or (c).

2. If the operating entity is a municipality that has applied for or received authorization under the Tier B Municipal Stormwater General Permit (see N.J.A.C. 7:14A-25.8), the applicable requirements of N.J.A.C. 7:14A-6.13 shall also be followed.

7:14A-25.3 Assignment of municipalities to Tier A or Tier B

(a) All municipalities are assigned either to Tier A or to Tier B as follows:

1. An entire municipality is assigned to Tier A if that municipality:

i. Is located entirely or partially within an urbanized area as determined by the 2000 Decennial Census by the Bureau of the Census or a subsequent and superseding Decennial Census, and has a population of at least 1,000 within an urbanized area as determined by that Census;

ii. Has a population density of at least 1,000 per square mile, and a population of at least 10,000 as determined by that Census;

iii. Has a stormwater sewer system discharging directly into the salt waters of Monmouth, Ocean, Atlantic, or Cape May counties (using the N.J.A.C. 7:22A-1.4 definitions of "stormwater sewer system" and "salt waters"). A municipality is deemed to have such a system if that municipality is one of the "Affected Municipalities" listed in N.J.A.C. 7:22A Appendix A, unless

it is determined in response to a petition under N.J.A.C. 7:22A-3.2(b) or 4.9(b) that N.J.A.C. 7:22A Appendix A erroneously includes or omits the municipality;

iv. Requests Tier A assignment from the Department; or

v. Operates a stormwater discharge(s) identified under N.J.A.C. 7:14A-25.2(a)4 (special designations), provided that the Department determines that such identification warrants assignment of the municipality to Tier A. In making this determination, the Department may consider the following with respect to the identified stormwater discharge(s) and to other stormwater discharge(s) from small MS4(s), if any, operated by the municipality: the location or size of the discharge from the small MS4(s), the quantity and nature of pollutants reaching the water of the State, the quality of the receiving waters, or other relevant factors.

2. Every municipality not assigned to Tier A is assigned to Tier B.

3. The Department shall publish in the New Jersey Register a notice of administrative change revising the list of Tier A and Tier B municipalities in the table below, and shall mail notice of such revision to the affected municipality(ies) and county(ies). Each notice under this paragraph shall identify the reason for the revision. The list in this table is for informational purposes only. Any person may obtain the most current list of such municipalities from the Department's Division of Water Quality, Bureau of Nonpoint Pollution Control at PO Box 029, Trenton, New Jersey 08625, or from the Division's website (http://www.state.nj.us/dep/dwq).

	Tier A Municipalities	Tier B Municipalities
Atlantic County	All municipalities not listed under Tier B	Estell Manor City Hammonton Town Mullica Township
Bergen County	All municipalities not listed under Tier B	Ridgefield Park Village Rockleigh Borough Teterboro Borough
Burlington County	All municipalities not listed under Tier B	Bass River Township Chesterfield Township Fieldsboro Borough New Hanover Township North Hanover Township Springfield Township Washington Township Woodland Township Wrightstown Borough
Camden County	All municipalities not listed	Pine Valley Borough

New Jersey Administrative Code.				
	under Tier B	Tavistock Borough		
Cape May County	All municipalities not listed under Tier B	Woodbine Borough		
Cumberland County	Bridgeton City Millville City Vineland City	All municipalities not listed under Tier A		
Essex County	All municipalities	None		
Gloucester County	All municipalities not listed under Tier B	Elk Township South Harrison Township Woolwich Township		
Hudson County	All municipalities not listed under Tier B	Hoboken City		
Hunterdon County	Clinton Town Clinton Township Flemington Borough High Bridge Borough Lebanon Borough Raritan Township Readington Township	All municipalities not listed under Tier A		
Mercer County	All municipalities not listed under Tier B	Hopewell Borough		
Middlesex County	All municipalities	None		
Monmouth County	All municipalities not listed under Tier B	Interlaken Borough Roosevelt Borough Upper Freehold Township		
Morris County	All municipalities not listed	Harding Township		

	under Tier B	
Ocean County	All municipalities not listed under Tier B	Plumsted Township
Passaic County	All municipalities	None
Salem County	Carneys Point Township Penns Grove Borough Pennsville Township Pittsgrove Township	All municipalities not listed under Tier A
Somerset County	All municipalities not listed under Tier B	Far Hills Borough Millstone Borough Rocky Hill Borough
Sussex County	Andover Township Byram Township Hopatcong Borough Newton Town Sparta Township Stanhope Borough	All municipalities not listed under Tier A

Union County	All municipalities	None
Warren County	Alpha Borough Greenwich Township Hackettstown Town Independence Township Lopatcong Township Mansfield Township Phillipsburg Town Pohatcong Township	All municipalities not listed under Tier A

7:14A-25.4 Deadlines to apply for NJPDES permits for small MS4s

(a) The deadline to apply for a NJPDES permit for all stormwater discharges identified under N.J.A.C. 7:14A-25.2(a) is March 3, 2004, except as provided in (a)1 through (a)3 below.

1. If notice from the Department is received that a municipality has been reassigned from Tier B to Tier A, or that a special designation has been made under N.J.A.C. 7:14A-25.2(a)4, the deadline is 180 days after receipt of that notice, unless the Department approves a later date.

2. The following is applicable to entities proposing new facilities or activities (for example, new small MS4s, or increasing the number of employees or students) that would result in any stormwater discharges identified under N.J.A.C. 7:14A-25.2(a):

i. General permits for such discharges shall specify deadlines for submitting requests for authorization under such permits.

ii. Entities submitting an individual permit application for such discharges shall submit an application at least 180 days before the date on which the activity is proposed to commence (unless the Department approves a later date), or by March 3, 2004, whichever is later.

3. Any entity planning to continue discharging from a small MS4 after the expiration date of its NJPDES permit for that discharge shall comply with N.J.A.C. 7:14A-4.2(e)3. General permits for stormwater discharges from small MS4s shall provide for automatic renewal of authorization when those general permits are renewed (see N.J.A.C. 7:14A-4.2(e)3 and 6.13(d)9).

(b) The deadline for Tier B municipalities to apply for the Tier B Municipal Stormwater General Permit is set forth in N.J.A.C. 7:14A-25.8(b).

7:14A-25.5 Applying for a NJPDES permit for a small MS4

(a) All operating entities that are required under N.J.A.C. 7:14A-25.2(a) to apply for a NJPDES permit for stormwater discharges from small MS4s shall submit a request for authorization (RFA) under a general NJPDES permit in accordance with (a)1 below, or an application for an individual NJPDES permit under N.J.A.C. 7:14A-25.9.

1. An operating entity seeking authorization under a general NJPDES permit shall submit to the Department a written RFA. The RFA shall include a certification acknowledging the best management practices and measurable goals specified in the general permit and required by N.J.A.C. 7:14A-25.6, and shall also include information specified in the general permit in accordance with N.J.A.C. 7:14A-6.13(d)2.

(b) All Tier B municipalities that are required under N.J.A.C. 7:14A-25.2(b) to apply for the Tier B Municipal Stormwater General Permit shall submit a request for authorization in accordance with N.J.A.C. 7:14A-25.8(d).

7:14A-25.6 Content of NJPDES permits for small MS4s

(a) The NJPDES small MS4 permit shall require at a minimum that the permittee develop, implement, and enforce a stormwater program designed to reduce the discharge of pollutants from the permittee's small MS4 to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Federal Act and the State Act. The stormwater program required under a general permit shall include the Statewide Basic Requirements (SBRs) that are listed under (b)1 and (b)3 through 8 below (and that may be set forth in more detail in the NJPDES permit). The stormwater program shall also include any additional measures (AMs) required under (e) below, and any other control or evaluation measures specified in the NJPDES permit. At the permittee's discretion, the stormwater program may also include optional measures (OMs) in accordance with (i) below. Except as provided in N.J.A.C. 7:14A-25.8(e)1 and (g), this section and N.J.A.C. 7:14A-25.7 do not apply to the Tier B Municipal Stormwater General Permit.

1. Best management practice (BMP) requirements are generally the most appropriate form of effluent limitations when designed to satisfy technology-based requirements (including reductions of pollutants to the maximum extent practicable) and to protect water quality. Implementation of BMPs (other than OMs) consistent with the provisions of the stormwater program required pursuant to this section and the provisions of the NJPDES permit required pursuant to N.J.A.C. 7:14A-25.2(a) constitutes compliance with the standard of reducing pollutants to the maximum extent practicable.

2. The NJPDES permit shall specify (for the permittee's first permit term) a time period of up to five years from the date of notification of general permit authorization (or the date of individual permit issuance) for the permittee to fully develop and implement its stormwater program for SBRs, and for any other measures specified in the NJPDES permit. For an AM required under (e) below, the areawide or Statewide water quality management plan will specify a time period for the permittee to fully develop and implement its stormwater program for that AM, and that

time period will be listed in the permit when the permit is issued or in a minor modification to the permit.

3. The permittee shall prepare and implement a written stormwater pollution prevention plan (SPPP) that describes the permittee's stormwater program, and identifies the person or persons responsible for implementing or coordinating that program (including, at the permittee's discretion, OMs). If the permittee wants to share responsibilities for implementing one or more control measures (other than OMs) with one or more other entities pursuant to N.J.A.C. 7:14A-25.7(a), the SPPP must describe which measure(s) the permittee will implement, and identify the entity(ies) that will implement the other measure(s) within the area served by the permittee's small MS4.

4. The Department shall include the requirements in N.J.A.C. 7:14A-25.4 through 25.7 in any NJPDES permit issued for small MS4s, or develop limits in an individual NJPDES permit based on a permit application submitted for a small MS4 under N.J.A.C. 7:14A-25.5 and 25.9.

5. The Department shall issue under N.J.A.C. 7:14A-6.13 one or more general NJPDES permits for stormwater discharges from small MS4s. The Department shall make guidance available to assist permittees in the design and implementation of stormwater programs.

(b) The Statewide Basic Requirements (SBRs) are as follows:

1. Public involvement/participation: The permittee shall, at a minimum, comply with applicable State and local public notice requirements when providing for public participation in the development and implementation of the permittee's stormwater program.

2. Construction site stormwater runoff control: This SBR applies to discharges to surface water only. Under N.J.A.C. 7:14A-25.7(b), any NJPDES permit issued for small MS4s shall recognize that the Department is responsible for developing, implementing, and enforcing a NJPDES permit program to reduce pollutants in stormwater runoff to small MS4s from construction activities that result in a land disturbance of one acre or more. Reduction of pollutants in stormwater discharges from construction activity disturbing less than one acre shall be included in the program if the construction activity is part of a larger common plan of development or sale that would disturb one acre or more. This program is part of the NJPDES permit program for stormwater discharges associated with construction activity addressed under N.J.A.C. 7:14A-24.10.

3. Post-construction stormwater management in new development and redevelopment:

i. To prevent or minimize water quality impacts, the permittee shall develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb one acre or more, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the permittee's small MS4. The permittee shall, in its program:

(1) Develop and implement strategies which include a combination of structural and/or nonstructural BMPs appropriate for the permittee's small MS4;

(2) Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State law (or Federal law, if the permittee is a Federal agency); and

(3) Ensure adequate long-term operation and maintenance of BMPs.

ii. The program under (b)3i above shall require compliance with the applicable design and performance standards established under N.J.A.C. 7:8 for major development as defined in N.J.A.C. 7:8-1, unless:

(1) Those standards do not apply because of a variance or exemption under N.J.A.C. 7:8; or

(2) Alternative standards are applicable under a water quality management plan adopted in accordance with N.J.A.C. 7:15.

iii. The program under (b)3i above shall also require compliance with standards set forth in the NJPDES permit to control passage of solid and floatable materials through storm drainage inlets. For purposes of this subsection, "solid and floatable materials" means sediment, debris, trash, and other floating, suspended, or settleable solids.

iv. If the permittee is a municipality, the municipality shall, in its program under (b)3i above:

(1) Ensure that any residential development and redevelopment projects that are subject to the Residential Site Improvement Standards for stormwater management (N.J.A.C. 5:21-7) comply with those standards (including any exception, waiver, or special area standard that was approved under N.J.A.C. 5:21-3);

(2) Adopt and reexamine a municipal stormwater management plan in accordance with N.J.A.C. 7:8; and

(3) Adopt and implement a municipal stormwater control ordinance or ordinances in accordance with N.J.A.C. 7:8. The ordinance(s) shall control stormwater from non-residential development and redevelopment projects. Where necessary to implement the municipal stormwater management plan, the ordinance(s) shall also:

(A) Control aspects of residential development and redevelopment projects that are not preempted by the Residential Site Improvement Standards; and

(B) Set forth special area standards approved by the Site Improvement Advisory Board for residential development or redevelopment projects under N.J.A.C. 5:21-3.5.

4. Public education on stormwater impacts: The permittee shall implement a public education program about the impacts of stormwater discharges on surface water and groundwater, and

about the steps that the public can take to reduce pollutants in stormwater runoff. As part of this education program, the permittee shall inform public employees, businesses, and the general public of hazards associated with illicit connections and improper disposal of waste.

5. Prohibiting improper disposal of waste:

i. The permittee shall develop a map, showing the location of the end of all MS4 outfall pipes (if any) that are operated by the permittee, and that discharge within the permittee's jurisdiction to a surface water body (for example, a lake or pond, the Atlantic Ocean or one of its estuaries, or a river or stream including an intermittent stream). This map shall also show the location (and name, where known to the permittee) of all surface water bodies receiving discharges from those outfall pipes. The permittee shall submit a copy of this map to the Department if requested.

ii. The permittee shall develop, implement and enforce a program to detect and eliminate illicit connections to the permittee's small MS4. The permittee shall, to the extent allowable under State law (or Federal law, if the permittee is a Federal agency), effectively prohibit, through ordinance or other regulatory mechanism, illicit connections to the permittee's small MS4, and implement appropriate enforcement procedures and actions.

iii. The permittee shall, to the extent allowable under State law (or Federal law, if the permittee is a Federal agency), effectively prohibit, through ordinance or other regulatory mechanism, other improper disposal of waste into the permittee's small MS4, and implement appropriate enforcement procedures and actions. "Improper disposal of waste" does not include any discharge that is regulated by a NJPDES permit other than the NJPDES permit for discharges from the permittee's small MS4.

iv. The permittee shall coordinate its programs under (b)5i, ii, and iii above with related components of the permittee's education program under (b)4 above.

6. Control of solid and floatable materials: The permittee shall develop and implement an operation and maintenance program that prevents or reduces the discharge of solid and floatable materials resulting from the permittee's small MS4. This program is applicable to areas owned or operated by the permittee (including roads).

7. Maintenance yards and highway service areas: The permittee shall develop and implement an operation and maintenance program that prevents or reduces pollutant runoff from maintenance yards and highway service areas owned or operated by the permittee.

8. Employee training: Using training materials that are available from USEPA, the Department or another State agency, or other organizations, the programs under (b)3, (b)5iii, (b)6 and (b)7 above shall include (where applicable) employee training to prevent and reduce stormwater-related pollution from activities such as park and open space maintenance, vehicle fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance.

(c) For each of the SBRs listed under (b)1 and (b)3 through 8 above, BMPs and measurable goals shall be specified or identified as follows:

1. Any general NJPDES permit for small MS4s shall specify:

i. The BMPs that the permittee or another entity (see (a)3 above) will implement for each of those SBRs; and

ii. The measurable goals for each of those BMPs including, as appropriate, an implementation schedule specifying the month and year in which the permittee or another entity will undertake each required action, including interim milestones and the frequency of the action.

2. Individual NJPDES permit applications under N.J.A.C. 7:14A-25.9(d) shall identify the information in (c)1i and ii above. The individual NJPDES permit as issued may specify BMPs and measurable goals that are the same as or different from the BMPs and measurable goals identified in the application.

(d) If, at the time the NJPDES permit is issued, modified, revoked and reissued, or renewed, a qualifying State or local program requires the permittee to implement one or more of the SBRs (or SBR components) listed under (b) above, or of the AMs (or AM components) required under (e) below, the Department may include conditions in the NJPDES permit that direct the permittee to follow that qualifying program's requirements rather than the corresponding requirements under (b) above or (e) below. For purposes of this subsection, a qualifying State or local program is a State or local municipal stormwater program that imposes, at a minimum, the relevant requirements under (b) above or (e) below. This subsection does not apply to the requirements in (b)2 above (construction site stormwater runoff control), or to the requirements in (b)3 above for compliance with the Stormwater Management Rules, N.J.A.C. 7:8, and the Residential Site Improvement Standards (N.J.A.C. 5:21).

(e) The permittee's stormwater program shall include any additional measures (AMs) required under this subsection. AMs are non-numeric or numeric effluent limitations that are expressly required to be included in the stormwater program by an areawide or Statewide water quality management plan (WQM plan) adopted in accordance with N.J.A.C. 7:15. AMs may modify, or be in addition to, SBRs listed under (b) above.

1. AMs may be adopted in an areawide or Statewide WQM plan before or after the Department issues the NJPDES permit. The Department shall provide written notice of the adoption of the AM to each permittee whose stormwater program must include that AM, and shall list each adopted AM in the permit when the permit is issued or in a minor modification to the permit. For AMs other than numeric effluent limitations, the areawide or Statewide WQM plan shall specify the BMPs that the permittee or another entity (see (a)3 above and N.J.A.C. 7:14A-25.8(e)) will implement, and the measurable goals for each of those BMPs. AMs may be required by:

i. A TMDL approved or established by USEPA, or an equivalent analysis that determines such AMs are needed to protect water quality;

ii. A regional stormwater management plan adopted under N.J.A.C. 7:8; or

iii. Other elements of areawide or Statewide WQM plans adopted in accordance with N.J.A.C. 7:15.

(f) Whenever a NJPDES permit specifies measures other than SBRs, AMs, or numeric effluent limitations, the NJPDES permit shall specify the BMPs that the permittee or another entity (see (a)3 above) shall implement, and the measurable goals for each of those BMPs.

(g) Permittees shall meet measurable goals specified under (c), (e) or (f) above in order to demonstrate compliance with SBRs, AMs, or other measures, respectively. The Department shall make guidance available for those measures prior to March 3, 2004 (for SBRs), when AMs are adopted in WQM plans, or when the Department issues the NJPDES permit (for other measures).

(h) The permittee shall comply with other applicable NJPDES permit requirements, standards and conditions established in the individual or general NJPDES permit.

(i) At the permittee's discretion, and to the extent allowable under law, the stormwater program may also include optional measures (OMs), which are BMPs that are not implemented for SBRs or AMs (or for other measures specified in the NJPDES permit), but that prevent or reduce the pollution of waters of the State. The SPPP shall specifically identify such BMPs (if any) as OMs, and identify actions to implement those OMs. Failure to implement an OM identified in the SPPP shall not be considered a violation of the NJPDES permit or this section.

(j) Requirements for evaluation, recordkeeping, and reporting are as follows:

1. The permittee shall evaluate compliance with NJPDES permit conditions, including progress towards achieving the measurable goals identified for BMPs under (c), (e), or (f) above.

2. The permittee shall keep records required by the NJPDES permit for at least five years from the date of the record. The Department may, at any time, extend this period through a written notice in accordance with N.J.A.C. 7:14A-6.6(a). The permittee shall submit these records to the Department if requested. The permittee shall make these records, including its SPPP, available to the public at reasonable times during regular business hours (see N.J.A.C. 7:14A-18 for confidentiality provisions).

3. The permittee shall submit an annual report to the Department unless the permittee is relying on another entity to satisfy all of its NJPDES permit obligations under N.J.A.C. 7:14A-25.7(a) (including its obligation to file the annual report required by this paragraph). The report, which shall be submitted on a form provided by the Department, shall include:

i. The status of compliance with NJPDES permit conditions, including progress towards achieving the measurable goals;

ii. For those SBRs or AMs (if any) that give the permittee a choice of BMPs, identification of the BMP(s) chosen by the permittee (including any change in any BMP identified in the previous annual report), and a summary of the actions that the permittee intends to undertake during the next 12 months to implement the chosen BMPs;

iii. A summary of the actions undertaken to implement OMs, if any; and

iv. Notice that the permittee is relying on another entity to satisfy some of its NJPDES permit obligations (if applicable).

7:14A-25.7 Sharing of responsibility to implement control measures for a small MS4

(a) A permittee may rely on another governmental, private, or nonprofit entity (for example, a watershed association) to satisfy the permittee's NJPDES permit obligations to implement one or more control measures (or component(s) thereof) for that permittee's small MS4 if:

1. The other entity, in fact, implements the measure(s), or component(s) thereof;

2. The particular measure(s), or component(s) thereof, is at least as stringent as the corresponding NJPDES permit requirement; and

3. The other entity agrees in writing (or is required by law) to implement the measure(s), or component(s) thereof, on the permittee's behalf. The permittee is responsible for compliance with the permittee's NJPDES permit obligations if the other entity fails to implement the measure(s), or component(s) thereof. In the annual reports the permittee must submit under N.J.A.C. 7:14A-25.6(j)3, the permittee shall specify that it is relying on another entity to satisfy some of the permittee's NJPDES permit obligations. If the permittee is relying on another entity regulated under the NJPDES permit program to satisfy all of that permittee's NJPDES permit obligation to file annual reports required by N.J.A.C. 7:14A-25.6(j)3, the permittee's obligation to file annual reports required by N.J.A.C. 7:14A-25.6(j)3, the permittee's obligation to file annual reports required by N.J.A.C. 7:14A-25.6(j)3, the permittee shall notify the Department of this reliance in writing, and shall also note this reliance in the permittee's SPPP.

(b) In some cases, the Department may recognize, either in an individual NJPDES permit or in a general NJPDES permit, that a governmental entity other than the permittee in question is responsible under a NJPDES permit for implementing one or more of the control measures, or component(s) thereof, for that permittee's small MS4, or that the Department itself is responsible. Where the NJPDES permit provides such recognition, the permittee in question is not required to include such measure(s), or component(s) thereof, in that permittee's stormwater program. The permittee is not responsible for such measure(s), or component(s) thereof, but is responsible for all other measure(s), or component(s) thereof, in the stormwater program. Under N.J.A.C. 7:14A-16.4(b)21, the NJPDES permit may be reopened and modified to include the requirement to implement a measure(s), or component(s) thereof, if the other governmental entity or the Department does not implement it. At a minimum, any NJPDES permit issued for small MS4s shall recognize that under N.J.A.C. 7:14A-25.6(b)2, the Department is responsible for implementing the SBR for construction site stormwater runoff control.

7:14A-25.8 Tier B Municipal Stormwater General Permit

(a) Each municipality that is assigned to Tier B under N.J.A.C. 7:14A-25.3(a)2, and that operates a small MS4 that discharges to surface water or groundwater, shall apply for the Department's Tier B Municipal Stormwater General Permit (Tier B Permit). The Department shall make this general NJPDES permit available to Tier B municipalities throughout the State. This general permit is not in any respect a permit under section 402 of the Federal Act (33 U.S.C. §1342).

(b) The deadline for Tier B municipalities to apply for authorization under this general permit is March 3, 2004 except as provided in (b)1 and 2 below.

1. If a municipality receives notice from the Department that the municipality has been reassigned from Tier A to Tier B, the deadline is 90 days after receipt of that notice.

2. If the municipality does not operate a small MS4 on March 3, 2004, but is proposing to operate a new small MS4 after that date, the deadline is 90 days before the date on which operation is proposed to commence, or March 3, 2004, whichever is later.

(c) The Tier B Permit shall provide for automatic renewal of authorization when the Department renews the general permit (see N.J.A.C. 7:14A-4.2(e)3 and 6.13(d)9).

(d) To apply, the municipality shall submit to the Department a written request for authorization (RFA). The RFA shall include a certification acknowledging the best management practices (BMPs) and measurable goals specified in this general permit and required by (f) or (g) below, and shall also include information specified in the general permit in accordance with N.J.A.C. 7:14A-6.13(d)2. After receiving the RFA, the Department shall notify the municipality in writing that the municipality is authorized to discharge under this general permit, or that the municipality is not authorized to discharge under this general permit because the municipality is assigned to Tier A under N.J.A.C. 7:14A-25.3(a)1. The Department shall publish a list of municipalities that are authorized to discharge under this general permit on the Division's website (http://www.state.nj.us/dep/dwq).

(e) Each municipality that is authorized to discharge under the Tier B Permit shall develop, implement, and enforce a stormwater program that includes the Statewide Basic Requirements (SBRs) listed in (e)1 and 2 below (and that may be set forth in more detail in the general permit). The stormwater program shall also include any additional measures (AMs) required under (g) below. The municipality may share responsibilities for implementing any of these SBRs or AMs with one or more other entities. Nothing in this section shall be construed as preventing the municipality from also implementing other stormwater control measures as allowed by statute. Such control measures are not governed by the Tier B stormwater program. The SBRs are as follows:

1. Post-construction stormwater management in new development and redevelopment: To prevent or minimize water quality impacts, the municipality shall develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects. This program shall meet the requirements listed in N.J.A.C. 7:14A-25.6(b)3.

2. Public education on stormwater impacts: The municipality shall implement a local public education program about the impacts of stormwater discharges on surface water and groundwater, and about the steps that the public can take to reduce pollutants in stormwater runoff.

(f) The Tier B Permit shall specify:

1. The BMPs that the Tier B municipality or another entity will implement for each of the SBRs listed under (e) above; and

2. The measurable goals for each of those BMPs including, as appropriate, an implementation schedule specifying the month and year in which the municipality or another entity will undertake each required action, including interim milestones and the frequency of the action.

(g) The Tier B municipality's stormwater program shall include any additional measures (AMs) required under this subsection. AMs are non-numeric or numeric effluent limitations that are expressly required to be included in the stormwater program by an areawide or Statewide water quality management plan (WQM plan) adopted in accordance with N.J.A.C. 7:15. AMs may modify, or be in addition to, SBRs listed under (e)1 and 2 above. AMs required under this subsection are subject to N.J.A.C. 7:14A-25.6(e)1.

(h) Tier B municipalities shall meet measurable goals specified under (f) or (g) above. The Department shall make guidance available to assist municipalities in the design and implementation of Tier B stormwater programs.

(i) Requirements for recordkeeping and reporting are as follows:

1. The Tier B municipality shall keep records required by this general permit for at least five years from the date of the record. The municipality shall submit these records to the Department if requested.

2. The Tier B municipality shall submit an annual report to the Department. The report, which shall be submitted on a form provided by the Department, shall evaluate progress towards achieving the measurable goals specified for BMPs under (f) or (g) above.

7:14A-25.9 Individual NJPDES permit applications for small MS4s

(a) An operating entity that is subject to N.J.A.C. 7:14A-25.5(a) shall apply for an individual NJPDES permit under (c) or (d) below for stormwater discharges from small MS4s if:

1. An application is required pursuant to N.J.A.C. 7:14A-2.4(c) or 6.13(e), in which case the Department shall specify whether (c) and/or (d) below is applicable; or

2. A general NJPDES permit applicable to the entity's small MS4 stormwater discharge is not available.

(b) An operating entity that is not required under (a) above to apply for an individual NJPDES permit may on its own initiative apply for an individual NJPDES permit under (c) below for stormwater discharges from small MS4s.

(c) The following is applicable to an operating entity that seeks authorization to discharge under an individual NJPDES permit, and seeks to implement under the permit a stormwater program that is different from the stormwater program under N.J.A.C. 7:14A-25.6.

1. If the permit is for discharge to surface water, the operating entity shall submit to the Department a permit application that includes the information required by N.J.A.C. 7:14A-25.10(a). The entity does not need to submit the information required by 40 C.F.R. 122.26(d)(1)(ii) and (d)(2)(i) regarding the entity's legal authority, unless the entity intends for the Department to take such information into account when developing the entity's permit conditions.

2. If the permit is for discharge to groundwater, the operating entity shall submit to the Department a permit application that includes:

i. The information required by N.J.A.C. 7:14A-4.3 (except 4.3(a)11 and 15 through 24) and 7.9. In accordance with N.J.A.C. 7:14A-7.9(a)1, the entity shall submit the information required pursuant to N.J.A.C. 7:14A-7.9(d), except when, after consultation with the Department during a pre-application conference, it is determined that the information is not necessary to develop permit conditions for the small MS4;

ii. An 8.5 inch x 11 inch copy of a portion of a U.S. Geological Survey Topographic Map(s), 7.5 minute Quadrangle Series extending one mile beyond the area served by the small MS4 that is the subject of the permit application. The boundaries of that area shall be marked on the copy; and

iii. Any information required by the Department under N.J.A.C. 7:14A-8.17 (if an individual UIC permit is sought).

(d) An operating entity that seeks to implement a stormwater program under N.J.A.C. 7:14A-25.6 may seek authorization to discharge under an individual NJPDES permit only if the Department requires that entity to submit an application under (a)1 above and this subsection, or if an application is required under (a)2 above. The operating entity shall submit to the Department an application that includes:

1. The information required under N.J.A.C. 7:14A-4.3(a)1, 2, 3, 6 and 9, and 25.6(c);

2. An estimate of the area, in square miles, served by the entity's small MS4;

3. A map, showing the location of the end of MS4 outfall pipes, that satisfies the requirement for such a map in N.J.A.C. 7:14A-25.6(b)5i (if the entity operates any MS4 outfall pipes);

4. Any information required under N.J.A.C. 7:14A-8.17 (if an individual UIC permit is sought); and

5. Other information required under N.J.A.C. 7:14A-4.3(e).

(e) If a small MS4 is in the same urbanized area as a medium or large MS4 with a NJPDES stormwater permit, and if the operating entity for the medium or large MS4 is willing to have the operating entity for that small MS4 participate in its stormwater program, both operating entities may jointly seek a modification of the medium or large MS4 permit to include the operating entity for the small MS4 as a limited co-permittee. As a limited co-permittee, the operating entity for the small MS4 will be responsible for compliance with the NJPDES permit conditions applicable to that entity's jurisdiction. If an operating entity for a small MS4 chooses this option for discharge to surface water, the entity does not need to comply with 40 C.F.R. 122.26(d)(1)(iii) and (iv) and (d)(2)(iii) (discharge characterization). The entity may satisfy the requirements in 40 C.F.R. 122.26(d)(1)(v) and (d)(2)(iv) (identification of a management program) by referring to the medium or large MS4's stormwater program.

7:14A-25.10 Requirements for large and medium municipal separate storm sewer discharges

(a) Application requirements for operating entities for discharges to surface water from large and medium municipal separate storm sewers are contained in 40 C.F.R. 122.26(d), which is incorporated into this chapter by reference. Also incorporated into this chapter by reference, for purposes of this subsection only, are the definitions at 40 C.F.R. 122.26(b)(5) and (6) of "major municipal separate storm sewer outfall" and "major outfall." References to a "NPDES permit" or "permit" in 40 C.F.R. 122.26(d) shall be understood to mean a NJPDES permit under this chapter, unless the context clearly indicates otherwise. References to an "illicit discharge" in 40 C.F.R. 122.26(d) shall be understood to mean an "illicit connection" as defined at N.J.A.C. 7:14A-1.2. Any operating entity for a discharge under this subsection is exempt from the requirements of N.J.A.C. 7:14A-4.3(a)11 and 15 through 24, (c) through (e) and 4.4(a) and (b)3 through 7.

(b) The operating entity for a large or medium municipal separate storm sewer system that discharges to surface water shall submit an annual report by the anniversary of the date of the issuance of the NJPDES permit for such system. The report shall include the information required under 40 C.F.R. 122.42(c), which is incorporated into this chapter by reference.