

ATTACHMENT I
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PERMITTING PROGRAM
REGISTRATION CONDITIONS
FOR USED OIL SPACE HEATERS

These Registration Conditions cover one or more Used Oil Space Heaters used at a facility with a combined gross heat input less than or equal to 0.5 million British Thermal Units per hour (500,000 BTU/hr). The terms used in these Registration Conditions shall have the meanings given to them in N.J.A.C. 7:27 et seq. (Please refer to these regulations if you have any confusion regarding the meaning of any of the primary terms used in these conditions.) The Used Oil Space Heaters shall meet the following criteria:

1. The used oil space heater(s) shall combust only used oil from conveyances that are powered by an internal combustion engine, consisting of any combination of the following substances: used crankcase oil, used transmission fluid, used power steering fluid, and used brake fluid. Number 1 and Number 2 commercial fuel oils may also be burned. Other substances may not be added to the used oil storage tank including, but not limited to: antifreeze, carburetor cleaner, paint thinner, paint, part degreaser solvents, gasoline, oil additives, chlorinated solvents, battery acid, and substances defined as hazardous wastes pursuant N.J.A.C. 7:26G. (It is recommended that the Registrant post written instructions in areas where used oil is handled and by the used oil storage tank as to what types of used oil can be put in the tank. Further, it is advisable to train employees who handle the used oil as to what to look for in the used oil brought to the facility by household do-it-yourselfer used oil generators.)
2. The used oil space heater(s) shall be operated for energy recovery only (for example, space heating or hot water heating).
3. The used oil space heater(s) shall only combust used oils generated on-site, or from household do-it-yourselfer used oil generators, or from do-it-yourselfer used oil collection centers.
4. These Registration conditions shall only cover used oil space heater(s) at any one facility if the total gross heat input of all space heaters does not exceed 500,000 BTU/hr. The reason for this is that the cumulative health risks from additional used oil combustion would have to be evaluated on a case-by-case basis by the Department.
5. The used oil fired space heater(s) shall be tested by a nationally recognized laboratory in accordance with Underwriters Laboratories, Incorporated Standard for Safety UL 296A "Waste Oil-Burning Air-Heating Appliances" or Canadian Standards Association-CSA Standard B140.4-1974 (R1991)-Oil-Fired Warm Air Furnaces and FBL Notice Number 72- Requirements for Appliances Burning Used Oil in an Atomizing Burner and listed. This listing shall be documented by the manufacturer of the used oil space heater(s) and provided to the Registrant.
6. The discharge point of the stack serving the used oil space heater(s) shall be higher than the peak of the roof of the building in which the space heater is located and that discharge point shall be at least 20 feet above grade.
7. All records which must be maintained shall be kept on-site in a central file and made available for inspection by the Department for a period of five years after the date of each record. The corrective actions taken for Conditions 8 and 10 below and the carbon monoxide and oxygen measurements taken for Conditions 10 below shall be part of the records maintained.
8. The Registrant shall not use the equipment in a manner which will cause visible emissions, exclusive of visible condensed water vapor, except for a period no more than 3 minutes in any consecutive 30 minute period. (NOTE: Water vapor may be visible on cold or humid days. Visible water vapor is not a violation.)

If visible emissions are observed, refer to operator manual for corrective measures and record corrective action. The used oil space heater(s) shall not be operated, except for adjustment purposes, until the Registrant corrects any mechanical problems and readjusts the air-to-fuel ratio, if necessary, and the space heater meets the no visible emission standard.

9. Any operation of the equipment which may cause a release of air contaminants which may result in citizen complaints shall be reported by the Registrant as required by the Air Pollution Control Act. The Registrant shall immediately notify the Department of any non-compliance, including visible emissions, by calling the Department Regional Enforcement Office or the Environmental Action Hotline at (877)-WARNDEP.
10. The Registrant shall adjust the combustion process of the used oil space heater(s) within 24 operating hours after startup and annually thereafter. The adjustment shall consist of the following:
 - A. Adjusting the air-to-fuel ratio to the manufacturer's recommended standards and ensuring that it is correctly calibrated and functioning properly;
 - B. Inspecting the used oil space heater(s) and cleaning or replacing any components of the space heater as necessary to minimize total emissions of carbon monoxide (CO);
 - C. Taking an exhaust stream sample and analyzing it for CO and oxygen. This sampling and analysis may be done with a portable monitor. The results of the sampling and analysis shall ensure that CO emissions after adjustment pursuant to 10.A. and 10.B., above, are no more than 100 parts per million by volume, dry basis, hourly average, corrected to seven percent oxygen. Testing for less than one hour is permitted if the CO reading is no more than 100 parts per million by volume, dry basis, corrected to seven percent oxygen for five consecutive minutes of operation;
 - (1) Record the manufacturer and model number of the portable monitor used for the CO and oxygen measurements. The CO testing equipment shall be capable of measuring and recording the in-stack concentrations of CO, over a range of 0 to 500 parts per million by volume, with an accuracy of plus/minus five percent of the reading when measuring 100 parts per million by volume.
 - (2) If an exhaust stream sample exceeds the CO standard of 100 ppmvd, one hour average, corrected to seven percent oxygen, the used oil space heater(s) shall not be operated, except for adjustment purposes, until the Registrant corrects any mechanical problems, readjusts the space heater, and the space heater has been demonstrated to meet the carbon monoxide standard of no more than 100 ppmvd, one hour average, corrected to seven percent oxygen;
 - D. Ensuring the exhaust emissions at the stack do not contain visible particulate emissions; and
 - E. Recording all adjustments made to the space heater, all parts replaced or cleaned, all carbon monoxide and oxygen readings, the determination of the presence of visible emissions, and the dates of each adjustment, as outlined in 10.A., 10.B., 10.C., and 10.D., respectively.
11. If the sample taken in 10.C. above, exceeds the CO standard of 100 parts per million by volume, dry basis, corrected to seven percent oxygen, one hour average, no violation of this Registration shall occur if the space heater continues to be operated only as is outlined in 10.C.(2), above.

12. The Registrant shall maintain oil filtering equipment in accordance with manufacturer's specifications. The Registrant shall not operate the used oil space heater without the oil filter installed and operating properly.
13. The used oil in the storage tank for the used oil space heater(s) shall not exceed the limits specified in N.J.A.C. 7:26A-6.2(a). The Department may obtain an oil sample to verify that the used oil is within these limits.
14. The used oil space heater(s) shall be constructed, installed, and operated in conformance with all applicable requirements in this subchapter and all other provisions of the New Jersey Administrative Code.