MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

December 10, 2008

PERMIT TO INSTALL

No. 342-08



STATE REGISTRATION NUMBER N8179

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: **10/21/2008**

DATE PERMIT TO INSTALL APPROVED: SIGNATURE: 12/10/2008 SIGNATURE: DATE PERMIT VOIDED: SIGNATURE: DATE PERMIT REVOKED: SIGNATURE:

PERMIT TO INSTALL

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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	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		
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	ng	Nanogram		
MAP	Malfunction Abatement Plan	NOx	Oxides of Nitrogen		
MDEQ	Michigan Department of Environmental Quality	РМ	Particulate Matter		
MIOSHA	Michigan Occupational Safety & Health Administration	PM10	PM less than 10 microns diameter		
MSDS	Material Safety Data Sheet	PM2.5	PM less than 2.5 microns diameter		
NESHAP	National Emission Standard for Hazardous Air Pollutants	pph	Pound per hour		
NSPS	New Source Performance Standards	ppm	Parts per million		
NSR	New Source Review	ppmv	Parts per million by volume		
PS	Performance Specification	ppmw	Parts per million by weight		
PSD	Prevention of Significant Deterioration	psia	Pounds per square inch absolute		
PTE	Permanent Total Enclosure	psig	Pounds per square inch gauge		
PTI	Permit to Install	scf	Standard cubic feet		
RACT	Reasonably Available Control Technology	sec	Seconds		
ROP	Renewable Operating Permit	SO ₂	Sulfur Dioxide		
SC	Special Condition	THC	Total Hydrocarbons		
SCR	Selective Catalytic Reduction	tpy	Tons per year		
SRN	State Registration Number	μg	Microgram		
TAC	Toxic Air Contaminant	VOC	Volatile Organic Compounds		
TEQ	Toxicity Equivalence Quotient	yr	Year		
VE	Visible Emissions				
		1			

* 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

- 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. (R 336.1201(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. (R 336.1201(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 R 336.1210, 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. (R 336.1201(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. (R 336.1201(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 R 336.1219. The notification shall include all of the information required by R 336.1219(1)(a) and (b). In addition, a new owner or operator must submit a written statement pursuant to R 336.1219(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. (R 336.1219)
- 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. (**R 336.1901**)
- 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 malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). (R 336.1912)
- 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.
- 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 R 336.1301, 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 R 336.1303. (R 336.1301)
 - 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.
- 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 R 336.1370(2). (R 336.1370)
- 13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. (R 336.2001)

SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Flexible Group ID				
EUENGINE1000	1,000kw diesel fuel-fired reciprocating engine generator, rated at 10.54 MMBtu/hr of heat input, used for emergency power generation in case of utility power outages.	NA				
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.						

The following conditions apply to: EUENGINE1000

I. EMISSION LIMITS

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	NOx	35.9 pph	Test Method	EUENGINE1000	SC V. 1	R 336.1205(1)(a)

II. MATERIAL LIMIT(S)

- 1. The permittee shall burn only diesel fuel in EUENGINE1000. (R 336.1224, R 336.1225)
- 2. The permittee shall burn only diesel fuel with a maximum sulfur content of 500 ppm in EUENGINE1000. (R 336.1205 (1) (a), R 336.1224, R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d))

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall operate EUENGINE1000 in accordance with its manufacturer's written instructions or by operating procedures developed by the permittee that are approved by the manufacturer. (R 336.1912)
- The permittee shall not operate EUENGINE1000 for more than 500 hours per engine per 12-month rolling time period as determined at the end of each calendar month. Of these 500 hours, the permittee shall not exceed 100 hours for maintenance checks and readiness testing. (R 336.1205(1)(a), R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d))

IV. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

NA

V. TESTING/SAMPLING

1. Verification of the NOx emission limit (35.9 pounds NOx per hour) from EUENGINE1000, by testing at owner's expense, in accordance with Department requirements may be required. If required, testing must be done at a load(s) as approved by the AQD. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of the emission factor includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. (R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d), R 336.2001, R 336.2003, R 336.2004)

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years.

- 1. The permittee shall equip EUENGINE1000 with a non-resettable hour meter to track the number of operating hours. (R 336.1205(1)(a), R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d))
- 2. The permittee shall monitor the hours of operation of EUENGINE1000 and the reason it was in operation during that time on a monthly basis in a manner that is acceptable to the District Supervisor, Air Quality Division. (R 336.1205(1)(a) and (3))
- The permittee shall monitor in a satisfactory manner the fuel oil usage for EUENGINE1000 on a monthly basis in a manner that is acceptable to the District Supervisor, Air Quality Division. (R 336.1205(1)(a) and (3))

VII. <u>REPORTING</u>

- 1. The permittee shall keep a complete copy of the diesel fuel/No. 2 fuel oil analysis including the sulfur content in percent, as supplied by the vendor, for each shipment of diesel fuel/No. 2 fuel oil received. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1205(3), R 336.1402, R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d))
- The permittee shall keep, in a satisfactory manner, records of the date, duration, and description of any malfunction, any maintenance performed and any testing results for EUENGINE1000. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1912)
- The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period operating hour records for EUENGINE1000. The records must also include the total operating time in hours for EUENGINE1000. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1205(1)(a), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA