

217/782-2113

LIFETIME OPERATING PERMIT

PERMITTEE

Saint Mary of Nazareth Hospital Center  
Attn: S. Sally Marie Kiepura, CSFN  
2233 West Division Street  
Chicago, Illinois 60622

Application No.: 74060098

I.D. No.: 031600EPM

Applicant's Designation:

Date Received: April 26, 2001

Subject: Hospital

Date Issued: May 16, 2001

Expiration Date: See Condition 1.

Location: 2233 West Division Street, Chicago, 60622

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of the five steam gas-fired boilers with #2 fuel oil as back-up, cogeneration system operating with three stationary internal combustion engines, two emergency generators, two ethylene oxide sterilizers, and two storage tanks pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This permit shall expire 180 days after the Illinois EPA sends a written request for the renewal of this permit.
- b. This permit shall terminate if it is withdrawn or is superseded by a revised permit.
- 2a. Total combined emissions and operation of the five boilers shall not exceed the following limits:

i.		E M I S S I O N S					
#2 Fuel Oil Usage		NO <sub>x</sub>		SO <sub>2</sub>			
<u>(Gal/Mo)</u>	<u>(Gal/Year)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>
150,000	150,000	1.7	16.5	0.3	3		
ii.		E M I S S I O N S					
Natural Gas Usage		PM		CO		VOM	
<u>(mmscf/Mo)</u>	<u>(mmscf/Yr)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>
30	300	0.1	1.1	1.3	12.6	0.08	0.8

- b. Total combined emissions and operation of the cogeneration system shall not exceed the following limits:

E M I S S I O N S

Natural Gas Usage		CO		NO <sub>x</sub>	
<u>(mmscf/Mo)</u>	<u>(mmscf/Yr)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
10	100	0.4	4.2	0.5	5

- c. Total combined emissions and operation of the two emergency generators shall not exceed the following limits:

Diesel Fuel Usage		E M I S S I O N S					
(Gal/Mo)	(Gal/Year)	NO <sub>x</sub>		CO		SO <sub>2</sub>	
		(Ton/Mo)	(Ton/Yr)	(Ton/Mo)	(Ton/Yr)	(Ton/Mo)	(Ton/Yr)
30,000	30,000	0.7	6.7	0.2	1.8	0.06	0.6

- d. These limits are based on standard emission factors given by AP-42. Compliance shall be determined from a running total of the previous 12 months data.
- 3. No person shall cause or allow the emission of carbon monoxide into the atmosphere from each individual boiler or generator to exceed 200 ppm in accordance with 35 Ill. Adm. Code 216.121.
- 4. No person shall cause or allow the emission of particulate matter into the atmosphere from each individual boiler or generator in any one hour period when burning liquid fuel exclusively to exceed 0.1 lb/mmBtu in accord with 35 Ill. Adm. Code 212.206.
- 5. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from each boiler or generator to exceed 0.3 lbs/mmBtu in any one hour period when burning distillate fuel oil exclusively in accordance with 35 Ill. Adm. Code 214.122(b)(2).
- 6. Emissions and operation of the 2 ethylene oxide sterilizers shall not exceed the following limits:

Ethylene Oxide Usage			VOM Emissions		
(Lb/Hr)	(T/Mo)	(T/Yr)	(Lb/Hr)	(T/Mo)	(T/Yr)
8	0.23	2.3	8	0.23	2.3

Compliance with annual limits shall be determined from a running total of 12 months of data.

- 7. This permit is issued based on the emissions of volatile organic material (VOM) from each ETO sterilizer not exceeding 8 lb/hour, pursuant to 35 Ill. Adm. Code 218.301.
- 8. At the above location, the Permittee shall not keep, store, or utilize:
  - a. Distillate fuel oil (Grades No. 1 and 2) with a sulfur content greater than the larger of the following two values:
    - i. 0.28 weight percent, or

ii. The wt. percent given by the formula: Maximum wt. percent sulfur =  $(0.000015) \times (\text{Gross heating value of oil, Btu/lb})$ .

9a. Organic liquid by-products or waste materials shall not be used in any fuel combustion emission source without written approval from the Illinois EPA.

- b. The Illinois EPA shall be allowed to sample all fuels stored at the above location.
- 10. The Permittee shall notify the Illinois EPA prior to any change in the type of fuel used at the source.
- 11. Natural gas and distillate fuel oil shall be the only fuel(s) fired in the above referenced equipment.
- 12. This permit is issued based on negligible emissions of volatile organic material from the two storage tanks. For this purpose emissions from each tank, shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
- 13. The Permittee shall keep monthly records of the following items:
  - a. Natural gas usage (mmscf/mo and mmscf/yr);
  - b. #2 fuel oil usage (gal/mo and gal/yr); and
  - c. ETO usage (tons/mo and tons/yr).
- 14. 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 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.
- 15. 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.
- 16. 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  
9511 West Harrison  
Des Plaines, Illinois 60016

17. Persons with lifetime operating permits must obtain a revised permit for any of the following changes at the source:
  - a. An increase in emissions above the amount the emission unit or the source is permitted to emit;
  - b. A modification;
  - c. A change in operations that will result in the source's noncompliance with conditions in the existing permit; or
  - d. A change in ownership, company name, or address, so that the application or existing permit is no longer accurate.

If you have any questions on this, please call Randy Solomon 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 1  
IEPA, Compliance Unit  
Lotus Notes

Attachment A

This attachment provides a summary of the maximum emission from the hospital operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Agency used the annual operating scenario which results in maximum emissions from such facility. The resulting maximum emissions are well below 100 tons per year of NO<sub>x</sub>, CO and VOM 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 material is handled, and control measures are more effective than required in this permit.

1a. Total combined emissions and operation of the five boilers shall not exceed the following limits:

		E M I S S I O N S			
		NO <sub>x</sub>		SO <sub>2</sub>	
<u>#2 Fuel Oil Usage</u>		<u>(T/Mo)</u>	<u>(T/Yr)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>
<u>(Gal/Mo)</u>	<u>(Gal/Year)</u>				
150,000	150,000	1.7	16.5	0.3	3

		E M I S S I O N S					
		PM		CO		VOM	
<u>Natural Gas Usage</u>		<u>(T/Mo)</u>	<u>(T/Yr)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>
<u>(mmscf/Mo)</u>	<u>(mmscf/Yr)</u>						
30	300	0.1	1.1	1.3	12.6	0.08	0.8

b. Total combined emissions and operation of the cogeneration system shall not exceed the following limits:

		E M I S S I O N S			
		CO		NO <sub>x</sub>	
<u>Natural Gas Usage</u>		<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
<u>(mmscf/Mo)</u>	<u>(mmscf/Yr)</u>				
10	100	0.4	4.2	0.5	5

c. Total combined emissions and operation of the two emergency generators shall not exceed the following limits:

		E M I S S I O N S					
		NO <sub>x</sub>		CO		SO <sub>2</sub>	
<u>Diesel Fuel Usage</u>		<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
<u>(Gal/Mo)</u>	<u>(Gal/Year)</u>						
30,000	30,000	0.7	6.7	0.2	1.8	0.06	0.6

2. Emissions and operation of the 2 ethylene oxide sterilizers shall not exceed the following limits:

			VOM Emissions		
<u>Ethylene Oxide Usage</u>			<u>(Lb/Hr)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>
<u>(Lb/Hr)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>			
8	0.23	2.3	8	0.23	2.3

3. This permit is issued based on negligible emissions of volatile organic material from the two storage tanks. For this purpose emissions from

each tank, shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.

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