MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

September 22, 2008

PERMIT TO INSTALL

No. 209-08



N8085

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:

 9/8/2008

 DATE PERMIT TO INSTALL APPROVED:

 9/22/2008

 DATE PERMIT VOIDED:

 SIGNATURE:

 DATE PERMIT REVOKED:

 SIGNATURE:

PERMIT TO INSTALL

Common Abbreviations / Acronyms

Common Acronyms Pollutant/Measurement Abbreviations					
AQD	Air Quality Division	BTU	British Thermal Unit		
BACT	Best Available Control Technology	°C	Degrees Celsius		
CAA	Clean Air Act	co	Carbon Monoxide		
CEM	Continuous Emission Monitoring	dscf	Dry standard cubic foot		
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter		
COM	Continuous Opacity Monitoring	°F	Degrees Fahrenheit		
EPA	Environmental Protection Agency	gr	Grains		
EU	Emission Unit	Hg	Mercury		
FG	Flexible Group	hr	Hour		
GACS	Gallon of Applied Coating Solids	H ₂ S	Hydrogen Sulfide		
GC	General Condition	hp	Horsepower		
HAP	Hazardous Air Pollutant	lb	Pound		
HVLP	High Volume Low Pressure *	m	Meter		
ID	Identification	mg	Milligram		
LAER	Lowest Achievable Emission Rate	mm	Millimeter		
MACT	Maximum Achievable Control Technology	ММ	Million		
MAERS	Michigan Air Emissions Reporting System	MW	Megawatts		
MAP	Malfunction Abatement Plan	ng	Nanogram		
MDEQ	Michigan Department of Environmental Quality	NO _x	Oxides of Nitrogen		
MSDS	Material Safety Data Sheet	PM	Particulate Matter		
NESHA P	National Emission Standard for Hazardous Air Pollutants	PM10	PM less than 10 microns diameter		
NSPS	New Source Performance Standards	PM2. 5	PM less than 2.5 microns diameter		
NSR	New Source Review	pph	Pound per hour		
PS	Performance Specification	ppm	Parts per million		
PSD	Prevention of Significant Deterioration	ppmv	Parts per million by volume		
PTE	Permanent Total Enclosure	ppmw	Parts per million by weight		
PTI	Permit to Install	psia	Pounds per square inch absolute		
RACT	Reasonably Available Control Technology	psig	Pounds per square inch gauge		
ROP	Renewable Operating Permit	scf	Standard cubic feet		
SC	Special Condition	sec	Seconds		
SCR	Selective Catalytic Reduction	SO ₂	Sulfur Dioxide		
SRN	State Registration Number	THC	Total Hydrocarbons		
TAC	Toxic Air Contaminant	tpy	Tons per year		
TEQ	Toxicity Equivalence Quotient	μg	Microgram		
VE	Visible Emissions	VOC	Volatile Organic Compounds		
		yr	Year		

* 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. (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 condition 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.
- 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 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)	Installation Date / Modification Date	Flexible Group ID		
EULEACHATETRTMNT	Oil/water separator, oil holding tank, aeration tank (air stripping tank), pump(s), and ancillary equipment. Control includes a 'passive' carbon adsorption system and a 'forced' carbon adsorption system.	N/A	N/A		
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: EULEACHATETRTMNT

DESCRIPTION: Oil/water separator, oil holding tank, aeration tank (air stripping tank), pump(s), and ancillary equipment. Control includes a 'passive' carbon adsorption system and a 'forced' carbon adsorption system.

Flexible Group ID:

POLLUTION CONTROL EQUIPMENT:

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	1 tpy	12-month rolling time period as determined at the end of each calendar month.	EULEACHATETRTMNT	V.1, VI.1, VI.4	R 336.1702(a)

II. MATERIAL LIMITS

1. N/A

III. PROCESS/OPERATIONAL RESTRICTIONS

 The permittee shall not operate EULEACHATETRTMNT unless a malfunction abatement plan (MAP) as described in Rule 911(2), for both the "forced" carbon control system and the passive carbon control system, has been submitted within 30 days of permit issuance, and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. (R 336.1227, R 336.1702(a), R 336.1910, R 336.1911)

IV. DESIGN/EQUIPMENT PARAMETERS

- The permittee shall not operate EULEACHATETRTMNT unless the passive carbon control system is installed, maintained, and operated in a satisfactory manner. (R 336.1702(a), R 336.1901, R 336.1910)
- The permittee shall not operate EULEACHATETRTMNT unless the "forced" carbon control system is installed, maintained, and operated in a satisfactory manner. (R 336.1702(a), R 336.1901, R 336.1910)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. Within 180 days after commencement of trial operation, the permittee shall verify VOC emission rates from SVCONTROL2 by testing at owner's expense, in accordance with Department requirements. This testing shall occur at least twenty days after a carbon changeout, that is, 'changeout' meaning the replacement of the first-stage canister.

No less than 30 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. (R 336.1227, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205(3), R 336.1702(a), R 336.1901)
- 2. The permittee shall monitor and record, in a satisfactory manner, the flow rate, the total VOC concentration of the aeration tank influent and effluent water streams. This shall be done on a biweekly basis until four valid samples, which pass all quality assurance and quality control requirements, have been obtained. Thereafter, the permittee shall monitor the aeration tank

influent and effluent water streams for these parameters on a monthly basis. The permittee shall determine the total VOC concentration using the "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)", or equivalent, analytical scans for VOCs. The permittee shall submit any request for a change in the sampling frequency to the AQD District Supervisor for review and approval. (R 336.1702(a), R 336.1901, R 336.1910)

- 3. The permittee shall keep, in a satisfactory manner, records of each carbon change. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1702(a), R 336.1901, R 336.1910)
- 4. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period calculations of VOC, as required by SC I.1. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(3), R 336.1702(a), R 336.1901)

VII. <u>REPORTING</u>

 Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EULEACHATETRTMNT. (R 336.1201(7)(a))

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVCONTROL1	2	25	R 336.1227, R 336.1901
2. SVCONTROL2	6	25	R 336.1227, R 336.1901

IX. OTHER REQUIREMENTS

N/A

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

APPENDIX

Leachate Treatment Air Emissions Calculation and Recordkeeping

Source Name		Contact Person		
Location		County		
Recordkeeping Period		Permit Number	Pollutant(s)	
Start Date	End Date			

	Α	В	С	D	F	E
_	Water Flow (gal/min)	Concentration (ppm)			Control	VOC
Date		Inlet	Outlet	In - Out	Efficiency (Percent)	Emissions (Ibs/hr)
EXAMPLE	100	210	10	200	95	0.5

EQUATIONS TO CALCULATE EMISSIONS:

D = B - C, all units in parts per million (ppm)

$$E \frac{lbs}{hr} = A \frac{gal}{min} \times 60 \frac{min}{hr} \times 8.34 \frac{lbs}{gal} \times D \times 10^{-6} \times \frac{(100 - F)}{100}$$

Signature:	Date:	
Telephone No.:		