MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

April 5, 2007



STATE REGISTRATION NUMBER M2017

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

 DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203:

 10/12/2006

 DATE PERMIT TO INSTALL APPROVED:
 SIGNATURE:

 4/5/2007
 SIGNATURE:

 DATE PERMIT VOIDED:
 SIGNATURE:

 DATE PERMIT REVOKED:
 SIGNATURE:

PERMIT TO INSTALL

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	Common Abbrevia Common Acronyms	uons / A	Pollutant/Measurement Abbreviations
AQD	Air Quality Division	Btu	British Thermal Unit
ANSI	American National Standards Institute	°C	Degrees Celsius
BACT	Best Available Control Technology	СО	Carbon Monoxide
CAA	Clean Air Act	dscf	Dry standard cubic foot
CEM	Continuous Emission Monitoring	dscm	Dry standard cubic meter
CFR	Code of Federal Regulations	°F	Degrees Fahrenheit
СОМ	Continuous Opacity Monitoring	gr	Grains
EPA	Environmental Protection Agency	Hg	Mercury
EU	Emission Unit	hr	Hour
FG	Flexible Group	H_2S	Hydrogen Sulfide
GACS	Gallon of Applied Coating Solids	hp	Horsepower
GC	General Condition	lb	Pound
HAP	Hazardous Air Pollutant	m	Meter
HVLP	High Volume Low Pressure *	mg	Milligram
ID	Identification	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram
MAP	Malfunction Abatement Plan	NOx	Oxides of Nitrogen
MDEQ	Michigan Department of Environmental Quality	PM	Particulate Matter
MIOSHA	Michigan Occupational Safety & Health Administration	PM-10	Particulate Matter less than 10 microns diameter
MSDS	Material Safety Data Sheet	pph	Pound per hour
NESHAP	National Emission Standard for Hazardous Air Pollutants	ppm	Parts per million
NSPS	New Source Performance Standards	ppmv	Parts per million by volume
NSR	New Source Review	ppmw	Parts per million by weight
PS	Performance Specification	psia	Pounds per square inch absolute
PSD	Prevention of Significant Deterioration	psig	Pounds per square inch gauge
PTE	Permanent Total Enclosure	scf	Standard cubic feet
PTI	Permit to Install	sec	Seconds
RACT	Reasonably Available Control Technology	SO_2	Sulfur Dioxide
ROP	Renewable Operating Permit	THC	Total Hydrocarbons
SC	Special Condition	tpy	Tons per year
SCR	Selective Catalytic Reduction	μg	Microgram
SRN	State Registration Number	VOC	Volatile Organic Compounds
TAC	Toxic Air Contaminant	yr	Year
TEQ	Toxicity Equivalence Quotient		
VE	Visible Emissions		
		1	

Common Abbreviations / Acronyms

* For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (psig).

GENERAL CONDITIONS

- 1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **[R336.1201(1)]**
- 2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent, shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **[R336.1201(4)]**
- 3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **[R336.1201(6)(b)]**
- 4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. [R336.1201(8), Section 5510 of Act 451, PA 1994]
- 5. The AQD District Supervisor shall be notified, in writing, of a change in ownership or operational control of the stationary source or emission unit(s) authorized by this Permit to Install pursuant to R336.1219. The notification shall include all of the information required by R336.1219(1)(a) and (b). In addition, a new owner or operator must submit a written statement pursuant to R336.1219(1)(c), agreeing to and accepting the terms and conditions of this Permit to Install, and shall notify the AQD District Supervisor of any change in the contact person for this Permit to Install. **[R336.1219]**
- 6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **[R336.1901]**
- 7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided no later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **[R336.1912]**
- 8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.

- 9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law nor does it affect any liability for past violations under the Natural Resources and Environmental Protection Act, 1994 PA 451.
- 10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.
- 11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R336.1303. **[R336.1301]**
 - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
 - b) A visible emission limit specified by an applicable federal new source performance standard.
 - c) A visible emission limit specified as a condition of this Permit to Install.
- 12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R336.1370(2). **[R336.1370]**
- 13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R336.2001 and R336.2003, under any of the conditions listed in R336.2001. **[R336.2001]**

SPECIAL CONDITIONS

Emission Unit Identification

Emission Unit ID	Emission Unit Description	Stack Identification
EUBOILER1	A natural gas/distillate oil fired Johnston firetube	SVBOILER1
	package boiler with a maximum rated heat input	
	capacity of 32.2 million Btu per hour.	
EUBOILER2	A natural gas/distillate oil fired Johnston firetube	SVBOILER2
	package boiler with a maximum rated heat input	
	capacity of 32.2 million Btu per hour.	
EUBOILER3	A natural gas/distillate oil fired Johnston firetube	SVBOILER3
	package boiler with a maximum rated heat input	
	capacity of 32.2 million Btu per hour.	
EUGENERATOR1	Cummins model QSK60-G6 diesel fired emergency	SVGENERATOR1
	generator with a rated heat input capacity of 19	
	million Btu per hour.	
EUGENERATOR2	Cummins model QSK60-G6 diesel fired emergency	SVGENERATOR2
	generator with a rated heat input capacity of 19	
	million Btu per hour.	
EUGENERATOR3	Cummins model QSK60-G6 diesel fired emergency	SVGENERATOR3
	generator with a rated heat input capacity of 19	
	million Btu per hour.	
EUGENERATOR4	Cummins model QSK60-G6 diesel fired emergency	SVGENERATOR4
	generator with a rated heat input capacity of 19	
	million Btu per hour.	
.	t described in this table are subject to the requirements of	R336.1201, except as
allowed by R336.1278 to	R336.1290.	

Flexible Group Identification

Flexible Group ID	Emission Units Included in Flexible Group	Stack Identification
FGBOILERS	EUBOILER1	See emission unit
	EUBOILER2	identification table above
	EUBOILER3	
FGGENERATORS	EUGENERATOR1	See emission unit
	EUGENERATOR2	identification table above
	EUGENERATOR3	
	EUGENERATOR4	
FGFACILITY	All process equipment at the facility including	N/A
	equipment covered by other permits, grand-fathered	
	equipment and exempt equipment.	

The following conditions apply to: FGBOILERS

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirement
1.1a	NOx	Each boiler under FGBOILERS	0.12 lb/million Btu, when burning natural gas	Test protocol	GC 13	R336.1205(3)
1.1b	NOx	Each boiler under FGBOILERS	0.15 lb/million Btu, when burning distillate oil	Test protocol	GC 13	R336.1205(3)
1.1c	PM	Each boiler under FGBOILERS	0.030 lb/million Btu (applicable at all times other than startup, shutdown, or malfunction)*	Test Protocol	SC 1.4	40 CFR 60, Subpart Dc, Section 60.43c(e)(1)
	* This limit is applicable only if required by 40 CFR 60, Subpart Dc.					

Material Usage Limits

1.2 The permittee shall only use natural gas or distillate oil in FGBOILERS. [R336.1201 (3)]

Process/Operational Limits

1.3 The sulfur content of the fuel oil used in FGBOILERS shall not exceed 0.05 percent by weight. [40 CFR 60, Subpart Dc, Section 60.42c(d), R336.1205(3)]

Testing

1.4 Within 180 days after commencement of initial operation (if required by 40 CFR 60, Subpart Dc), the permittee shall verify PM emission rates from FGBOILERS by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **[40 CFR 60, Subpart Dc, Section 60.45(c)]**

Visible Emissions

1.5 Visible emissions from FGBOILERS shall not exceed 20 percent opacity except as specified in the federal Standards of Performance for New Stationary Sources, 40 CFR Part 60, Subparts A and Dc, Section 60.43c(c). The opacity standard applies at all times, except during periods of startup, shutdown, or malfunction. [40 CFR 60, Subpart Dc, Section 60.43c (c) and (d)]

Recordkeeping/Reporting/Notification

- 1.6 The permittee shall submit notification of the date of construction, anticipated startup, and actual startup of FGBOILERS. This notification shall include:
 - The design heat input capacity of the boilers and identification of fuels to be combusted in the boilers
 - If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under 40 CFR Subpart Dc Section 60.42c or 60.43c.
 - The annual capacity factor at which the owner or operator anticipates operating the boilers based on all fuels fired and based on each individual fuel fired.
 - Notification if an emerging technology will be used for controlling SO₂ emissions.

[40 CFR 60, Subpart Dc, Section 60.48(c)]

- 1.5 The permittee shall record and maintain records of the amounts of each fuel combusted during each calendar month. All recordkeeping shall be done in a manner acceptable to the district supervisor, and shall be maintained for a period of at least five years. **[40 CFR 60, Subpart Dc, Section 60.48c(g)]**
- 1.6 The permittee shall maintain fuel certification records from the fuel oil supplier which, verify that the sulfur content of the fuel is in compliance with the sulfur in fuel limitation contained in special condition 1.3. These records shall include the name of the oil supplier, and a statement from the oil supplier that the oil complies with the specifications under definition of distillate oil in 40 CFR 60, Subpart Dc, Section 60.41c. These records shall be maintained for a period of five years. [40CFR 60, Subpart Dc, Section 60.48c(f)(1)]

Stack/Vent Restrictions

	Stack & Vent ID	Maximum Diameter	Minimum Height Above	Applicable		
	Stack & Vent ID	(inches)	Ground Level (feet)	Requirement		
1.7	SVBOILER1	26	47	R 336.1225, 40 CFR		
	SVBOILER2	26	47	52.21 (c) and (d)		
	SVBOILER3	26 47				
	The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.					
	Additional text, descriptions, stack/vent conditions, etc. as needed.					

The following conditions apply to: FGGENERATORS

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirement
2.1a	NOx	FGGENERATORS	5.11 grams/horsepower hour	Test Protocol	GC 13	R336.1205(3)

Material Usage Limits

- 2.2 The permittee shall only use distillate oil in FGGENERATORS. **[R336.1201(3)]**
- 2.3 The sulfur content of the fuel oil used in FGGENERATORS shall not exceed 0.05 percent by weight. [R336.1205(3)]

Process/Operational Limits

2.4 The permittee shall not operate FGGENERATORS for more than 2,000 generator-hours per rolling 12 month time period, as determined at the end of each calendar month. A generator hour is defined as the aggregation of the operating hours of each generator, and includes periods of startup, shutdown, and testing. **[R336.1201(3)]**

Recordkeeping / Reporting / Notification

2.5 The permittee shall maintain fuel certification records from the fuel oil supplier, which verify that the sulfur content of the fuel is in compliance with the sulfur in fuel limitation contained in special condition 2.3. These records shall include the name of the oil supplier, and a statement from the oil supplier that the oil complies with the specifications under definition of distillate oil in 40 CFR 60, Subpart Dc, Section 60.41c. These records shall be maintained for a period of five years. **[R336.1201(3)]**

2.6 The permittee shall maintain records, on a monthly basis, of the operating hours of each generator, and the total generator-hours for FGGENERATORS. The permittee shall also calculate and maintain records of the generator-hours, based upon a rolling 12-month time period, as determined at the end of each calendar month. **[R336.1203(1)]**

Stack/Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement		
2.3	SVGENERATOR1	16	14	R336.1201 (3)		
	SVGENERATOR2	16	14			
	SVGENERATOR3	16	14			
	SVGENERATOR4	16	14			
	The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.					
	Additional text, descriptions, stack/vent conditions, etc. as needed.					