217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

Gottlieb Memorial Hospital
Attn: Al Godberg
701 West North Avenue
Melrose Park, Illinois 60160

Application No.: 00010025 I.D. No.: 031186AGH
Applicant's Designation: Date Received: December 7, 2006
Subject: Medical Facility
Date Issued: October 29, 2008 Expiration Date: October 29, 2013
Location: 710 West North Avenue, Melrose Park, Cook County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of three (3) 14.7 mmBtu/hour natural gas-fired boilers with fuel oil back-up, one (1) 18.4 mmBtu/hour natural gas-fired boiler with fuel oil back-up, two (2) 850 kW natural gas-fired reciprocating internal combustion engines, one (1) natural gas-fired heat absorption unit, one parts washer, and one cleaning unit 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 major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), Sulfur Dioxide (SO_2), and Volatile Organic Material (VOM)). 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 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. Pursuant to 35 Ill. Adm. Code 212.123(a), 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 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 meter (1000 foot) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. 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).

4a. Pursuant to 35 IAC 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 source to excess 2000 ppm.

5. Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or 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.

6a. Pursuant to 35 Ill. Adm. Code 218.182(a), no person shall operate a cold cleaning degreaser unless:

i. Waste solvent is stored in covered containers only and not disposed of in such a manner that more than 20% of the waste solvent (by weight) is allowed to evaporate into the atmosphere;

ii. The cover of the degreaser is closed when parts are not being handled; and

iii. Parts are drained until dripping ceases.

b. Pursuant to 35 Ill. Adm. Code 218.182(b), no person shall operate a cold cleaning degreaser unless:

i. The degreaser is equipped with a cover which is closed whenever parts are not being handled in the cleaner. The cover shall be designed to be easily operated with one hand or with the mechanical assistance of springs, counter-weights or a powered system if:

A. The solvent vapor pressure is greater than 2 kPa (15 mmHg or 0.3 psi) measured at 38°C (100°F);

B. The solvent is agitated; or

C. The solvent is heated above ambient room temperature.

ii. The degreaser is equipped with a device for draining cleaned parts. The drainage device shall be constructed so that parts are enclosed under the cover while draining unless:

A. The solvent vapor pressure is less than 4.3 kPa (32 mmHg or 0.6 psi) measured at 38°C (100°F); or

B. An internal drainage device cannot be fitted into the cleaning system, in which case the drainage device may be external.

iii. The degreaser is equipped with one of the following control devices if the vapor pressure of the solvent is greater than 4.3 kPa (32 mmHg or 0.6 psi) measured at 38°C (100°F) or if the solvent is heated above 50°C (120°F) or its boiling point:

A. A freeboard height of 7/10 of the inside width of the tank or 91 cm (36 in), whichever is less; or

B. Any other equipment or system of equivalent emission control as approved by the Illinois EPA and further processed consistent with 35 Ill. Adm. Code 218.108. Such a system may include a water cover, refrigerated chiller or carbon adsorber.

iv. A permanent conspicuous label summarizing the operating procedure is affixed to the degreaser; and

v. If a solvent spray is used, the degreaser is equipped with a solid fluid stream spray, rather than a fine, atomized or shower spray.

c. Pursuant to 35 Ill. Adm. Code 218.182(c)(3)(B), on and after May 30, 2007 no person shall operate a cold cleaning degreaser with a solvent vapor pressure which exceeds 1.0 mmHg (0.019 psi) measured at 20°C (68°F) , unless the person is in compliance with the control

requirements of 35 Ill. Adm. Code 218.182(c)(4) or is exempt under 35 Ill. Adm. Code 218.182(f) or (g).

d. 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 source, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 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.

7. This permit is issued based on the cooling towers not being subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Industrial Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling towers are not operated with chromium-based water treatment chemicals.

8a. The boilers shall only be operated with natural gas and #2 fuel oil as the fuel(s). The use of any other fuel in the boilers requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.

b. The two (2) 850 kW reciprocating internal combustion engines and the heat absorption unit shall only be operated with natural gas as the fuel. The use of any other fuel in the reciprocating internal combustion engines and the heat absorption unit requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.

c. The Permittee shall not keep, store or use distillate fuel oil (Grades No. 1 and 2) at this source 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 = (0.00015) x (Gross heating value of oil, Btu/lb).

d. Organic liquid by-products or waste materials shall not be used in these fuel combustion emission sources.

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

f. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

9a. Emissions and operation of four Boilers shall not exceed the following limits:

i. Natural Gas:

Mode	Fuel Usage (mscf/Mo)	Fuel Usage (mscf/Yr)	Pollutant	Emission Factor (lb/mscf)	Emissions (T/Mo)	Emissions (T/Yr)
Natural Gas	54.75	547.5	NO_x	100	2.74	27.38
			CO	84	2.30	23.00
			PM	7.6	0.21	2.09
			SO_2	0.6	0.02	0.17
			VOM	5.5	0.16	1.51

These limits are based on the maximum fuel usage and standard emissions factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

ii. Backup Fuel Oil:

Mode	Fuel Usage (Kgal/Mo)	Fuel Usage (Kgal/Yr)	Pollutant	Emission Factor (lb/Kgal)	Emissions (T/Mo)	Emissions (T/Yr)
Fuel Oil	50	500	NO_x	20	0.50	5.00
			CO	5	0.13	1.25
			PM	2	0.05	0.50
			SO_2	42.6	1.07	10.65
			VOM	2	0.01	0.05

These limits are based on the maximum fuel use and standard emission factors (Tables 1.3-1 and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

b. Emissions and operation of the two 850 kW natural gas-fired reciprocating internal combustion shall not exceed the following limits:

i. Natural gas usage: 3,412 Mscf /month, 34,120 Mscf/year

ii. Emissions from the reciprocating internal combustion:

Pollutant	Emission Factor (lb/MMscf)	Emissions (Ton/Mo)	Emissions (Ton/Yr)
Nitrogen Oxides (NO_x)	2,840	4.75	47.50
Carbon Monoxide (CO)	399	0.67	6.68
Particulate Matter (PM)	10	0.02	0.17
Sulfur Dioxide (SO_2)	0.6	0.01	0.01
Volatile Organic Material (VOM)	116	0.20	1.94

These limits are based on maximum fuel use and standard emission factors (SCC 2-01-001-02, Factor Information Retrieval (FIRE) Version 6.25, September 2004).

c. Emissions and operation of natural gas-fired heat absorption unit shall not exceed the following limits:

Mode	Fuel Usage (mscf/Mo)	Fuel Usage (mscf/Yr)	Pollutant	Emission Factor (lb/mscf)	Emissions (T/Mo)	Emissions (T/Yr)
Natural Gas	5.26	52.6	NO_x	100	0.27	2.63
			CO	84	0.23	2.21
			PM	7.6	0.02	0.20
			SO_2	0.6	0.01	0.02
			VOM	5.5	0.02	0.14

These limits are based on the maximum fuel usage and standard emissions factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

d. Solvent usage and VOM emissions from cleaning unit and the parts washer shall not exceed the following limits:

Material	Usage (Gals/Mo)	Usage (Gals/Yr)	VOM Content (lb/Gal)	VOM Emissions (Tons/Mo)	VOM Emissions (Tons/Yr)
Cleaning unit	66	660	1.5	0.05	0.50
Parts washer	20	200	7.0	0.07	0.70

These limits are based on the maximum material usage and the maximum VOM content. VOM emissions from cleaning unit and the parts washer shall be calculated using the following formula:

$$E = [(S_p \times C_p \times d_p) - (S_s \times C_s \times d_s)]/2{,}000$$

Where:

E = VOM emissions (tons/month, tons/year);

S_p = Amount of solvent purchased (gallons/month, gallons/year);

C_p = VOM content of purchased solvent (% by weight);

d_p = Density of solvent purchased (lbs/gallon);

S_s = Certified amount of solvent shipped-off for recycling or disposal (gallons/month, gallons/year);

C_s = Certified VOM content of solvent shipped-off (% by weight); and

d_s = Density of solvent shipped-off (lbs/gallon).

e. 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).

10. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a Clean Air Act Permit Program (CAAPP) Permit.

11a. 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. Testing required by Condition 12 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

12a. 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, except that the length of the observing period shall be at the

discretion of the observer, but not less than one minute. 35 Ill. Adm. Code 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. 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, except that for 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.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement 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.

d. 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.

e. 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.

13. 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.

14. 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.

15a. Pursuant to 35 Ill. Adm. Code 218.182(d)(2), on and after March 15, 1999 all persons subject to the requirements of 35 Ill. Adm. Code 218.182(c)(1)(B), (c)(2)(B), and (c)(3)(B) must maintain records which include for each purchase:

i. The name and address of the solvent supplier;

ii. The date of purchase;

iii. The type of solvent;

iv. The vapor pressure of the solvent measured in mmHg at 20°C (68°F); and

v. For any mixture of solvents, the vapor pressure of the mixture, as used, measured in mmHg at 20°C (68°F).

b. Pursuant to 35 Ill. Adm. Code 218.182(e), all records required by 35 Ill. Adm. Code 218.182(d) shall be retained for three years and shall be made available to the Illinois EPA upon request.

16a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Natural gas consumption (mmscf/month, mmscf/year);

ii. Fuel oil consumption (gallons/month, gallons/year) separately;

iii. Sulfur content for fuel oil (% by weight);

iv. Amount of solvent purchased (gallons/month, gallons/year);

v. VOM content of purchased solvent (% by weight);

vi. Density of solvent (lbs/gallon);

vii. Certified amount of waste solvent shipped-off for recycling or disposal (lbs/month and lbs/year);

viii. VOM content of waste solvent shipped-off for recycling or disposal (% by weight);

ix. Density of waste solvent shipped-off for recycling or disposal (lbs/gallon); and

xi. Monthly and annual emissions of CO, NO_x, PM, SO_2, VOM and HAPs from the source, with supporting calculations (tons/month, 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.

17. 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 or 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.

18. 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.

18. Pursuant to 35 Ill. Adm. Code 218.182(d)(6), on and after March 15, 1999, all persons subject to the requirements of 35 Ill. Adm. Code 218.182(b) or (c) shall notify the Illinois EPA of any violation of 35 Ill. Adm. Code 218.182(b) or (c) by sending a description of the violation and copies of records documenting such violations to the Illinois EPA within 30 days following the occurrence of the violation.

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

It should be noted that three cooling towers are exempt from permitting pursuant to 35 Ill. Adm. Code 201.146(vv)(2).

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

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

ECB:GMK:psj

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the medical facility 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 below the levels, (e.g., 100 tons per year of NO_x, CO, VOM, and SO_2) 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	CO	NO_x	PM	SO_2	VOM
4 Boilers					
(Natural Gas)	23.00	27.38	2.09	0.17	1.51
(Fuel Oil)	1.25	5.00	0.50	10.65	0.05
2 Generators	6.68	47.50	0.17	0.01	1.94
1 Heat absorption unit	2.21	2.63	0.20	0.02	0.14
1 Parts washer	-----	-----	-----	----	0.50
1 Cleaning unit	-----	-----	-----	-----	0.70
Totals	33.14	82.51	2.96	10.85	4.84

GMK:psj