



TO: Interested Parties / Applicant
RE: Seton Specialty Hospital / R 097-24957-00618
FROM: Felicia A. Robinson
Administrator

Notice of Decision: Approval - Registration

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Indianapolis Office of Environmental Services, Air Permits at (317) 327-2234.

Enclosures



Air Quality Hotline: 317-327-4AIR | knozone.com

Department of Public Works
Office of Environmental Services

2700 Belmont Avenue
Indianapolis, IN 46221

317-327-2234
Fax 327-2274
TDD 327-5186
indygov.org/dpw

Certified Mail: 7000 0600 0023 5186 3665

October 4, 2007

Mr. Kevin Webb
Safety Officer
Seton Specialty Hospital
8050 Township Line Road
Indianapolis, Indiana 46260



Re: Registration No.: R 097-24957- 00618

Dear Mr. Webb:

An application from Seton Specialty Hospital (herein referred to as "source") relating to the construction and operation of internal and external combustion emission units, was received by the Indianapolis Office of Environmental Services (OES) on June 22, 2007, and has been reviewed. Based on the data submitted and the provisions of 326 IAC 2-5.5, it has been determined that the following emission units at this source, located at 8050 Township Line Road, Indianapolis, Indiana 46260, are classified as registered:

- (a) One (1) Bryan natural gas fired boiler with #2 fuel oil as back-up, identified as emission unit B-01, with a maximum heat input capacity of 4 million Btu per hour (MMBtu/hr), constructed and operational May 2007, utilizing no emission control and exhausting to a stack identified as S-01.
- (b) One (1) Bryan natural gas fired boiler with #2 fuel oil as back-up, identified as emission unit B-02, with a maximum heat input capacity of 4 million Btu per hour (MMBtu/hr), constructed and operational May 2007, using no emission control and exhausting to a stack identified as S-02.
- (c) One (1) Cummins diesel fired reciprocating, 4-cycle rich-burn, 12 cylinder (2.54 liter displacement/cylinder) internal combustion engine utilized as back-up emergency generator, identified as emission unit EG-01, with a maximum power output of 1,490 horsepower (hp), manufactured in 2006 and operational May 2007, using no emission control and exhausting to the atmosphere.

The following conditions shall be applicable:

- (a) Pursuant to New Source Performance Standards (NSPS) provisions of 40 CFR Part 60, Subpart IIII, (40 CFR 60.4200 - 4209), Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, the source shall comply with the provisions of this subpart for the emergency generator (EG-01) as follows:



Air Quality Hotline: 317-327-4AIR | knozone.com

Department of Public Works
Office of Environmental Services

2700 Belmont Avenue
Indianapolis, IN 46221

317-327-2234
Fax 327-2274
TDD 327-5186
indygov.org/dpw

Subpart III—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Source: 71 FR 39172, July 11, 2006, unless otherwise noted.

§ 60.4200 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005 where the stationary CI ICE are:

(i) Manufactured after April 1, 2006 and are not fire pump engines, or

(ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

(3) Owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005.

(b) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.

Emission Standards for Owners and Operators

§ 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(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 this subpart. 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).

§ 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 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.

Fuel Requirements for Owners and Operators

§ 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

(a) **Beginning October 1, 2007**, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

(b) **Beginning October 1, 2010**, owners and operators of stationary CI ICE subject to this subpart 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.

(c) Owners and operators of pre-2011 model year stationary CI ICE subject to this subpart may petition the Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of paragraphs (a) and (b) of this section beyond the dates required for the purpose of using up existing fuel inventories. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator.

Other Requirements for Owners and Operators

§ 60.4208 What is the deadline for importing or installing stationary CI ICE produced in the previous model year?

- (a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.
- (b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.
- (c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.
- (d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.
- (e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.
- (f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.
- (g) In addition to the requirements specified in §§60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (f) of this section after the dates specified in paragraphs (a) through (f) of this section.
- (h) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

§ 60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in §60.4211.

- (a) If you are an owner or operator of an emergency stationary CI internal combustion engine, you must install a non-resettable hour meter prior to startup of the engine.

Compliance Requirements

§ 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

- (a) If you are an owner or operator and must comply with the emission standards specified in this subpart, 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.
- (b) 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 §§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 this subpart and must comply with the emission standards specified in §60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.
 - (1) 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.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

(3) Keeping records of engine manufacturer data indicating compliance with the standards.

(4) Keeping records of control device vendor data indicating compliance with the standards.

(5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in §60.4212, as applicable.

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications.

(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 Administrator 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 §60.4205 but not §60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.

Testing Requirements for Owners and Operators

§ 60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (d) of this section.

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F.

(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.

(c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD}) \quad (\text{Eq. 1})$$

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate.

(d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in §60.4204(a), §60.4205(a), or §60.4205(c), determined from the equation in paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in §60.4204(a), §60.4205(a), or §60.4205(c).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) may follow the testing procedures specified in §60.4213, as appropriate.

Notification, Reports, and Records for Owners and Operators

§ 60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

(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 this subpart, 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.

General Provisions

§ 60.4218 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you.

Definitions

§ 60.4219 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Diesel particulate filter means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

Emergency stationary internal combustion engine means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

Engine manufacturer means the manufacturer of the engine. See the definition of "manufacturer" in this section.

Fire pump engine means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

Manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1039.801.

Model year means either:

- (1) The calendar year in which the engine was originally produced, or
- (2) The annual new model production period of the engine manufacturer if it is different than the calendar year. This must include January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named

calendar year. For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was originally produced.

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Reciprocating internal combustion engine means any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to a gasoline, natural gas, or liquefied petroleum gas fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Subpart means 40 CFR part 60, subpart IIII.

Useful life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for useful life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for useful life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).

Tables to Subpart IIII of Part 60

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 [As stated in §§ 60.4201(b), 60.4202(b), 60.4204(a), and 60.4205(a), you must comply with the following emission standards]

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-hr (g/HP-hr)				
	NMHC + NOX	HC	NOX	CO	PM
KW<8 (HP<11)	10.5 (7.8)		8.0 (6.0)	1.0 (0.75)	
8[le]KW<19 (11[le]HP<25)	9.5 (7.1)		6.6 (4.9)	0.80 (0.60)	
19[le]KW<37 (25[le]HP<50)	9.5 (7.1)		5.5 (4.1)	0.80 (0.60)	
37[le]KW<56 (50[le]HP<75)		9.2 (6.9)			
56[le]KW<75 (75[le]HP<100)		9.2 (6.9)			
75[le]KW<130 (100[le]HP<175)		9.2 (6.9)			
130[le]KW<225 (175[le]HP<300)	1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)	
225[le]KW<450 (300[le]HP<600)	1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)	
450[le]KW[le]560 (600[le]HP[le]750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
KW>560 (HP>750)	1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)	

Table 5 to Subpart III of Part 60. Labeling and Recordkeeping Requirements for New Stationary Emergency Engines [You must comply with the labeling requirements in § 60.4210(f) and the recordkeeping requirements in § 60.4214(b) for new emergency stationary CI ICE beginning in the following model years:]

Engine power	Starting model year
19[le]KW<56 (25[le]HP<75).....	2013
56[le]KW<130 (75[le]HP<175).....	2012
KW>=130 (HP>=175).....	2011

Table 8 to Subpart III of Part 60. Applicability of General Provisions to Subpart III [As stated in § 60.4218, you must comply with the following applicable General Provisions:]

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§ 60.1.....	General applicability of the General Provisions.	Yes.....	
§ 60.2.....	Definitions.....	Yes.....	Additional terms defined in § 60.4219.
§ 60.3.....	Units and abbreviations...	Yes.....	
§ 60.4.....	Address.....	Yes.....	
§ 60.5.....	Determination of construction or modification.	Yes.....	
§ 60.6.....	Review of plans.....	Yes.....	
§ 60.7.....	Notification and Recordkeeping.	Yes.....	Except that § 60.7 only applies as specified in § 60.4214(a).
§ 60.8.....	Performance tests.....	Yes.....	Except that § 60.8 only applies to stationary CI ICE with a displacement of (>=30 liters per cylinder and engines that are not certified.
§ 60.9.....	Availability of information.	Yes.....	
§ 60.10.....	State Authority.....	Yes.....	
§ 60.11.....	Compliance with standards and maintenance requirements.	No.....	Requirements are specified in subpart IIII.
§ 60.12.....	Circumvention.....	Yes.....	
§ 60.13.....	Monitoring requirements...	Yes.....	Except that § 60.13 only applies to stationary CI ICE with a displacement of (>=30 liters per cylinder.
§ 60.14.....	Modification.....	Yes.....	
§ 60.15.....	Reconstruction.....	Yes.....	
§ 60.16.....	Priority list.....	Yes.....	
§ 60.17.....	Incorporations by reference.	Yes.....	
§ 60.18.....	General control device requirements.	No.....	
§ 60.19.....	General notification and reporting requirements.	Yes.....	

- (b) Pursuant to federal provisions of 40 CFR 80, (Regulation of Fuels and Fuel Additives) Subpart I (40 CFR 80.510(a) and 40 CFR 80.510(b)), Motor Vehicles, NonRoad, Locomotive, and Marine Diesel Fuel; and referenced in NSPS 40 CFR 60 Subpart IIII (40 CFR 60.4200-4219), Fuel Requirements for Owners and Operators, the Permittee shall comply with the following requirements for the emergency generator (EG-01) as follows:

§ 80.510 What are the standards and marker requirements for NRLM diesel fuel?

(a) **Beginning June 1, 2007.** Except as otherwise specifically provided in this subpart, all NRLM diesel fuel is subject to the following per-gallon standards:

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

(2) Cetane index or aromatic content, as follows:

(i) A minimum cetane index of 40; or

(ii) A maximum aromatic content of 35 volume percent.

(b) **Beginning June 1, 2010.** Except as otherwise specifically provided in this subpart, all NR and LM diesel fuel is subject to the following per-gallon standards:

(1) Sulfur content.

(i) 15 ppm maximum for NR diesel fuel.

(ii) 500 ppm maximum for LM diesel fuel.

(2) Cetane index or aromatic content, as follows:

(i) A minimum cetane index of 40; or

(ii) A maximum aromatic content of 35 volume percent.

(c) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1 for the diesel emergency generator (EG-01), except as otherwise specified in 40 CFR Part 60, Subpart IIII.

(d) Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(1) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

(e) Pursuant to 326 IAC 6-2-4, indirect heating units constructed after September 21, 1983, when the total source maximum operating capacity rating (Q) is less than 10 MMBtu/hr, particulate matter emissions (Pt) shall not exceed 0.6 lb/MMBtu.

Therefore, each natural gas-fired boiler (B-01 and B-02), shall not exceed a particulate matter emission rate of 0.6 lb/MMBtu.

- (f) Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), the Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right of way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).
- (g) Pursuant to the Code of Indianapolis and Marion County, Chapter 511, this registration will be subject to annual operating fees.

An authorized individual shall provide an annual notice (see page 12 of 12 of this document) to IDEM, OAQ and OES, that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

**Indiana Department of Environmental Management
Office of Air Quality
Compliance Data Section
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 46204-22514**

and

**Indianapolis Office of Environmental Services
Air Compliance
2700 South Belmont Avenue
Indianapolis, Indiana 46221**

no later than March 1 of each year, with the annual notice being submitted in the format attached on the next page of this document.

This is the first air approval issued to this source. The source may operate according to 326 IAC 2-5.5.

An application or notification shall be submitted in accordance with 326 IAC 2 to IDEM, OAQ and OES if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Carmen Bugay at (317) 327-2512.

Sincerely,

Original signed by,

Felicia A. Robinson
Administrator

FAR/cmb

cc: Andrew Dick, Esquire, Hall Render Killian Heath & Lyman
Mindy Hahn, IDEM, OAQ
Marion County Health Department
OES files (3 copies)

Registration Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3).

Company Name:	Seton Specialty Hospital
Address:	8050 Township Line Road
City:	Indianapolis, Indiana 46260
Phone #:	(317) 582-8566
Registration #:	R 097-24957-00618

Certification by the Authorized Individual
I hereby certify that is still in operation and is in compliance with the requirements of this Registration, R 097-24957-00618.
Name (typed):
Title:
Signature:
Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES**

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name:	Seton Specialty Hospital
Source Location:	8050 Township Line Road, Indianapolis, Indiana 46260
County:	Marion
SIC Code:	8069
Operation Permit No.:	R 097-24957-00618
Permit Reviewer:	Carmen Bugay

The Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the Indianapolis Office of Environmental Services (OES) have reviewed an application from Seton Specialty Hospital, a long term acute care rehabilitation hospital, relating to the construction and operation of combustion equipment.

Permitted Emission Units and Pollution Control Equipment

There are no permitted emission units at this source during this review process.

Unpermitted Emission Units and Pollution Control Equipment

- (a) One (1) Bryan natural gas fired boiler with #2 fuel oil as back-up, identified as emission unit B-01, with a maximum heat input capacity of 4 million Btu per hour (MMBtu/hr), constructed and operational May 2007, utilizing no emission control and exhausting to a stack identified as S-01.
- (b) One (1) Bryan natural gas fired boiler with #2 fuel oil as back-up, identified as emission unit B-02, with a maximum heat input capacity of 4 million Btu per hour (MMBtu/hr), constructed and operational May 2007, using no emission control and exhausting to a stack identified as S-02.
- (a) One (1) Cummins diesel fired reciprocating, 4-cycle rich-burn, 12 cylinder (2.54 liter displacement/cylinder) internal combustion engine utilized as back-up emergency generator, identified as emission unit EG-01, with a maximum power output of 1,490 horsepower (hp), manufactured in 2006 and operational May 2007, using no emission control and exhausting to the atmosphere.

Existing Approvals

The source has no prior approvals.

Enforcement Issue

- (a) IDEM and OES are aware that equipment has been constructed prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled "Unpermitted Emission Units and Pollution Control Equipment".
- (b) IDEM and OES are reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Administrator that the construction and operation be approved. This recommendation is based on the following facts and conditions:

An administratively complete application for the purposes of this review was received on August 16, 2007. Additional information was submitted by the applicant on June 1, June 22, July 17, July 25, July 27, July 30, August 7, August 17, and September 20, 2007.

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

Emission Calculations

See Appendix A (page 1 through 6) of this document for detailed emission calculations.

Potential to Emit Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential to Emit (tons/yr)
PM	0.76
PM-10	0.65
SO ₂	12.17
VOC	0.46
CO	5.16
NO _x	13.95

HAPs	Potential to Emit (tons/yr)
Any Single HAP	Negligible (below 0.1)
Combination HAPs	Negligible (below 0.1)

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of SO₂ and NO_x are each greater than ten (10) tons per year and less than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5.5. A registration will be issued.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3. A registration will be issued.
- (c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	Attainment
PM2.5	Nonattainment
SO ₂	Maintenance attainment
NO _x	Attainment
8-hour Ozone	Basic nonattainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability – Entire Source section.
- (b) Marion County has been classified as nonattainment for PM_{2.5} in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM_{2.5} emissions, it has directed states to regulate PM-10 emissions as a surrogate for PM_{2.5} emissions, pursuant to the Nonattainment New Source Review (NSR) requirements. See the State Rule Applicability – Entire Source section.
- (c) Marion County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.
- (d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision revoking the one-hour ozone standard in Indiana.

Source Status

New Source PSD Definition and Emission Offset (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Potential to Emit (tons/yr)
PM	0.76
PM-10	0.65
SO ₂	12.17
VOC	0.46
CO	5.16
NO _x	13.95

HAPs	Potential to Emit (tons/yr)
Any Single HAP	Negligible (below 0.1)
Combination HAPs	Negligible (below 0.1)

- (a) This new source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.
- (b) This new source is not a major stationary source because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or greater. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons per year.

This is the first air approval issued to this source.

Federal Rule Applicability

- (a) Even though each boiler (B-01 and B-02) was constructed after June 9, 1989, the requirements of the New Source Performance Standard (NSPS) and 326 IAC 12 (40 CFR Part 60, Subpart Dc), are not included for each boiler, since each boiler's maximum heat input capacity is less than 10 million British thermal units (MMBtu) per hour.
- (b) The emergency generator EG-01 is subject to the NSPS provisions of 40 CFR Part 60, Subpart IIII, (40 CFR 60.4200 - 4209), Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, because it was constructed after July 11, 2005, and manufactured after April 1, 2006.

Nonapplicable portions of the NSPS will not be included in the permit. The Permittee shall comply with the provisions of this subpart for the emergency generator (EG-01) as follows:

- (1) 40 CFR 60.4200(a)(2)
- (2) 40 CFR 60.4200(a)(3)
- (3) 40 CFR 60.4200(b)
- (4) 40 CFR 60.4205(a)
- (5) 40 CFR 60.4206
- (6) 40 CFR 60.4207(a)
- (7) 40 CFR 60.4207(b)
- (8) 40 CFR 60.4207(c)
- (9) 40 CFR 60.4208
- (10) 40 CFR 60.4209(a)
- (11) 40 CFR 60.4211(a)
- (12) 40 CFR 60.4211(b)
- (13) 40 CFR 60.4211(c)
- (14) 40 CFR 60.4211(e)
- (15) 40 CFR 60.4212
- (16) 40 CFR 60.4214(b)
- (17) 40 CFR 60.4218
- (18) 40 CFR 60.4219
- (19) Tables 1, 5, and 8

- (c) The emergency generator EG-01 is subject to the federal provisions of 40 CFR 80, (Regulation of Fuels and Fuel Additives) Subpart I (40 CFR 80.510 (a) and (b)), Motor Vehicles, NonRoad, Locomotive, and Marine Diesel Fuel; and referenced in NSPS 40 CFR Part 60, Subpart IIII (40 CFR 60.4200-4219), Standards of Performance for Stationary Compression Ignition Internal Combustion Engines), because it was constructed after July 11, 2005, and manufactured after April 1, 2006.

Portions of these federal provisions will not be included in the permit. The Permittee shall comply with the provisions of this subpart for the emergency generator (EG-01) as follows:

- (1) 40 CFR 80.510 (a)
(2) 40 CFR 80.510 (b)
- (d) The provisions of 40 CFR 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the emergency generator EG-01, except when otherwise specified in 40 CFR 60, Subpart IIII.
- (e) No other NSPS (40 CFR Part 60 and 326 IAC 12) are included in this permit.
- (f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters 40 CFR 63, Subpart DDDDD, are not included for each boiler (B-01 and B-02) because this source is not a major source of Hazardous Air Pollutants (HAP).
- (g) The requirements of 40 CFR Part 63, Subpart ZZZZ for Stationary Reciprocating Internal Combustion Engines (RICE), are not included for the emergency generator (EG-01). The source does not own or operate a stationary RICE which is located at a major source of HAP emissions (defined as a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons or 9.07 megagrams or more per year; or any combination of HAP at a rate of 25 tons or 22.68 megagrams or more per year).
- (h) No other NESHAP (40 CFR Part 61, 63 and 326 IAC 14, and 20) are included in this permit.

State Rule Applicability – Entire Source

326 IAC 1-7 (Stack Height Provisions)

This source does not have potential or actual particulate matter or sulfur dioxide emissions greater than twenty (25) tons per year. Therefore, the source is not subject to this regulation.

326 IAC 2-1.1-3 (General Provisions - Exemptions)

This new source has a potential to emit (PTE) of the regulated pollutants for the overall source that exceeds threshold requirements under this rule. Therefore, operation of the overall source is not exempt and is required to have a registration under this regulation.

326 IAC 2-1.1-5 (Nonattainment New Source Review (NSR))

This source is not major under nonattainment NSR because it has the potential to emit less than 100 tons of PM-10 (as surrogate for PM2.5). Therefore, the nonattainment NSR requirements are not applicable.

326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements)

This new source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

326 IAC 2-3 (Emission Offset)

This new source is not a major stationary source because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or greater. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants - New source toxics control)

This source is not a major source of HAPs, since it has the potential to emit less than ten (10) tons per year for single HAP and twenty-five (25) tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-5.5-1 (Registrations)

Pursuant to 326 IAC 2-5.5-1(b)(1), the source's potential to emit (PTE) sulfur dioxide and nitrogen oxides is greater than 10 but less than 25 tons per year. Therefore, it is subject to this regulation.

326 IAC 2-6 (Emission Reporting)

This source is not located in Lake or Porter Counties, is not subject to a Part 70 Permit program, and does not emit lead into the ambient air at levels equal to or greater than five (5) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions Limitations)

Pursuant to 326 IAC 6-4, the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate this regulation.

326 IAC 6-5.1-1 (Particulate Matter Limitations except Lake County)

Although the source is located in Marion County, it does not have the potential to emit 100 tons per year or greater of particulate matter; and/or actual emissions of 10 tons or more per year of particulate matter. In addition, the source is not one of the sources listed in 326 IAC 6.5-6 (formerly 326 IAC 6-1-12). Therefore, 326 IAC 6.5-1-1 (formerly 6-1), does not apply.

326 IAC 8-1-6 (Volatile Organic Compound Rules: New facilities; general reduction requirements)

The source was constructed after January 1, 1980, but does not have the PTE of volatile organic compounds of 25 tons or more per year. Therefore, 326 IAC 8-1-6 does not apply.

State Rule Applicability - Individual Facilities

326 IAC 6-2-4 (Particulate Emissions Limitations for Sources of Indirect Heating)

Each natural gas fired boiler (B-01 and B-02), is subject to the provisions of 326 IAC 6-2-1(d) and 326 IAC 6-2-4, because each boiler is a source of indirect heating, is located in Marion County, and is constructed and installed after September 1, 1983.

Pursuant to 326 IAC 6-2-4, indirect heating units constructed after September 21, 1983, when the total source maximum operating capacity rating (Q) is less than 10 MMBtu/hr, particulate matter emissions (Pt) shall not exceed 0.6 lb/MMBtu.

Therefore, each natural gas-fired boiler (B-01 and B-02) shall not exceed a particulate matter emission rate of 0.6 lb/MMBtu.

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-1(b)(1), combustion from indirect heating is exempt from this regulation. Therefore, this regulation is not applicable to the boilers (B-01 and B-02). 326 IAC 6-3-1(b)(13) states that trivial activities as defined in 326 IAC 2-7-1(40) are exempt from the requirements of 326 IAC 6-3. Since hospital emergency generators are listed under 326 IAC 2-7-1(40)(K), 326 IAC 6-3 is not applicable to emission unit EG-01.

326 IAC 7-1.1-1 (Sulfur Dioxide Emissions)

326 IAC 7-1.1 is not applicable to each boiler (B-01 and B-02) and emergency generator (EG-01), since each emission unit has a potential to emit sulfur dioxide of less than twenty-five (25) tons per year.

Conclusion

The construction and operation of this specialty hospital facility shall be subject to the conditions of Registration, R 097-24957-00618.

**Appendix A: Emissions Calculations
 Natural Gas Combustion Only
 MM BTU/HR <100
 Small Industrial Boiler**

Company Name: Seton Specialty Hospital
Address City IN Zip: 8050 Township Line Rd., Indianapolis, Indiana 46260
Permit Number: R 097-24957-00618
Reviewer: Carmen Bugay
Date: July 5, 2007

Heat Input Capacity
 MMBtu/hr

Potential Throughput
 MMCF/yr

Emission Units: Boilers B-01 & B-02

8.0

70.1

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx 100.0 **see below	VOC	CO
Potential Emission in tons/yr	0.1	0.3	0.0	3.5	0.2	2.9

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
 MMBtu = 1,000,000 Btu or 1,000 MBH x 1,000/hr
 MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 2 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
 Natural Gas Combustion Only
 MM BTU/HR <100
 Small Industrial Boiler
 HAPs Emissions**

Company Name: Seton Specialty Hospital
Address City IN Zip: 8050 Township Line Rd., Indianapolis, Indiana 46260
Permit Number: R 097-24957-00618
Reviewer: Carmen Bugay
Date: July 5, 2007

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	7.358E-05	4.205E-05	2.628E-03	6.307E-02	1.191E-04

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	1.752E-05	3.854E-05	4.906E-05	1.332E-05	7.358E-05

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#2 Fuel Oil

Company Name: Seton Specialty Hospital
Address, City IN Zip: 8050 Township Line Rd., Indianapolis, Indiana 46260
Permit No.: R 097-24957-00618
Reviewer: Carmen Bugay
Date: July 5, 2007

Emission Units: B-01 & B-02

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur 0.3
8	500.6	

	Pollutant				
Emission Factor in lb/kgal	PM*	SO2	NOx	VOC	CO
	2.0	42.6 (142.0S)	20.0	0.34	5.0
Potential Emission in tons/yr	0.5	10.7	5.0	0.1	1.3

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)

*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

See page 4 for HAPs emission calculations.

Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#2 Fuel Oil
HAPs Emissions

Company Name: Seton Specialty Hospital
Address, City IN Zip: 8050 Township Line Rd., Indianapolis, Indiana 46260
Permit Number: R 097-24957-00618
Reviewer: Carmen Bugay
Date: July 5, 2007

HAPs - Metals					
Emission Factor in lb/mmBtu	Arsenic 4.0E-06	Beryllium 3.0E-06	Cadmium 3.0E-06	Chromium 3.0E-06	Lead 9.0E-06
Potential Emission in tons/yr	0.0001	0.0001	0.0001	0.0001	0.0003

HAPs - Metals (continued)				
Emission Factor in lb/mmBtu	Mercury 3.0E-06	Manganese 6.0E-06	Nickel 3.0E-06	Selenium 1.5E-05
Potential Emission in tons/yr	0.0001	0.0002	0.0001	0.0005

Methodology

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

Appendix A: Emission Calculations
Internal Combustion Engines - Diesel Fuel

Company Name: Seton Specialty Hospital
Address City IN Zip: 8050 Township Line Rd., Indianapolis, Indiana 46260
Permit No: R 097-24957-00618
Reviewer: Carmen Bugay
Date: July 5, 2007

A. Emissions calculated based on heat input capacity (MMBtu/hr)

Heat Input Capacity
MM Btu/hr

Horsepower (hp)

S= 0.5 = WEIGHT % SULFUR

10.43 1490.0

Emission Factor in lb/MMBtu	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	0.100	0.0573	0.5050 (1.01S)	3.200 **see below	0.090	0.850
Potential Emission in tons/yr	0.261	0.149	1.317	8.344	0.235	2.216

Note*: No information was given regarding which method was used to determine the PM emission factor or whether condensable PM is included. The PM10 emission factor is filterable and condensable PM10 combined. PM10 emission factor in lb/hp-hr is not provided in the Supplement B update of AP-42.

**NOx emissions: uncontrolled = 3.2 lb/MMBtu, controlled with ignition timing retard = 1.9 lb/MMBtu

Note***: The average conversion factor of 1hp-hr = 7,000Btu. Emission Factors are from AP 42 (Supplement B 10/96)Table 3.4-1 and Table 3.4-2. 1 hp-hr = 7000 Btu, AP42 (Supplement B 10/96), Table 3.3-1, Footnote a.

B. Emissions calculated based on output rating (hp)

Heat Input Capacity
Horsepower (hp)

Potential Throughput
hp-hr/yr

S= 0.5 = WEIGHT % SULFUR

1490.0 745000.0
 10.43 *** (mmBtu/hr)

Emission Factor in lb/hp-hr	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	0.0007	not provided	0.0040 (.00809S)	0.024 **see below	0.00071	0.00550
Potential Emission in tons/yr	0.261	0.000	1.507	8.940	0.263	2.049

Note*: No information was given regarding which method was used to determine the PM emission factor or whether condensable PM is included. The PM10 emission factor is filterable and condensable PM10 combined. PM10 emission factor in lb/hp-hr is not provided in the Supplement B update of AP-42.

Note**: NOx emission factor: uncontrolled = 0.024 lb/hp-hr, controlled by ignition timing retard = 0.013 lb/hp-hr

Note***: The average conversion factor of 1hp-hr = 7,000Btu. Emission Factors are from AP 42 (Supplement B 10/96)Table 3.4-1 and Table 3.4-2. 1 hp-hr = 7000 Btu, AP42 (Supplement B 10/96), Table 3.3-1, Footnote a.

Methodology

Potential Throughput (hp-hr/yr) = hp * 500 hr/yr

MMBtu/hr = Potential Throughput (hp-hr/yr) * 7,000Btu/1,000,000

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 500 hr/yr / (2,000 lb/ton)

Emission (tons/yr) = [Potential Throughput (hp-hr/yr) x Emission Factor (lb/hp-hr)] / (2,000 lb/ton)

**Appendix A: Emissions Calculations
Summary**

Company Name: Seton Specialty Hospital
Address, City IN Zip: 8050 Township Line Rd., Indianapolis, Indiana 46260
Permit No.: R 097-24957-00618
Reviewer: Carmen Bugay
Date: July 5, 2007

All Emission Units: B-01 & B-02 & Em.Gen (EG-01)

POLLUTANT	Potential To Emit (PTE) in ton/yr								
	PM	PM10	SO2	NOx	VOC	CO	HAP single		HAPs comb.
Combustion: 1) Natural Gas	0.067	0.266	0.021	3.504	0.193	2.943	Hexane (gas)	0.0631	0.0661
Combustion: 2) Fuel Oil (Bkup)	0.501	0.501	10.662	5.006	0.085	1.251	Selenium (oil)	0.0005	0.0017
Maximum Values	0.501	0.501	10.662	5.006	0.193	2.943			0.0661
Combustion: 3) Emerg.Gen.-diesel	0.261	0.149	1.317	8.344	0.235	2.216			negligible
	0.261	0.000	1.507	8.940	0.263	2.049			negligible
Maximum Values	0.261	0.149	1.507	8.940	0.263	2.216			
Total Worst Case PTE	0.76	0.65	12.17	13.95	0.46	5.16	Hexane	0.06	0.07