217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -– NSPS/NESHAP SOURCE

PERMITTEE

Good Shepherd Hospital
Attn: Paul Drake
450 West Highway 22
Barrington, Illinois 60010

Application No.: 10060066 I.D. No.: 097070AAB
Applicant's Designation: Date Received: July 26, 2010
Subject: Boilers, Generators, and ETO
Date Issued: November 29, 2010 Expiration Date: November 29, 2015
Location: 450 West Highway 22, Barrington, Cook County, 60010

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of two (2) 43.8 mmBtu/hour natural gas/distillate fuel oil-fired boilers (Boilers 1 and 2), one (1) 10.5 mmBtu/hour natural gas-fired boiler (Boiler 3), three (3) 1,500 kW diesel-powered emergency generators (Generators #2, 3, and 4), one (1) 500 kW diesel-powered emergency generator (Generator 1), and one (1) ethylene oxide sterilizer 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 air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), and Sulfur Dioxide (SO_2)). 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 the current permit(s) issued for this location.

2a. Generators #2, 3, and 4 are subject to the New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60 Subparts A and IIII. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

b. Pursuant to 40 CFR 60.4205(a), owners and operators of pre–2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in table 1 to 40 CFR 60 Subpart IIII. Owners and operators of pre–2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards in 40 CFR 94.8(a)(1).

Table 1 to Subpart IIII of Part 60 —Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder and 2007-2010 Model Year Engines >2,237 KW (3,000 HP) and With a Displacement of <10 Liters per Cylinder

Maximum engine power	Emission standards for stationary pre-2007 model year engines with a displacement of <10 liters per cylinder and 2007–2010 model year engines >2,237 KW (3,000 HP) and with a displacement of <10 liters per cylinder in g/KW-hour (g/HP-hour)				
	NMHC + NO_x	HC	NO_x	CO	PM
KW>560 (HP>750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)

c. Pursuant to 40 CFR 60.4205(b), owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

d. Pursuant to 40 CFR 60.4202(a)(2), stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and greater than or equal to 37 KW (50 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines, to the emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

e. Pursuant to 40 CFR 60.4206, owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

3a. Pursuant to 40 CFR 89.112(a), exhaust emission from nonroad engines to which 40 CFR 89 Subpart B is applicable shall not exceed the applicable exhaust emission standards contained in Table 1, as follows:

Table 1 — Emission Standards (g/kW-hour)

Rated Power (kW)	Tier	Model Year[1]	NO_x	HC	NMHC + NO_x	CO	PM
kW>560	Tier 1	2000	9.2	1.3	---	11.4	0.54
	Tier 2	2006	---	---	6.4	3.5	0.20

[1] The model years listed indicates the model years for which the specified tier of standards take effect.

b. Pursuant to 40 CFR 89.112(d), in lieu of the NOx standards, NMHC + NOx standards, and PM standards specified in 40 CFR 89.112(a), manufacturers may elect to include engine families in the averaging, banking, and trading program, the provisions of which are specified in 40 CFR 89 Subpart C. The manufacturer must set a family emission limit (FEL) not to exceed the levels contained in Table 2. The FEL established by the manufacturer serves as the standard for that engine family. Table 2 follows:

Table 2 – Upper Limit for Family Emission Limits (g/kW-hour)

Rated Power (kW)	Tier	Model Year[1]	NO_x FEL	NMHC + NO_x FEL	PM FEL
kW>560	Tier 1	2000	14.6	---	---
	Tier 2	2006	---	10.5	0.54

[1] The model years listed indicates the model years for which the specified tier of standards take effect.

c. Pursuant to 40 CFR 89.112(e), naturally aspirated nonroad engines to which 40 CFR 89 Subpart B is applicable shall not discharge crankcase emissions into the ambient atmosphere, unless such crankcase emissions are permanently routed into the exhaust and included in all exhaust emission measurements. This provision applies to all Tier 2 engines and later models. This provision does not apply to engines using turbochargers, pumps, blowers, or superchargers for air induction.

d. Pursuant to 40 CFR 89.113(a), exhaust opacity from compression-ignition nonroad engines for which 40 CFR 89 Subpart B is applicable must not exceed:

i. 20 percent during the acceleration mode;

ii. 15 percent during the lugging mode; and

iii. 50 percent during the peaks in either the acceleration or lugging modes.

4a. The ethylene oxide sterilizer is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Hospital Ethylene Oxide Sterilizers, 40 CFR 63, Subparts A and WWWWW. The Illinois EPA is administering the NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.

b. Pursuant to 40 CFR 63.10390, you must sterilize full loads of items having a common aeration time, except under medical necessary circumstances, as that term is defined in 40 CFR 63.10448.

c. Pursuant to 40 CFR 63.10400(a), except as provided in 40 CFR 63.10400(b) and (c), you must demonstrate initial compliance with the management practice standard in 40 CFR 63.10390 by submitting an Initial

Notification of Compliance Status certifying that you are sterilizing full loads of items having a common aeration time except under medically necessary circumstances.

d. Pursuant to 40 CFR 63.10400(b), if you operate your sterilization unit(s) with an air pollution control device pursuant to a State or local regulation, you may demonstrate initial compliance with 40 CFR 63.10390 by submitting an Initial Notification of Compliance Status certifying that you are operating the sterilization unit in accordance with your State or local regulation and following control device manufacturer’s recommended procedures.

e. Pursuant to 40 CFR 63.10400(c), if you operate your sterilization unit(s) with an air pollution control device but are not subject to any State or local regulation, you may demonstrate initial compliance with 40 CFR 63.10390 by submitting an Initial Notification of Compliance Status certifying that you are venting the ethylene oxide emissions from each sterilization unit to an add-on air pollution control device. You must certify that you are operating the control device during all sterilization processes and in accordance with manufacturer's recommended procedures.

5a. 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).

6a. 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 excess 2000 ppm.

c. Pursuant to 35 Ill. Adm. Code 214.304, the emissions from the burning of fuel at process emission units located in the Chicago or St. Louis (Illinois) major metropolitan areas shall comply with applicable 35 Ill. Adm. Code 214 Subparts B through F (i.e., 35 Ill. Adm. Code 214.122(b)).

7. 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.

8. 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 form any emission unit, 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 only apply to photochemically reactive material.

9. This permit is issued based on the diesel-powered standby generators at this source not being subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63 Subpart ZZZZ. Pursuant to 40 CFR 63.6590(b)(3), an existing stationary residential, commercial, or institutional emergency stationary RICE located at an area source of HAP emissions, does not have to meet the requirements of 40 CFR 63 Subpart ZZZZ and of 40 CFR 63 Subpart A. No initial notification is necessary.

10. Pursuant to 40 CFR 89.113(c)(3), constant-speed engines are exempt from the requirements of 40 CFR 89.113.

11. 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.

12a. Pursuant to 40 CFR 60.4206, owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 according to the manufacturer’s written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

b. Pursuant to 40 CFR 60.4207(a), beginning October 1, 2007, owners and operators of stationary CI ICE subject to 40 CFR 60 Subpart IIII that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

c. Pursuant to 40 CFR 60.4207(b), beginning October 1, 2010, owners and operators of stationary CI ICE subject to 40 CFR 60 Subpart IIII with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

d. Pursuant to 40 CFR 60.4211(a), if you are an owner or operator and must comply with the emission standards specified in 40 CFR 60 Subpart IIII, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

e. Pursuant to 40 CFR 4211(b)(1), if you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in 40 CFR 60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to 40 CFR 60 Subpart IIII and must comply with the emission standards specified in 40 CFR 60.4205(c), you must demonstrate compliance by purchasing an engine certified according to 40 CFR part 89 or 40 CFR Part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

f. Pursuant to 40 CFR 60.4011(e), emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone may petition the Illinois EPA or USEPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under 40 CFR 60.4205 but not 40 CFR 60.4204, any operation other than emergency operation, and maintenance and testing as permitted in 40 CFR 60.4011, is prohibited.

13a. Pursuant to 40 CFR 80.510(a), beginning June 1, 2007. Except as otherwise specifically provided in 40 CFR 80 Subpart I, all NRLM diesel fuel is subject to the following per-gallon standards:

i. Sulfur content. 500 parts per million (ppm) maximum.

ii. Cetane index or aromatic content, as follows:

A. A minimum cetane index of 40; or

B. A maximum aromatic content of 35 volume percent.

b. Pursuant to 40 CFR 80.510(b), beginning June 1, 2010. Except as otherwise specifically provided in 40 CFR 80 Subpart I, all NR and LM diesel fuel is subject to the following per-gallon standards:

i. Sulfur content 15 ppm maximum for NR diesel fuel.

ii. Cetane index or aromatic content, as follows:

A. A minimum cetane index of 40; or

B. A maximum aromatic content of 35 volume percent.

14a. Boilers 1 and 2 shall only be operated with natural gas or distillate fuel oil as the fuel. The use of any other fuel in Boilers 1 or 2 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 Boiler 3 shall only be operated with natural gas as the fuel. The use of any other fuel in Boiler 3 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 diesel-powered generators shall only be operated with distillate fuel oil grades as the fuel. The use of any other fuel in the diesel-powered generators 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.

d. 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 = (0.000015) x (Gross heating value of oil, Btu/lb).

c. Organic liquid by-products or waste materials shall not be used in the diesel-powered generators without written approval from the Illinois EPA.

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

15a. Emissions and operation of the boilers shall not exceed the following limits:

i. Total Natural Gas Usage in Boilers 1, 2, and 3: 44.1 mmscf/month and 441 mmscf/year.

ii. Emissions limits for the combustion of natural gas:

Pollutant	Emission Factor (Lbs/mmscf)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	84.0	1.85	18.52
Nitrogen Oxides (NO_x)	100.0	2.21	22.06
Particulate Matter (PM)	7.6	0.17	1.68
Sulfur Dioxide (SO_2)	0.6	0.01	0.13
Volatile Organic Material (VOM)	5.5	0.12	1.21

These limits are based on the 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).

iii. Total Distillate Fuel Oil Usage in Boilers 1 and 2: 281,250 gallons/month, 2,812,500 gallons/year.

iv. Emissions from the combustion of fuel oil:

Pollutant	Emission Factor (Lbs/10^3 Gal)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	5.00	0.70	7.03
Nitrogen Oxides (NO_x)	20.00	2.81	28.13
Particulate Matter (PM)	2.00	0.28	2.81
Sulfur Dioxide (SO_2)	39.76	5.59	55.91
Volatile Organic Material (VOM)	0.34	0.05	0.48

These limits are based on the maximum distillate fuel oil usage, a sulfur content of 0.28% by weight, and standard emission factors (Tables 1.3-1 and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1998).

b. Operation of Generator #1 shall not exceed the following limits:

i. Distillate Fuel Oil Usage in Generator #1: 2,413 gallons/month, 21,429 gallons/year.

ii. Emission from Generator #1:

Pollutant	Emission Factor (Lbs/mmBtu)	Emissions (Tons/Month)	Emissions (Tons/Year)
CO	0.85	0.13	1.28

Pollutant	Emission Factor (Lbs/mmBtu)	Emissions (Tons/Month)	Emissions (Tons/Year)
NO_x	3.20	0.48	4.80
PM	0.10	0.02	0.15
SO_2	0.28	0.04	0.42
VOM	0.09	0.01	0.14

These limits are based on the maximum fuel usage, a heat content of 140,000 Btu/gal, a sulfur content of 0.28% by weight, and standard emission factors (Table 3.4-1, AP 42, Fifth Edition, Volume I, Supplement B, October 1996).

c. Emissions and operation of Generator #2 shall not exceed the following limits:

Pollutant	Emission Factor (Lbs/Hp-Hr)	Emissions (Lbs/Hr)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	0.005749	11.57	2.89
Nitrogen Oxides (NO_x)	0.01052	21.16	5.03
Particulate Matter (PM)	0.000329	0.66	0.17
Sulfur Dioxide (SO_2)	0.0004045	0.81	0.20
Volatile Organic Material (VOM)	0.000526	1.06	0.27

These limits are based on the rated output of the generator (1,500 kW), 500 hours/year of operation, and emission factors derived from the Tier 2 limits in 40 CFR 89.112 and 40 CFR 89.113 as referenced in 40 CFR 60.4202(a) for units with a power rating of 1,500 KW (2,012HP). Sulfur dioxide emissions are based on the standard emission factor (Table 3.4-1, AP 42, Fifth Edition, Volume I, Supplement B, October 1996) and the allowable fuel sulfur content (0.05%). Emission totals shall be calculated by multiplying the diesel generator set runtime and the emission factors for each pollutant.

d. Emissions and operation of Generators #3 and #4 (combined) shall not exceed the following limits:

Pollutant	Emission Factor (Lbs/Hp-Hr)	Emissions (Lbs/Hr)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	0.01874	75.40	18.85
Nitrogen Oxides (NO_x)	0.01512	60.85	15.21
Particulate Matter (PM)	0.0008878	3.57	0.89
Sulfur Dioxide (SO_2)	0.0004045	1.63	0.41
Volatile Organic Material (VOM)	0.002137	8.60	2.15

These limits are based on the rated output of the generators (1,500 kW, each), 500 hours/year of operation, and emission factors derived from table 1 to 40 CFR 60 Subpart IIII and the Tier 1 limits in 40 CFR 89.112 and 40 CFR 89.113. Sulfur dioxide

emissions are based on the standard emission factor (Table 3.4-1, AP 42, Fifth Edition, Volume I, Supplement B, October 1996) and the allowable fuel sulfur content (0.05%). Emission totals shall be calculated by multiplying the diesel generator set runtime and the emission factors for each pollutant.

e. This permit is issued based on negligible emissions of volatile organic material and hazardous air pollutants from the ethylene oxide sterilizer. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.

f. 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).

16. 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 from the source 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.

17. This permit is issued based on the diesel-powered generator #2 set having a displacement of less than 30 liters per cylinder and has been certified by the manufacturer to meet the standards of 40 CFR 60 60.4201(a) through (c). As a result, this permit is issued based on these diesel-powered generator sets not being subject to the testing requirements of 40 CFR 60.8.

18a. 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 19 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

19. 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.

20a. Pursuant to 40 CFR 60.4209(a), if you are an owner or operator of an emergency stationary CI internal combustion engine, you must meet install a non-resettable hour meter prior to startup of the engine.

21a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.

22. Pursuant to 40 CFR 60.4214(b), if the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to 40 CFR 60 Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

23. 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.

24a. Pursuant to 40 CFR 63.10402, you must demonstrate initial compliance with 40 CFR 63.10390 upon startup or no later than 180 calendar days after your compliance date, whichever is later.

b. Pursuant to 40 CFR 63.10420, for each sterilization unit not equipped with an air pollution control device, you must demonstrate continuous compliance with the management practice standard in 40 CFR 63.10390 by recording the date and time of each sterilization cycle, whether each sterilization cycle contains a full load of items, and if not, a statement from a hospital central services staff, a hospital administrator, or a physician that it was medically necessary.

25a. Pursuant to 40 CFR 63.10432, you must keep the records specified in 40 CFR 63.10432(a) and (b).

i. A copy of the Initial Notification of Compliance Status that you submitted to comply with 40 CFR 63 Subpart WWWWW.

ii. Records required by 40 CFR 63.10420 for each sterilization unit not equipped with an air pollution control device.

b. Pursuant to 40 CFR 63.10434(a), your records must be in a form suitable and readily available for expeditious review.

c. Pursuant to 40 CFR 63.10434(b), you must keep each record for 5 years following the date of each record.

d. Pursuant to 40 CFR 63.10434(c), you must keep each record onsite for at least 2 years after the date of each record. You may keep the records offsite for the remaining 3 years.

26. 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.

27a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Monthly and annual natural gas usage for Boilers 1, 2, and 3 (mmBtu/month and mmBtu/year);

ii. Ethylene oxide and usage (pounds/month and tons/year);

iii. Distillate fuel oil usage for the Generator 1 (mmBtu/month and mmBtu/year);

iv. Distillate fuel oil usage for the Boilers 1 and 2 (mmBtu/month and mmBtu/year);

v. Sulfur content of distillate fuel oil used the boilers and generators;

vi. Runtime for Generators 2, 3, and 4 (hours/month and hours/year) and

vii. Monthly and annual emissions of CO, NO_x, PM, SO_2, VOM and HAPs from the source 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 storage device) 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.

28. Pursuant to 40 CFR 60.7(a), any owner or operator subject to the provisions of 40 CFR Part 60 shall furnish the Illinois EPA or USEPA written notification or, if acceptable to both the Illinois EPA and USEPA and the owner or operator of a source, electronic notification, as follows:

a. A notification of the date construction (or reconstruction as defined under 40 CFR 60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.

b. A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

c. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA or USEPA may request additional relevant information subsequent to this notice.

29a. Pursuant to 40 CFR 63.10430(a), you must submit an Initial Notification of Compliance Status that includes the information required in 40 CFR 63.10430(a)(1) through (5) and the applicable certification in 40 CFR 63.10400.

i. The name and address of the owner or operator.

ii. The address (i.e., physical location) of the affected source.

iii. An identification of the standard and other applicable requirements in this subpart that serve as the basis of the notification and the source's compliance date.

iv. A brief description of the sterilization facility, including the number of ethylene oxide sterilizers, the size (volume) of each, the number of aeration units, if any, the amount of annual ethylene oxide usage at the facility, the control technique used for each sterilizer, and typical number of sterilization cycles per year.

v. A statement that the affected source is an area source.

b. Pursuant to 40 CFR 63.10430(b), you must submit the Initial Notification of Compliance Status to the appropriate authority(ies) specified in 40 CFR 63.9(a)(4). In addition, you must submit a copy of the Initial Notification of Compliance Status to EPA’s Office of Air Quality Planning and Standards. Send your notification via e-mail to CCG-ONG@EPA.GOV or via U.S. mail or other mail delivery service to U.S. EPA, Sector Policies and Programs Division, Coatings and Chemicals Group (E143–01), Attn: Hospital Sterilizers Project Leader, Research Triangle Park, NC 27711.

c. Pursuant to 40 CFR 63.10430(c), you must submit the Initial Notification of Compliance Status no later than 180 calendar days after your compliance date, consistent with 40 CFR 63.10402.

30. 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.

31a. If there is an exceedance of or deviation from the requirements of this permit as determined by the record 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.

b. 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 George Kennedy at 217/782-2113.

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

ECB:GMK:psj

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions of the hospital 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 the source. The resulting maximum emissions are below the levels (e.g., 100 tons/year for CO, NO_x, 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 the hours of operation are less that that allowed in this permit.

	E M I S S I O N S (Tons/Year)				
Emissions Unit	CO	NO_x	PM	SO_2	VOM
Boilers 1, 2, & 3 (Natural Gas)	18.52	22.06	1.68	0.13	1.21
Boilers 1 & 2 (Fuel Oil)	7.03	28.13	2.81	59.91	0.48
Generator #1	1.28	4.81	0.15	0.42	0.14
Generator #2	2.89	5.29	0.17	0.20	0.27
Generators #3 and $	18.85	15.21	0.89	0.41	2.15
Ethylene Oxide Sterilizer	-----	-----	-----	-----	0.44
Totals	48.57	75.50	5.70	57.08	4.69

GMK:psj