217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

Hinsdale Hospital
Attn: Alan First, Superintendent of Plant Operations
120 North Oak Street
Hinsdale, Illinois 60521

Application No.: 00090032 I.D. No.: 043452AAQ
Applicant's Designation: Date Received: July 28, 2006
Subject: Hospital
Date Issued: January 11, 2008 Expiration Date: January 11, 2013
Location: 120 North Oak Street, Hinsdale, DuPage County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of 3 boilers #1 - #3, 4 natural gas-fired reciprocating engines #1 - #4, ethylene oxide sterilizers #1 and #2, gasoline storage tank, #2 fuel oil tank 1, comfort heating units, coating operation, miscellaneous material storage for nonorganic materials and woodworking equipment with cyclone 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:

i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for nitrogen oxides (NO_x), 10 tons/year for a single hazardous air pollutant (HAP) and 25 tons/year of any combination of such HAPs). 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.

ii. To limit the potential emissions of VOM from the source to less than 25 tons/year. As a result, the source is excluded from the requirement of 35 Ill. Adm. Code Part 205, Emission Reduction Market System. 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 permits issued for this location.

2a. This permit is issued based on the Hospital/Medical/Infectious Waste Incinerator (HMIWI) being permanently shutdown.

b. Within 30 days after the issuance of this permit, the Permittee shall take the following affirmative steps to demonstrate that the HMIWI has been rendered permanently inoperable:

i. Weld the primary chamber door shut;

ii. Dismantle the HMIWI; or

iii. Other means that reasonably demonstrate that the HMIWI is no longer functional.

3a. Boiler #1 (14.78 mmBtu/hour) is subject to the New Source Performance Standard (NSPS) for Small Industrial – Commercial – Institutional Steam Generating Units, 40 CFR 60, Subparts A and Dc. The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

b. The Permittee shall fulfill applicable notification and recordkeeping requirements of NSPS, 40 CFR 60.7 and 60.48c.

c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

d. This permit is issued based on Boiler #2 not being subject to the NSPS for Small Industrial – Commercial – Institutional Steam Generating Units, 40 CFR 60 Subpart Dc. The replacement of the natural gas/No. 2 fuel oil burner on Boiler #2 does not constitute a modification, pursuant to 40 CFR 60.14, because the heat input capacity of the boiler is being decreased from 49.0 mmBtu/hour to 39.0 mmBtu/hour.

4a. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 Ill. Adm. Code 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 Ill. Adm. Code 212.123(b) and 212.124.

b. Pursuant to 35 Ill. Adm. Code 212.206, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hour of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).

5a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2), no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hour), burning liquid

fuel exclusively to exceed 0.46 kg of sulfur dioxide per MW-hour of actual heat input when distillate fuel oil is burned (0.3 lbs/mmBtu).

b. Pursuant to 35 Ill. Adm. Code 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm.

c. Pursuant to 35 Ill. Adm. Code 214.304, the emissions from the burning of fuel at process emission sources located in the Chicago or St. Louis (Illinois) major metropolitan areas shall comply with applicable Subparts B through F (i.e., 35 Ill. Adm. Code 214.122(b)(2)).

6. No person shall allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hour) to exceed 200 ppm, corrected to 50 percent excess air, pursuant to 35 Ill. Adm. Code 216.121.

7a. Pursuant to 35 Ill. Adm. Code 218.122(b), no person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201, and further processed consistent with 35 Ill. Adm. Code 218.108, or unless such tank is a pressure tank as described in 35 Ill. Adm. Code 218.121(a) or is fitted with a recovery system as described in 35 Ill. Adm. Code 218.121(b)(2).

b. Exception: Pursuant to 35 Ill. Adm. Code 218.122(c), if no odor nuisance exists the limitations of 35 Ill. Adm. Code 218.122 shall only apply to the loading of VOL with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).

c. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, 218.304 and the following exception: if no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G shall apply only to photochemically reactive material.

d. Pursuant to 35 Ill. Adm. Code 218.583(a), no person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank at a gasoline dispensing operation unless:

i. The tank is equipped with a submerged loading pipe; and

ii. The vapors displaced from the storage tank during filling are processed by a vapor control system that includes one or more of the following:

A. A vapor collection system that meets the requirements of 35 Ill. Adm. Code 218.583(d)(4) below; or

B. A refrigeration-condensation system or any other system approved by the Illinois EPA and approved by the USEPA as a SIP revision, that recovers at least 90 percent by weight of all vaporized organic material from the equipment being controlled; and

C. The delivery vessel displays the appropriate sticker pursuant to the requirements of 35 Ill. Adm. Code 218.584(b) or (d); and

iii. All tank vent pipes are equipped with pressure/vacuum relief valves with the following design specifications:

A. The pressure/vacuum relief valve shall be set to resist a pressure of at least 3.5 inches water column and to resist a vacuum of no less than 6.0 inches water column; or

B. The pressure/vacuum relief valve shall meet the requirements of 35 Ill. Adm. Code 218.586(c).

e. Pursuant to 35 Ill. Adm. Code 218.583(b), the requirements of 35 Ill. Adm. Code 218.583(a)(2) and (a)(3) shall not apply to transfers of gasoline to a stationary storage tank at a gasoline dispensing operation if:

i. The tank is equipped with a floating roof, or other system of equal or better emission control approved by the Illinois EPA and approved by the USEPA as a SIP revision;

ii. The tank has a capacity of less than 2000 gallons and was in place and operating before January 1, 1979; or

iii. The tank has a capacity of less than 575 gallons.

8a. Pursuant to 35 Ill. Adm. Code 218.583(c), subject to Pursuant to 35 Ill. Adm. Code 218.583(b), each owner of a gasoline dispensing operation shall:

i. Install all control systems and make all process modifications required by Pursuant to 35 Ill. Adm. Code 218.583(a);

ii. Provide instructions to the operator of the gasoline dispensing operation describing necessary maintenance operations and procedures for prompt notification of the owner in case of any malfunction of a vapor control system; and

iii. Repair, replace or modify any worn out or malfunctioning component or element of design.

b. Pursuant to 35 Ill. Adm. Code 218.583(d), subject to Pursuant to 35 Ill. Adm. Code 218.583(b), each operator of a gasoline dispensing operation shall:

i. Maintain and operate each vapor control system in accordance with the owner's instructions;

ii. Promptly notify the owner of any scheduled maintenance or malfunction requiring replacement or repair of a major component of a vapor control system;

iii. Maintain gauges, meters or other specified testing devices in proper working order;

iv. Operate the vapor collection system and delivery vessel unloading points in a manner that prevents:

A. A reading equal to or greater than 100 percent of the lower explosive limit (LEL measured as propane) when tested in accordance with the procedure described in EPA 450/2-78-051 Appendix B incorporated by reference in 35 Ill. Adm. Code 218.112; and

B. Avoidable leaks of liquid during the filling of storage tanks; and

v. Within 15 business days after discovery of the leak by the owner, operator, or the Illinois EPA, repair and retest a vapor collection system which exceeds the limits of 35 Ill. Adm. Code 218.583(d)(4)(A).

9a. This permit is issued based on the use of only natural gas for Boiler #1 and the use of natural gas and fuel oil #2 for Boilers #2 and #3. The use of any other fuel in the boilers requires that the Permittee first obtain a construction permit from the Illinois EPA.

b. At the above location, the Permittee shall not keep, store, or utilize in the boilers and generators at this source:

i. Distillate fuel oil (Grades No. 1 and 2) with a sulfur content greater than the large of the following two values:

A. 0.28 weight percent, or

B. The weight percent give by the formula: Maximum weight percent sulfur = (0.000015) x (Gross heating value of oil, Btu/lb).

ii. Organic liquid by-products or waste materials shall not be used in the boilers and generators without written approval from the Illinois EPA.

The Illinois EPA shall be allowed to sample all fuels stored at the above location.

c. The design capacity of Boiler #1 shall be 14.78 million Btu/hour, Boiler #2 shall be 39.0 million Btu/hour, and Boiler #3 shall be 49.0 million Btu/hour.

10a. Emissions and operations of the three boilers and comfort heating units shall not exceed the following limits:

i. Natural Gas Consumption Emissions:

Fuel Type	Usage (mmscf/Mo)	Usage (mmscf/Yr)	Pollutant	Emission Factor (Lbs/mmscf)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Natural Gas	50	300	NO_x	100	2.5	15.00
			CO	84	2.1	12.60
			PM	7.6	0.019	1.14
			SO_2	0.6	0.02	0.09
			VOM	5.5	0.14	0.83

ii. #2 Fuel Oil Consumption and Emissions:

Fuel Type	Usage (10^3 Gal/Mo)	Usage (10^3 Gal/Yr)	Pollutant	Emission Factor (Lbs/10^3 Gal)	Emissions (T/Mo)	Emissions (T/Yr)
#2 Fuel Oil	85	150	NO_x	20	0.85	1.50
			CO	5	0.21	0.38
			PM	2	0.09	0.15
			SO_2	42	1.79	3.15
			VOM	0.252	0.01	0.02

iii. These limits define the potential emissions for NO_x, CO, PM, SO_2, and VOM and are based on maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D , July 1998 for Natural Gas Combustion and Tables 1.3-1 and 1.3-3. AP-4 , Fifth Edition, Volume I, Supplement E , September 1998 for Fuel Oil Combustion).

b. Emissions of the 4 natural gas-fired reciprocating engines and 5 standby generators combined shall not exceed the following limits (total for all units):

i. 90% - 100% Load (11,000 hours total)

E M I S S I O N S					
NO_x		VOM		CO	
(Lbs/Hr)	(Tons/Yr)	(Lbs/Hr)	(Tons/Yr)	(Lbs/Hr)	(Tons/Yr)
2.66*	14.66	1.52*	8.36	4.05*	22.3

ii. 75% - 89% Load (6,680 hours total)

E M I S S I O N S					
NO_x		VOM		CO	
(Lbs/Hr)	(Tons/Yr)	(Lbs/Hr)	(Tons/Yr)	(Lbs/Hr)	(Tons/Yr)
9.65*	32.23	0.95*	3.17	2.66*	8.9

* Hourly emission rate per engine and does not apply to the standby generators.

iv. Emissions

PM	SO_2
(Tons/Year)	(Tons/Year)
3.20	3.60

v. These emissions are based on the hourly emission rates submitted by the manufacturer.

c. VOM emissions from the gasoline storage tank and coating operating shall not exceed 1,000 pounds/month and 3.0 tons/year.

d. This permit is issued based on negligible emissions of volatile organic material from the fuel oil tank and ethylene oxide sterilization process. For this purpose emissions from each emission unit shall not exceed nominal emission rates of 0.44 tons/year.

e. This permit is issued based on negligible emissions of particulate matter from the wood working operation. For this purpose emissions shall not exceed nominal emission rates of 0.44 tons/year.

11. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not exceed 0.9 tons/month and 9.0 tons/year of any single HAP and 2.25 tons/month and 22.5 tons/year of any combination of such HAPs. 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.

12. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

13a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control

equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR Part 60, Appendix A, incorporated by reference in 35 Ill. Adm. Code 212.113, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. This Condition shall not apply to 35 Ill. Adm. Code 212.301, pursuant to 35 Ill. Adm. Code 212.107.

c. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, incorporated by reference in 35 Ill. Adm. Code 212.113, except that the roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged, pursuant to 35 Ill. Adm. Code 212.109.

d. Pursuant to 35 Ill. Adm. Code 212.110(a), measurements of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E, pursuant to 35 Ill. Adm. Code 212.110(a).

e. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4, pursuant to 35 Ill. Adm. Code 212.110(b).

f. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA, pursuant to 35 Ill. Adm. Code 212.110(c).

g. Testing required by Condition 13 shall be performed by a qualified independent testing service.

14. Pursuant to 35 Ill. Adm. Code 218.583(a)(4), the owner or operator of a gasoline dispensing operation demonstrates compliance with 35 Ill. Adm. Code 218.583(a)(3), by March 15, 1995 or 30 days after installation of each pressure/vacuum relief valve, whichever is later, and at least annually thereafter, by measuring and recording the pressure indicated by a pressure/vacuum gauge at each tank vent pipe. The test shall be performed on each tank vent pipe within two hours after product delivery into the respective storage tank. For manifold tank vent systems, observations at any point within the system shall be adequate. The owner or operator shall maintain any records required by 35 Ill. Adm. Code 218.583 for a period of three years.

15. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If

relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

16. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

17a. The Permittee shall maintain records of the following items to demonstrate compliance with the Conditions of this permit

i. Natural gas consumption for the boilers and comfort heating units (mmscf/month and mmscf/year);

ii. No. 2 fuel oil consumption for the boilers and standby generators (gallons/month and gallons/year);

iii. Hours of operation for each engine and calendar year totals for all engines (hours/year);

iv. Records of sulfur content in each shipment of the distillate fuel oil (weight %);

v. Operating and maintenance logs for the boilers including maintenance activities, with date and description of inspections, repair actions, and replacements, etc.;

vi. Ethylene oxide usage for the ethylene oxide sterilizers;

vii. The name and identification number of each coating as applied;

viii. Coating usage (gallons/month and gallons/year);

ix. Annual gasoline throughput for the gasoline storage tank; and

x. Monthly and annual emissions of CO, NO_x, PM, SO_2, VOM and HAPs with supporting calculations (tons/month and tons/year).

b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) 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.

18. If there is an exceedance of or deviation from 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/deviation. 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 deviation and efforts to reduce emissions and future occurrences.

19. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

20. Two (2) copies of required reports and notifications 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
9511 West Harrison
Des Plaines, Illinois 60016

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

Edwin C. Bakowski, P.E. Date Signed: _____
Acting Manager, Permit Section
Division of Air Pollution Control

ECB:DWH:psj

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the hospital equipment 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 nitrogen oxides (NO_x), 10 tons per year for a single HAP, and 25 tons per year for totaled HAPs) 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.

	E M I S S I O N S (Tons/Year)						
Emission Unit	VOM	CO	NO_x	PM	SO_2	Single HAP	Total HAPs
3 Boilers	0.85	12.98	16.50	1.29	3.24		
4 Natural Gas Fired Engines & Standby Generators	11.53	31.20	46.89	3.20	3.60		
Gasoline Storage Tank & Coating Operation	3.00	---	---	---	---		
Fuel Oil Tank	0.44						
Wood Working Operation	0.44						
Plant Wide Totals	16.70	44.18	63.39	4.49	6.84	9.0	22.5

DWH:psj