

G5066

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection *FY 2015 Sched. Insp.*

G506630172

FACILITY: ST JOSEPH MERCY HOSPITAL		SRN / ID: G5066
LOCATION: 44405 WOODWARD AVE, PONTIAC		DISTRICT: Southeast Michigan
CITY: PONTIAC		COUNTY: OAKLAND
CONTACT: <i>JF</i>		ACTIVITY DATE: 06/19/2015
STAFF: Iranna Konanahalli	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: FY 2015 level 2 scheduled annual inspection of St. Joseph Mercy Hospital ("St. Joseph" or "SJM" or "the hospital")		
RESOLVED COMPLAINTS:		

G5066 - SAR 2015 06 19

St. Joseph Mercy Hospital (G5066)
44405 Woodward Avenue
Pontiac, Michigan 48341-5023
(fka 900 Woodward Avenue, Pontiac, Michigan 48053)

Permit-to-Install No.: 216-07A dated April 22, 2015 (ROP opt-out for NOx < 89.9 tons per year via natural gas usage and Diesel hours of operation limits)

PTI revision: PTI No. 216-07 (89 tpy SOx limit via SC FG-Boilers, 1.3 limit 0.5% sulfur (S) and SC FG-Boilers, 1.4 limit 2,269,800 gal / year diesel) → PTI No. 216-07A (FG-Facility, I.1: 89.9 tpy NOx limit via SC FG-Facility, II.1 933.6 MM SCF per year NG usage, SC FG-Facility, III.1 500 hours / year operation limit using Diesel for both boilers and generators) with addition of six existing exempt emergency engines as well as three proposed emergency engines and three proposed boilers.

Void: PTI Nos. 209-711 because the incinerators do not exist anymore; 216-07 dated November 29, 2007 (ROP opt-out for SOx < 89 tons per year) – revised to include six existing exempt emergency engines as well as three proposed emergency engines and three proposed boilers with NOx limit.

VN: AQD issued Violation Notice dated March 05, 2007, for Boiler NSPS Dc and Rule 336.1201 (Permit-to-Install) concerning three identical Cleaver Brooks boilers (25 MM BTU / hour).

Three identical Cleaver Brooks boilers (25 MM BTU / hour, installed 1995, after June 09, 1989) with fuel oil backup are subject to: NSPS Dc, New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR, Part 60, Subpart Dc). Three Bryan boilers (7 MM BTU / hour < 10 MM BTU / hour, hot water circulating, space heating), other yet smaller boilers and four domestic hot water boilers are not subject to NSPS Dc due to their small sizes (<< 10 MM BTU / hour).

PSD: Not subject because 2014 project (addition of boilers and generators) was not a significant change pursuant to PSD regulations.

GHG: 60,216 tons per year of greenhouse gases (GHG) per PTI 216-07A calculations.

Boilers are NOT subject to: NESHAP / MACT 6J, 40 CFR Part 63, Subpart JJJJJJ / 6J National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers, Page 15554, Federal Register / Vol. 76, No. 54 / Monday, March 21, 2011 / Rules and Regulations / Final rule. This rule does NOT apply

to boilers that burn only gaseous fuels or any solid waste. The permit (PTI No. 216-07A, SC FG-Facility, III.1 500 hours / year operation) restricts Diesel usage to 500 hours per year. In addition, the permit (PTI No. 216-07A, SC FG-Boilers, II.2: 48 hours / year operation with Diesel) restricts Diesel usage to 48 hours per year. Hence, the boilers are deemed to be natural gas only (40 CFR 63.11237).

The hospital's emergency generators (manufactured after April 2006) are subject to: **NSPS IIII or 4I, New Source Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 39154 Federal Register / Vol. 71, No. 132 / Tuesday, July 11, 2006 / Rules and Regulations / Final Rule.**

The hospital's emergency generators may be subject to: **RICE MACT 4Z, Area Source NESHAP / MACT ZZZZ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines and National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines / Final rule (Page 3568, Federal Register / Vol. 73, No. 13 / Friday, January 18, 2008 / Rules and Regulations / Final rule).** AQD has not and will not evaluate compliance with Area Source MACT 4Z until it obtains delegation from US EPA for Area Source MACT 4Z due to funding issues.

Not subject to: Area Source NESHAP / MACT 5W: Ethylene Oxide (EO) sterilizers are subject to Area Source NESHAP / MACT 5W, National Emission Standards for Hospital Ethylene Oxide Sterilizers, 40 CFR Part 63, Subpart WWWW, Page 73611, Federal Register / Vol. 72, No. 248 / Friday, December 28, 2007 / Rules and Regulations / Final rule. The hospital does not have EO sterilizers. Ethylene Oxide Sterilizers were removed in 1998.

On April 29 and June 19, 2015, I conducted a level 2 **scheduled** annual inspection of St. Joseph Mercy Hospital ("St. Joseph" or "SJM" or "the hospital") located at 44405 Woodward Avenue, Pontiac, Michigan 48341-5023 (fka 900 Woodward Avenue, Pontiac, Michigan 48053 which changed due to renumbering of street numbers by the City of Pontiac about 1995). The inspection was conducted to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 (PA 451); Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) administrative rules; and PTI No. 216-07A dated April 22, 2014.

During the inspection, Mr. Michael T. Tremblay (Phone: 248-858-3075; Fax: 248-858-3738; Pager: 248-725-1153; E-mail: Mike.Tremblay@STJOESHEALTH.ORG), Asst. Engineering Director, assisted me.

About February 2008, Mr. Donald Wloszek (Phone: 248-858-3075; Fax: 248-858-3738; E-mail: wloszekd@trinity-health.org) separated from the hospital.

Ethylene Oxide Sterilizers

Per Ms. Sarah Elliott (Phone: 248-858-6859), RN, Manager, Sterile Processing Unit, Ethylene Oxide Sterilizers were removed in 1998. The EO sterilizers were replaced by Gas Plasma (STERRAD Machine) Units. This information is based upon February 15, 2007, inspection.

Hospital Sterilizers are not subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) for Ethylene Oxide Commercial Sterilization and Fumigation Operations (40 CFR, Part 63, Subpart O). But the Hospital Sterilizers are subject to Area Source

MACT. At any rate, the sterilizers are removed from the hospital.

Permit-to-Install Number 209-711 (Incinerator)

AQD must void Permit-to-Install Number 209-711 because the incinerators do not exist any more based upon FY 2007 inspection.

PTI No. 216-07A dated April 22, 2014

This permit covers both predominantly natural gas fired boilers (PTI No. 216-07A, SC FG-Boilers, II.2: 48 hours / year operation with Diesel – deemed natural gas only) and Diesel emergency generators (CI RICE).

Emission units:

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EUBOILER1	A natural gas/distillate oil fired Cleaver Brooks package boiler with a maximum rated heat input capacity of 25 million Btu per hour. Exhausts to the communal stack, SVBOILERS.	11-29-2007 Installed 1995	FG-BOILERS
EUBOILER2	A natural gas/distillate oil fired Cleaver Brooks package boiler with a maximum rated heat input capacity of 25 million Btu per hour. Exhausts to the communal stack, SVBOILERS.	11-29-2007 Installed 1995	FG-BOILERS
EUBOILER3	A natural gas/distillate oil fired Cleaver Brooks package boiler with a maximum rated heat input capacity of 25 million Btu per hour. Exhausts to the communal stack, SVBOILERS.	11-29-2007 Installed 1995	FG-BOILERS
Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.			
There are clerical errors in the permit table: NA for FG-BOILERS.			

FLEXIBLE GROUPS: FG-Boilers and FG-Facility

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGBOILERS	Three Cleaver Brooks boilers each with a maximum rated heat input capacity of 25 MMBtu per hour. They are natural gas-fired boilers with distillate oil-firing backup capabilities. They all exhaust to the communal stack, SVBOILERS.	EUBOILER1, EUBOILER2, EUBOILER3
FGFACILITY	All process equipment source-wide including equipment covered by other permits, grand-fathered	N/A

equipment and exempt equipment.

As of June 2015, while FG-BOILERS includes three identical boilers (Cleaver Brooks CB Packaged Boiler, 25 million BTU per hour heat input, 600 HP, 150 psi steam, natural gas fired boiler with fuel oil (167.5 gallons per hour) back-up capability, installed in 1995), FG-FACILITY includes 3 CB boilers (FG-Boilers, again), three identical Bryan boilers (7 MM BTU per hour, Bryan hot water circulating, space heating), four domestic hot water boilers (Laars Pennant 0.5 MM BTU per hour), two identical tubeless Fulton boilers (1.047 MM BTU per hour, Fulton Classic Vertical steam producing boilers for humidification), nine Diesel emergency generators (CI RICE: three 1 MW Caterpillar, one 0.75 MW Cummins, one 0.455 MW Kohler, three 1 MW Kohler, one 0.105 MW Kohler), etc.

In 1995, after June 9, 1989, St. Joseph Mercy Hospital (SJM) installed three identical boilers (Cleaver Brooks CB Packaged Boiler, 25 million BTU per hour heat input, 600 HP, 150 psi steam, natural gas fired boiler with fuel oil (167.5 gallons per hour) back-up capability). As the boilers of capacity 25 (greater than 10) million BTU per hour, with fuel oil back-up, were installed after June 9, 1989 (1995), The boilers are subject to federal New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR, Part 60, Subpart Dc or NSPS Dc). All boilers were installed in violation of Rule 336.1201 (Permit-to-Install) and were operating in violation of NSPS Dc. Pursuant to Rule 336.1282(b), the fuel oil fired boilers (up to 20 million BTU per hour) are exempt from Rule 336.1201 (Permit-to-Install) subject to the condition that fuel oil (limited to No.1 and No.2) burnt has sulfur content no greater than 0.40 percent by mass. It may be noted that NSPS Dc allows sulfur content up to 0.50 percent sulfur by mass (0.5 pounds of sulfur dioxide per million BTU heat input). MDEQ-AQD issued March 5, 2007, letter of violation for operating the boilers in violation of Rule 336.1201 and NSPS Dc.

As a result of the March 5, 2007, letter of violation, St. Joseph obtained ROP opt PTI No. 216-07. As a result of personnel changes at the hospital, St. Joseph did not comply with the conditions of the permit and nor did it submit MAERS-2007 until June 2008 (due March 15). The MAERS-2007 was submitted upon advising to do so.

St. Joseph has failed to comply with NSPS Dc Notification requirements, which is required pursuant to Special Condition No. 1.5 (PTI No. 216-07, SC1.5). Mr. Tremblay stated that he would send the notification during my January 2009 inspection. In addition, St. Joseph failed to comply with NSPS Dc and SC1.6 monthly fuel usage records. On January 11, 2009, Mr. Tremblay sent me a spreadsheet format for natural gas and diesel usage (PTI No. 216-07, SC1.6).

PTI revision: PTI No. 216-07 → PTI No. 216-07A

St. Joseph revised the permit to become a ROP opt-out permit for NOx (PTI No. 216-07A, FG-Facility, I.1: 89.9 tpy NOx limit via SC FG-Facility, II.1 933.6 MM SCF per year NG usage, SC FG-Facility, III.1 500 hours / year operation limit using Diesel for both boilers and generators). In addition, St. Joseph obtained Area Source Boiler NESHAP / MACT 6J opt-out conditions via restricting Diesel usage in boilers to 48 hours per year (PTI No. 216-07A, SC-FG-Boilers, II.2 48 hours / year operation with Diesel). Hence, the boilers are deemed to be natural gas only, which are exempt from Area Source NESHAP / MACT 6J (40 CFR 63.11237).

During this 2014 permit revision (PTI No. 216-07 → PTI No. 216-07A), MDEQ-AQD Permit

Section did NOT perform Rule 201 New Source Review (NSR) concerning Boiler NSPS Dc, CI RICE NSPS 4I, CI RICE NESHAP / MACT 4Z because six existing exempt emergency engines as well as three proposed emergency engines and three proposed boilers were exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rules 336.1282(b)(ii) (boilers) and 336.1285(g) (CI RICE), respectively. The Permit Section issued only ROP opt-out permit.

Boilers

As of June 2015, the boilers are:

1. Three (3) identical Cleaver Brooks CB Packaged Boilers (25 million BTU per hour, 600 HP, 150 psi steam, natural gas fired boiler with fuel oil (167.5 gallons per hour) back-up capability, installed: Feb 28, 1995). Model CB-200-600HP. Serial Nos. L-93790, L-93791, L-93792.
2. Three (3) identical Bryan boilers (7 million BTU per hour, Built 2012, 847 sq. ft. heating surface, hot water circulating, space heating, NG only). Model RV700-W-F-DGO.
3. Two (2) identical tubeless Fulton boilers (1.047 MM BTU per hour, Fulton Classic Vertical Tubeless steam producing boilers for humidification, 75 sq. ft. heating surface, Built 2012, NG only). Model IOS 25.
4. Four (4) identical Laars Pennant domestic hot water heaters (0.5 million BTU per hour, NG only). Model PNC V0750NACK22XN.
5. Two (2) identical Cleaver Brooks CB Package Boilers (4.185 million BTU per hour, Built 1997) for space heating and sterilization. Model CB 700-100HP. Serial Nos. L-96252, L-96254.

Total: 14 heaters and boilers for space heating and humidification (Fulton). While 3 large CB boilers belong to both FG-Boilers (Boilers1, Boiler2 & Boiler3) & FG-Facility, rest of the boilers belong to FG-Facility only. Only three large boilers (25 million BTU per hour) are subject NSPS Dc; other small boilers are too small and are exempt from NSPS Dc (<< 10 million BTU per hour).

The boilers are deemed to be natural gas fired only (PTI No. 216-07A, SC FG-Boilers, II.2: 48 hours / year operation using Diesel) and, hence, are not subject to Area Source NESHAP / Boiler MACT 6J. However, three identical Cleaver Brooks boilers (25 MM BTU / hour, installed 1995, after June 09, 1989) with fuel oil backup are subject to NSPS Dc.

Emergency diesel generators

As of June 2015, nine Diesel emergency generators are:

1. Three (3) 1 MW Caterpillar. One 1 MW, 1250 kVA, installed 2002, Engine Model 3508 (not subject to NSPS 4I) and two identical 1 MW, 1250 kVA, Engine Model C32 (subject to NSPS 4I (Mfg after Apr. 2006)), installed / Mfg 2009

2. One (1) 0.455 MW Caterpillar. One 0.455 MW, 568 kVA
3. One (1) 0.75 MW Cummins, 938 kVA, installed 1980, Generator Model 682 FDR7030GG, Engine family 0023, Engine Model KTA 2300051, Engine # 33105808
4. Three (3) identical 1 MW Kohler 1000 Power Systems Generators (1-800-544-2444), 1 MW, 1250 kVA, max. 127 gallons ULSD per hour. Model No. 1000 R EOZDE Mfg. March 2013, Serial No. SGM 3274T86.
5. One (1) 0.105 MW Kohler, Model 160 ROZJ Serial No. 0640708. John Deer Engine.

Total: 9 emergency generators (CI RICE) with 500 hours per year operation limits.

1,000 kW (1 MW) generator is equivalent to 8.2 million BTU per hour heat input based upon 60 gallons per hour fuel (diesel) consumption at peak load and 137,000 BTU per gallon of diesel. Therefore, the generators (<10 million BTU per hour heat input internal combustion engines) are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 285(g).

PTI No. 216-07A compliance

Only off-road ultra-low sulfur (15 ppm sulfur) diesel (ULSD 15 ppm S) is used in both boilers and generators. One such off-road ULSD shipment was received on May 23, 2014, from Altas Oil Co. of Taylor, Michigan (SJMHA Acct. No. 66714445; 10,000 gallons, \$/gallon; 3.189; \$38,421.50; Invoice # 15832121-R)

FG-BOILERS

The hospital burns only pipeline quality sweet natural gas and off-road Ultra Low Sulfur Diesel (ULSD 15 ppm S). ULSD is used for biannual testing only (one half hour testing, once per six months) (PTI No. 216-07A, FG-Boilers, SC II.1: NG and Diesel only and II.3: 0.5 %S in Diesel). The permit restricts Diesel usage in large CB boilers to 48 hours per year in (PTI No. 216-07A, FG-Boilers, SC II.2: 48 hours / year using Diesel) in order to be exempt from NESHAP / Boiler MACT 6J (40 CFR 63.11237) and this limit is complied with by firing ULSD for testing only (one half hour testing, once per six months). FG-Boilers refer to three (3) identical CB 25 MM BTU per hour boilers.

I asked Mr. Mike Tremblay to submit NSPS Dc notification (PTI No. 216-07A, FG Boilers, SC VI.1: NSPS notification). Only off-road ULSD 15 ppm S is used for biannual testing only (PTI No. 216-07A, FG-Boilers, SC VI.2,3,4: fuel usage, sulfur content, %S certification, hours burning Diesel). Only NSPS requirement for NG only is usage records and such records are reported via annual MAERS (PTI No. 216-07A, FG-Boilers, SC IX).

I asked Mr. Mike Tremblay to keep MS Excel spreadsheet of fuel usage and emission calculations.

FG-FACILITY

FG-FACILITY consists of boilers and generators.

The hospital complies with NOx limit via fuel usage limits (PTI No. 216-07A, FG-FACILITY, I.1: 89.9 tpy NOx). A compliance with natural gas usage limit is determined via MAERS (PTI No. 216-07A, FG-FACILITY, II.1: 933.6 MM SCF per year natural gas). The hospital burns only pipeline quality sweet natural gas. In addition, the hospital burns in boilers and generators Ultra Low Sulfur Diesel (ULSD 15 ppm S) for testing purposes only (PTI No. 216-07A, FG-FACILITY, III.1: 500 hours / year, VI: records, emission calculations). Generators are tested once per month for one half hour; once per year at full load lasting 4 hours; i.e., monthly reliability testing and annual full load testing using ULSD. The boilers are tested with ULSD on biannual basis (twice per year).

MAERS-2014

Based upon MAERS-2014, 163.87 MM BTU per CY2014 natural gas is used counting only 3 large CB Boilers and 3 Bryan Boilers (PTI No. 216-07A, FG-FACILITY, II.1: 933.6 MM SCF per year natural gas). Rest of the boilers are small. 26,075 gallons of ULSD is used in emergency generators.

I asked Mr. Mike Tremblay to keep MS Excel spreadsheet of fuel (natural gas and ULSD Diesel) usage and emission calculations. In addition, I asked him to obtain US EPA Certificates for NSPS 4I generators from the vendor and fully comply with the CI RICE NSPS 4I and CI RICE MACT 4Z.

Conclusion

The letter of violation dated March 5, 2007 was issued for failure to comply with Rule 336.1201 and NSPS Subpart Dc. The PTI revised (PTI No. 216-07 → PTI No. 216-07A) to opt-out of both ROP and Boiler MACT 6J.

FYI: LOV

March 5, 2007

CERTIFIED MAIL

Mr. Jack Weiner, President
St. Joseph Mercy Hospital
44405 Woodward Avenue
Pontiac, Michigan 48341-5023

SRN: G5066, Oakland County (63)

Dear Mr. Weiner:

LETTER OF VIOLATION

On February 15, 2007, the Department of Environmental Quality (DEQ), Air Quality Division (AQD), conducted an inspection of St. Joseph Mercy Hospital located at 44405 Woodward Avenue, Pontiac, Michigan 48341-5023 (fka 900 Woodward Avenue, Pontiac, Michigan 48053 which changed due to renumbering of street numbers by the City of Pontiac about 10 years ago). The purpose of this inspection was to determine the facility's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural

Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451).

During the inspection, the following air pollution violations were identified:

Process Description	Rule/Permit Condition Violated	Comments
Cleaver Brooks CB Packaged Boiler No. 1: 25 million BTU per hour, 600 HP, 150 psi steam, natural gas fired boiler with fuel oil (167.5 gallons per hour) back-up capability. Installed: 1995.	New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units. 40 CFR, Part 60, Subparts A and Dc.	St. Joseph Mercy Hospital (SJMh) has failed to comply with these federal standards since 1995.
Cleaver Brooks CB Packaged Boiler No. 2: 25 million BTU per hour, 600 HP, 150 psi steam, natural gas fired boiler with fuel oil (167.5 gallons per hour) back-up capability. Installed: 1995.		
Cleaver Brooks CB Packaged Boiler No. 3: 25 million BTU per hour, 600 HP, 150 psi steam, natural gas fired boiler with fuel oil (167.5 gallons per hour) back-up capability. Installed: 1995.		
Cleaver Brooks CB Packaged Boiler No. 1: 25 million BTU per hour, 600 HP, 150 psi steam, natural gas fired boiler with fuel oil (167.5 gallons per hour) back-up capability. Installed: 1995.	40 CFR, Part 60, Subpart Dc, § 60.44c & § 60.48c and 40 CFR, Part 60, Subpart A, § 60.7 & § 60.8.	SJMh has failed to comply with written notification and initial performance test requirements.
Cleaver Brooks CB Packaged Boiler No. 2: 25 million BTU per hour, 600 HP, 150 psi steam, natural gas fired boiler with fuel oil (167.5 gallons per hour) back-up capability. Installed: 1995.		
Cleaver Brooks CB Packaged Boiler No. 3: 25 million BTU per hour, 600 HP, 150 psi steam, natural gas fired boiler with fuel oil (167.5 gallons per hour) back-up capability. Installed: 1995.		
Cleaver Brooks CB Packaged Boiler No. 1: 25 million BTU per hour, 600 HP, 150 psi steam, natural gas fired boiler with fuel	40 CFR, Part 60, Subpart Dc, § 60.48c (g).	SJMh has failed to keep a record of amount of each fuel combusted during

<p>oil (167.5 gallons per hour) back-up capability. Installed: 1995.</p>		<p>each day⁰.</p>
<p>Cleaver Brooks CB Packaged Boiler No. 2: 25 million BTU per hour, 600 HP, 150 psi steam, natural gas fired boiler with fuel oil (167.5 gallons per hour) back-up capability. Installed: 1995.</p>		
<p>Cleaver Brooks CB Packaged Boiler No. 3: 25 million BTU per hour, 600 HP, 150 psi steam, natural gas fired boiler with fuel oil (167.5 gallons per hour) back-up capability. Installed: 1995.</p>		
<p>Cleaver Brooks CB Packaged Boiler No. 1: 25 million BTU per hour, 600 HP, 150 psi steam, natural gas fired boiler with fuel oil (167.5 gallons per hour) back-up capability. Installed: 1995.</p>	<p>40 CFR, Part 60, Subpart Dc, § 60.48c (d), (e) & (f)</p>	<p>SJMH has failed to obtain fuel supplier certification and keep records of it. Alternatively, SJMH may conduct its own sulfur-in-fuel analyses.</p>
<p>Cleaver Brooks CB Packaged Boiler No. 2: 25 million BTU per hour, 600 HP, 150 psi steam, natural gas fired boiler with fuel oil (167.5 gallons per hour) back-up capability. Installed: 1995.</p>		
<p>Cleaver Brooks CB Packaged Boiler No. 3: 25 million BTU per hour, 600 HP, 150 psi steam, natural gas fired boiler with fuel oil (167.5 gallons per hour) back-up capability. Installed: 1995.</p>		
<p>Cleaver Brooks CB Packaged Boiler No. 1: 25 million BTU per hour, 600 HP, 150 psi steam, natural gas fired boiler with fuel oil (167.5 gallons per hour) back-up capability. Installed: 1995.</p>	<p>Rule 336-1201 (Rule 201) Permit-to-Install</p>	<p>SJMH installed this process without first obtaining a Permit-to-Install.</p>
<p>Cleaver Brooks CB Packaged Boiler No. 2: 25 million BTU per hour, 600 HP, 150 psi steam, natural gas fired boiler with fuel oil (167.5 gallons per hour) back-up capability. Installed: 1995.</p>		
<p>Cleaver Brooks CB Packaged</p>		

<p>Boiler No. 3: 25 million BTU per hour, 600 HP, 150 psi steam, natural gas fired boiler with fuel oil (167.5 gallons per hour) back-up capability. Installed: 1995.</p>		
<p>⁰ Since each boiler is a NSPS Dc (40 CFR, Part 60, Subpart Dc) facility, fuel records shall be maintained separately for each boiler. Pursuant to the United States Environmental Protection Agency's prior determinations, a monthly, instead of daily, fuel usage records are deemed sufficient if only a sulfur-in-fuel compliant fuel is burnt, i.e., pipeline quality sweet natural gas or fuel oil with less than 0.5 percent sulfur. In other words, SJMH shall maintain a fuel record, in a format acceptable to the AQD, of natural gas usage in standard cubic feet (and fuel oil in gallons or pounds if used) per calendar month and year, based upon 12-month rolling time period, as determined at the end of each calendar month.</p>		

Please note that **the AQD will void Permit-to-Install Number 209-711** because the incinerators do not exist any more.

During this inspection, it was noted that you had installed and commenced operation of three unpermitted dual fuel (natural gas, a principal fuel, and fuel oil, a backup fuel) boilers of capacity over 20 million BTU per hour at the hospital facility. The AQD staff advised your staff on February 15, 2007, that this was a violation of Act 451, Rule 201, which states in part:

"A person shall not install, construct, reconstruct, relocate, alter, or modify any process or process equipment, including control equipment pertaining thereto, which may emit an air contaminant, unless a Permit to Install which authorizes such action is issued by the department."

Be advised that Rule 201 requires an air use permit be obtained prior to installation, construction, reconstruction, relocation, or alteration of any process or process equipment which may be a source of an air contaminant.

Be advised that the AQD may initiate appropriate enforcement action for your unpermitted installation and operation of the process equipment. Furthermore, continued operation of unpermitted equipment is not authorized.

St. Joseph Mercy Hospital (SJMH) installed three boilers at the Pontiac Hospital facility. Each boiler has a rated or design capacity of 10 million BTU per hour, or greater. Each boiler was installed after June 9, 1989. These boilers are subject to federal New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR, Part 60, Subpart Dc). Hence, pursuant to Act 451 of 1994, as amended, § 324.5522 (2) (b), SJMH facility is subject to Category II air quality fees. In addition, pursuant to Rule 336.1282(b), the boilers burning sweet natural gas (up to 50 million BTU per hour) are exempt from Rule 336.1201 (Permit-to-Install). Furthermore, pursuant to Rule 336.1282(b), the fuel oil fired boilers (up to 20 million BTU per hour) are exempt from Rule 336.1201 (Permit-to-Install) subject to the condition that fuel oil (limited to No.1 and No.2) burnt has sulfur content no greater than 0.40 percent by mass. It may be noted that NSPS Dc allows sulfur content up to 0.50 percent sulfur by mass (0.5 pounds of sulfur dioxide per million BTU heat input) and the boilers in question have design capacity of 25 (>20) million BTU heat input per hour.

You should immediately initiate necessary actions to correct the cited violations. Additionally, please submit a report of your program for compliance with New Source Performance

Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR, Part 60, Subparts A and Dc) and Rule 201 by March 26, 2007. At a minimum, this report should explain the causes and duration of the violations, whether the violations are ongoing, remedial action taken, and what steps are being taken to prevent a reoccurrence. If the violations are not resolved by the date of your response, describe what equipment you will install, procedures you will implement, processes or process equipment you will shut down, or other actions you will take and by what dates these actions (**a schedule of compliance**) will take place.

Separately, the AQD will send an air quality fee invoice(s). Please promptly pay the required amounts.

Notwithstanding your response to the preceding citations, the AQD may initiate further enforcement action to address violations of state and federal Clean Air Acts, rules and regulations.

Thank you for your attention to resolving the violations cited above and for the cooperation that was extended to me during my inspection of your facility. If you have any questions regarding the violations or the actions necessary to bring your facility into compliance, please call me at the number listed below.

Sincerely,

Iranna S. Konanahalli

Air Quality Division
586-753-3741

ISK:VLL

Enclosure

- cc: Mr. Don Wloszek (CBRE), Systems Maintenance Facilities Manager, St. Joseph Mercy Hospital
- Mr. James Proctor, Director, Buildings and Grounds, St. Joseph Mercy Hospital
- Mr. Gerald Avery, DEQ
- Mr. Thomas Hess, DEQ
- Ms. Teresa Seidel, DEQ
- Mr. Christopher Ethridge, DEQ
- Mr. Richard Taszreak, DEQ
- Mr. Dennis McGeen, DEQ

NAME Iranna S. Konanahalli DATE 07/13/2015 SUPERVISOR CJE