

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT
RENEWAL

PERMITTEE

Dixon Correctional Center
Attn: James E. Harms
2600 North Briton
Dixon, Illinois 61021

Application No.: 73040535 I.D. No.: 103020AAD
Applicant's Designation: DIXON CC Date Received: August 3, 2000
Subject: Boilers
Date Issued: November 16, 2000 Expiration Date: November 16, 2005
Location: 2600 North Briton, Dixon

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of three natural gas-fired boilers with #2 fuel oil backup (3 - 82.5 mmBtu/hr), seven (7) storage tanks (2 - 30,000, 2 - 500. 1 - 550, 1 - 1,000 gallon storing #2 fuel oil and 1 - 4,000 gallon storing gasoline) as described in 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 nitrogen oxides (NO_x), and sulfur dioxide (SO₂) from this facility to less than 100 and 100 tons/year respectively, as further described in Attachment A. As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program permit.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes the current permit(s) issued for this location.
- 2a. Operation of the three boilers shall not exceed the following limits:

Total Combined Natural Gas Usage: 65 mmft³/month not to exceed 246 mmft³/year.

Total Combined #2 Fuel Oil Usage: 14,100 gal/month not to exceed 14,100 gal/year.
- b.
 - i. At the above location, the Permittee shall not keep, store, or utilize a fuel with a sulfur content greater than 0.3 weight percent for distillate fuel oil.
 - ii. The Illinois EPA shall be allowed to sample all fuels stored at the source.

- c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.

- d. Compliance with annual limits immediately following the issuance date of this permit shall be determined using available data from the previous months.
- 3a. Within 30 days of a written request from the Illinois EPA the Permittee shall submit data on the sulfur content by weight of representative #2 fuel oil, determined by laboratory analysis.
 - b. The submitted information shall include the sulfur content by weight of the #2 fuel oil, a justification of why this is representative, and a description of the sampling procedures and documentation for the analysis.
 - c. The Illinois EPA may provide additional time for the performance of this testing upon request from the Permittee which shows that it is not feasible to perform representative testing within 30 days.
4. The Permittee shall maintain records of the following items:
 - a. Natural gas usage for the three boilers (ft³/month and ft³/year).
 - b. #2 Fuel oil usage for the three boilers (gal/month and gal/year).
 - c. Sulfur content of #2 fuel oil.
5. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
6. 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 or 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 or USEPA request for records during the course of a source inspection.
7. 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.

8. 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

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

9. This permit is issued based on negligible emission of volatile organic material from the seven storage tanks. For this purpose emission from the storage tanks, shall not exceed nominal emission rates of 0.1 lb/hr and 0.44 ton/yr.
10. The Permittee shall submit the following additional information from the prior calendar year with the Annual Emission Report, due May 1st each year:
 - a. Natural gas usage;
 - b. #2 fuel oil usage.

If you have any questions on this, 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
CASM

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from gas-fired boilers 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. The resulting maximum emissions are well below the levels, e.g., 100 tons per year of NO_x and SO₂, 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 and control measures are more effective than required in this permit.

- 1a. Emissions from the three boilers when firing natural gas shall not exceed the following limits:

<u>Pollutant</u>	<u>Fuel Usage (mmft³/Yr)</u>	<u>Emission Factor (Lb/mmft³)</u>	<u>Emissions (Ton/Yr)</u>
NO _x	246	100	12.3
CO	246	84	10.3
VOM	246	5.5	0.7
SO ₂	246	0.6	0.07
PM	246	7.6	0.93

- b. Emissions from the three boilers when firing #2 fuel oil shall not exceed the following limits:

<u>Pollutant</u>	<u>Fuel Usage (Gal/Yr)</u>	<u>Emission Factor (Lb/10³ Gal)</u>	<u>Emissions (Ton/Yr)</u>
NO _x	14,100	20	0.14
CO	14,100	5	0.04
VOM	14,100	0.25	----
SO ₂	14,100	39.76	0.28
PM	14,100	2	0.01

These tables defines the potential emissions of the three boilers and are based on fuel type, standard emission factors and maximum annual fuel usage.

Note: mm = Million

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