

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

State Farm Mutual Automobile Insurance Company
Attn: Paul Lee
2102 East Hamilton Road
Bloomington, Illinois 61791

Application No.: 04090053

I.D. No.: 113020AEP

Applicant's Designation:

Date Received: September 17, 2004

Subject: Emergency Generators

Date Issued:

Location: 2102 East Hamilton Road, Bloomington

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of five diesel fired emergency generators as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1.0 Description

The source uses diesel-fired emergency generators to supply electricity to the plant for emergency purposes when the facility experiences a loss of electrical service from the public utility company.

In this project, State Farm is installing a set of five more diesel generators.

1.1 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
01	Five Caterpillar Diesel-Fired Generators (Diesel Generators) Nominal Rating 2250 KW (7.7 million Btu/hour)	None

1.2 Applicable Regulations

- a. The affected diesel generators are subject to 35 IAC 214.304, which provides that no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2,000 ppm, [35 IAC 214.301].
- b. The emission of smoke or other particulate matter from each diesel generator shall not have an opacity greater than 30 percent, except as allowed by 35 IAC 212.123(b) and 212.124. Compliance with this limit shall be determined by 6-minute averages of opacity readings in accordance with USEPA Reference Method 9. [35 IAC 212.109 and 212.123(a)].

1.3 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the installation of five diesel generators not being associated with a major modification of the source pursuant to the Federal Prevention of Significant Deterioration (PSD) rules, 40 CFR 52.21 because total combined emissions of NO_x from five emergency generators have been limited to below major modification threshold levels (i.e., 40 tons per year for NO_x).
- b. The diesel generators are not subject to 35 IAC 216.121, emissions of carbon monoxide from fuel combustion emission units, because the affected diesel generators are not by definition a fuel combustion emission unit.
- c. This permit is issued based on the diesel generators not being subject to 35 IAC 212.321 because due to the nature of this process, such rules cannot reasonably be applied.

1.4 Operational and Production Limits and Work Practices

- a. The diesel generators shall only be operated with distillate fuel oil as the fuel.
- b. Distillate fuel oil usage in the five diesel generators combined shall not exceed 45,000 gallons/month and 274,550 gallons/year.
- c. Sulfur content of fuel being fired in the diesel generators shall not exceed 0.5% weight.

1.5 Emission Limitations

- a. Emissions from the diesel generators combined shall not exceed the following limits:

<u>Emission Unit</u>	<u>Annual Emissions (Tons/Year)</u>		
	<u>SO₂</u>	<u>NO_x</u>	<u>CO</u>
Diesel Generators	12.8	39.1	3.8

These limits are based on emission rates calculated using manufacturer's emission data and firing 274,550 gallons of fuel oil.

1.6 Recordkeeping Requirements

- a. The Permittee shall maintain records of the following items for the diesel generators:
 - i. Distillate fuel oil usage for the diesel generators, gallons/month and gallons/year;

- ii. The sulfur content of the distillate fuel oil used in the diesel generators (% by weight), which shall be recorded for each shipment of oil delivered to the source;
 - iii. Applicable emission factors for the engines, with supporting documentation;
 - iv. Monthly and annual aggregate CO, NO_x, and SO₂, emissions from the diesel generators shall be maintained, based on fuel consumption and the applicable emission factors, with supporting calculations; and
- b. All records shall be maintained for three years and made available to the Illinois EPA for inspection or copying upon request.

1.7 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the diesel generators with the permit requirements as follows. Reports shall described the probable cause of such deviations, and any corrective actions or preventive measures taken:
- i. The use of distillate fuel oil with a sulfur content in excess of the limit specified in Condition 1.4(c) with the length of time this fuel was used and the effect on emissions of SO₂ within 15 days of this violation being detected.
 - ii. Other deviations within 30 days of such an occurrence.

2.0 The Permittee may operate these diesel generators pursuant to this construction permit until the CAAPP permit is revised to address these units.

If you have any questions on this, please call Minesh Patel at 217/782-2113.

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

DES:MVP:psj

cc: Region 3