

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - NSPS SOURCE

REVISED

PERMITTEE

United Parcel Service  
Attn: Toshi Joji  
2600 Warrenville Road  
Downers Grove, Illinois 60515

Application No.: 94090118                      I.D. No.: 201808ADN  
Applicant's Designation: IL532-0260        Date Received: November 6, 2000  
Subject: Diesel Standby Generators and Storage Tanks  
Date Issued: December 18, 2000            Expiration Date: May 3, 2005  
Location: 3300 Airport Road, Rockford

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of three diesel fired emergency generators, three Jet A storage tanks, three glycol storage tanks, and 30 natural gas heaters pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than the major source thresholds (i.e., 100 tons/year for nitrogen oxide). As a result the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit(s) for this location.
- 2a. The five above ground storage tanks are subject to a New Source Performance Standard (NSPS) for volatile organic liquid storage vessels, 40 CFR 60 Subpart Kb. The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.
- b. At all times, the Permittee shall also, to the extent practicable, maintain and operate these five tanks, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.
- c. The Permittee shall fulfill applicable monitoring of operations requirements of the NSPS 40 CFR 60.116(b).

- 3a. Emissions of nitrogen oxide from all three generators shall not exceed 15.43 tons/year. This limit is based on manufacturers guaranteed data for nitrogen oxide emissions (61.7 lb/hr) and operating hours (500 hrs/year).
- b. Diesel fuel (Number 2 fuel oil) shall be the only fuel fired in the three generators.

- c. The sulfur content of the fuel shall not exceed 0.30 percent by weight.
  - d. The Illinois EPA shall be allowed to sample all fuels stored at the above location.
  - e. The Permittee shall not operate the generators for more than 500 hours per year, total.
  - f. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the proceeding 11 months.
- 4a. Emissions of nitrogen oxide from all 30 heaters shall not exceed 15.3 tons/year. This limit is based on maximum natural gas usage ( $306 \times 10^6$  scf/year) and standard emission factors for natural gas.
- b. Natural gas shall be the only fuel fired in the 30 heaters.
  - c. Total annual fuel usage for the 30 heaters shall not exceed  $306 \times 10^6$  scf/year.
  - d. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the proceeding 11 months.
5. The Permittee shall install, maintain, calibrate and operate a continuous monitoring system to monitor and record fuel consumption by the generators.
- 6a. i. The Permittee shall maintain a permanent record of the output of the continuous monitoring system required pursuant to Condition 5.
- ii. The Permittee shall maintain a record of maintenance, calibration and operational activity associated with continuous monitoring equipment.
- b. The Permittee shall maintain monthly records of the following items:
- i. Operating hours of the generators monthly and yearly.
  - ii. Natural gas usage ( $10^6$  scf/month and  $10^6$  scf/year).
  - iii.  $\text{NO}_x$  emission as calculated by AP-42 for heaters and by manufacturers guaranteed emission rates for three generators.
- c. These records shall be retained at a readily accessible location at the source for at least three years and shall be available for inspection and copying by the Illinois EPA and USEPA.
7. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying

by the Illinois EPA and USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.

8. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
- 9a. The Permittee shall only store fuel with a vapor pressure less than 0.5 psia at 70°F in the three larger above ground storage tanks (greater than 40,000 gallon capacity). The Permittee shall only store fuel with a vapor pressure less than 2.1 psia at 70°F in the two smaller above ground storage tanks (less than 40,000 gallon capacity).
- b. Combined annual throughput of the three larger above ground storage tanks shall not exceed 14.6 million barrels. Combined annual throughput of the two smaller above ground storage tanks shall not exceed 0.35 million barrels.
- c. Combined emissions of volatile organic material from five above ground storage tanks shall not exceed 4.53 ton/year.
- d. Compliance with annual limits shall be determined from a running total of 12 months of data.
- 10a. The Permittee shall maintain records of the following items, and such other items as may be appropriate to allow the Illinois EPA to review compliance with the limits in Condition 9.
  - i. The types of material stored and corresponding vapor pressures for each tank.
  - ii. Throughput of each type of material stored in each tank (barrels/month and barrels/year).
- b. These records shall be retained for three years and shall be available for inspection and copying by the Illinois EPA.
11. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year: operating hours of generators from the prior calendar year. If there have been no exceedances during the prior calendar year the Annual Emissions Report shall include a statement of that effect.
12. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

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and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
5415 North University  
Peoria, Illinois 61614

It should be noted that this permit has been revised to correct the description.

If you have any questions on this permit, please call Don Hanko at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

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cc: IEPA, FOS Region 2  
IEPA, Compliance Section  
USEPA

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from diesel standby generator operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. These generators are operating 500 hours/year. The resulting maximum emissions are well below the levels, e.g., 100 tons per year of NO<sub>x</sub> at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, e.g., these generators are standby units and control measures are more effective than required in this permit.

1. Emission of nitrogen oxide (NO<sub>x</sub>), carbon monoxide (CO), volatile organic material (VOM), sulfur dioxide (SO<sub>2</sub>), and particulate matter (PM) from the generators:

<u>Pollutant</u>	E M I S S I O N S	
	<u>Each Engine (Lb/Hr)</u>	<u>Total (T/Yr)</u>
NO <sub>x</sub>	61.7	15.42
CO	5.49	1.37
VOM	0.8	0.20
SO <sub>2</sub>	2.89	0.72
PM	0.37	0.10

This table defines the potential emission of the three generators and are based on the emission rates guaranteed by the generator manufacturer and combined operating hours (500 hr/year) as provided in the permit application. Compliance with annual limits shall be determined on a monthly basis from the sum of the data from the current month plus the preceding 11 months.

2. Combined emission of nitrogen oxide (NO<sub>x</sub>), carbon monoxide (CO), volatile organic material (VOM), sulfur dioxide (SO<sub>2</sub>), and particulate matter (PM) from the 30 heaters:

<u>Pollutant</u>	<u>Fuel Usage (10<sup>6</sup> scf/Yr)</u>	<u>Emission Factor (Lb/10<sup>6</sup> scf)</u>	<u>Emissions (Ton/Yr)</u>
NO <sub>x</sub>	306	100	15.3
CO	306	20	3.1
VOM	306	5.3	1.2
SO <sub>2</sub>	306	0.6	0.1
PM	306	3.0	0.5

This table defines the potential emissions of the 11 heaters and are based on the combined fuel fired, operation (5,140 hr/yr) and standard emission factors at the maximum annual fuel usage. Compliance with annual limit shall be determined on a monthly basis from the sum of the current month plus the preceding 11 months.

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