# MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

January 21, 2004

## **NEW SOURCE REVIEW PERMIT TO INSTALL**

ISSUED TO
Oakland County

LOCATED AT
One Public Works Drive

IN THE COUNTY OF
Oakland

# STATE REGISTRATION NUMBER

G5252

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 Part 5505(1) of Article II, Chapter I, Part 55 (Air Pollution Control) of P.A. 451 of 1994. 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).

January 6, 2004	REQUIRED BY RULE 203:
DATE PERMIT TO INSTALL APPROVED:	SIGNATURE:
January 21, 2004	
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

# NEW SOURCE REVIEW PERMIT TO INSTALL

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## Common Abbreviations / Acronyms Used in this Permit to Install

Common Acronyms			Pollutant/Measurement Abbreviations		
AQD	Air Quality Division	BTU	British Thermal Unit		
ANSI	American National Standards Institute	°C	Degrees Celsius		
BACT	Best Available Control Technology	CO	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		
COM	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	NOx	Oxides of Nitrogen		
MAP	Malfunction Abatement Plan	PM	Particulate Matter		
MDEQ	Michigan Department of Environmental Quality	PM-10	Particulate Matter less than 10 microns diameter		
MIOSHA	Michigan Occupational Safety & Health Administration	pph	Pound per hour		
MSDS	Material Safety Data Sheet	ppm	Parts per million		
NESHAP	National Emission Standard for Hazardous Air Pollutants	ppmv	Parts per million by volume		
NSPS	New Source Performance Standards	ppmw	Parts per million by weight		
NSR	New Source Review	psia	Pounds per square inch absolute		
PS	Performance Specification	psig	Pounds per square inch gauge		
PSD	Prevention of Significant Deterioration	scf	Standard cubic feet		
PTE	Permanent Total Enclosure	sec	Seconds		
PTI	Permit to Install	$SO_2$	Sulfur Dioxide		
RACT	Reasonable Available Control Technology	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		
VE	Visible Emissions				

<sup>\*</sup> 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).

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#### **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, PO 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 terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R336.1219. The written request shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. [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 not 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 conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunciton, 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.

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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.

- 10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA Act 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]

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#### SPECIAL CONDITIONS

#### **Emission Unit Identification**

<b>Emission Unit ID</b>	Emission Unit Description	Stack Identification		
EU-Boiler1	Natural gas and fuel oil fired boiler, 30,000 lb steam/hr	SV-Boiler1		
EU-Boiler2	Natural gas and fuel oil fired boiler, 30,000 lb steam/hr	SV-Boiler2		
EU-Boiler3	Natural gas and fuel oil fired boiler, 30,000 lb steam/hr	SV-Boiler3		
EU-Boiler4	Natural gas and fuel oil fired boiler, 60,000 lb steam/hr	SV-Boiler4		
Changes to the equipment 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
FG-Boilers	EU-Boiler1, EU-Boiler2, EU-Boiler3, EU-Boiler4	N/A

## The following conditions apply to: FG-Boilers

#### **Emission Limits**

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirement
1.1	$SO_2$	FG-Boilers	89.4 tpy	12-month rolling	SC No. 1.2, 1.3, 1.4,	R336.1205(1)(a)
				time period	and 1.7	& (3)

## **Material Usage Limits**

- 1.2 The permittee shall only burn natural gas or #6 fuel oil in FG-Boilers. [R336.1205(1)(a) & (3)]
- 1.3 The sulfur content of all fuel oil used in FG-Boilers shall not exceed 1.5 percent by weight. [R336.1205(1)(a) & (3)]
- 1.4 The permittee shall not burn more than 757,000 gallons of fuel oil in FG-Boilers per 12-month rolling time period. [R336.1205(1)(a) & (3)]

#### **Recordkeeping/Reporting/Notification**

- 1.5 The permittee shall keep monthly natural gas and fuel oil usage records for FG-Boilers, in a format acceptable to the AQD District Supervisor, indicating the total amount of natural gas used, in cubic feet, and fuel oil used, in gallons, on a 12-month rolling time period basis. All records shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1205(1)(a) & (3)]
- 1.6 The permittee shall maintain a complete copy of the sulfur content analysis, as supplied by the fuel oil vendor, for each shipment of fuel, prior to firing in FG-Boilers. In the event that the vendor does not supply the sulfur content analysis in a timely manner, the sulfur content analysis shall be performed, at owner's expense, prior to firing in FG-Boilers. All records shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1205(1)(a) & (3)]
- 1.7 The permittee shall keep, in a satisfactory manner, monthly and previous 12-month SO<sub>2</sub> calculation records, as required by SC 1.1, for FG-Boilers. All records shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1205(1)(a) &(3)]

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# **Stack/Vent Restrictions**

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requireme nt	
1.8	SV-Boilers	98.4	150	40 CFR 52.21(d),	
				R336.1901	
	The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.				