## MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

November 8, 2007

# **PERMIT TO INSTALL**

No. 333-07



## STATE REGISTRATION NUMBER N7879

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:

10/23/2007	
DATE PERMIT TO INSTALL APPROVED: <b>11/8/2007</b>	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

## PERMIT TO INSTALL

## **Common Abbreviations / Acronyms**

Common AcronymsPollutant/Measurement AbbreviationsAQDAir Quality DivisionBtuBritish Thermal UnitAQDAmerican National Standards Institute"CDegrees CelsiusBACTBest Available Control TechnologyCACarbon MonoxideCACTContinuous Emission MonitoringdscfDry standard cubic footCEMContinuous Emission MonitoringgrGrainsCPRCode of Federal Regulations"FDegrees CelsiusCOMContinuous Opacity MonitoringgrGrainsEPAEnvironmental Protection AgencyHgMercuryEUEmission UnithrHourFGFlexible GroupHg.Hydrogen SulfideGACSGallon of Applied Coating SolidshpHorsepowerIDIdentificationmMeterHVLPHigh Volume Low Pressure*mgMilligramIDIdentificationMWMegawattsMARTMaximum Achievable EontrolMWMegawattsMARAMichigan Air Emissions ReportingNQ,Oxides of NitrogenMAPMational Stafety Data SheetPM-Particulate MatterMSSMaterial Safety Data SheetpphPound per hourMSSNew Source Performance StandardsppmParts per millionNSSNew Source ReviewSolSolSSRNew Source ReviewSolSolPSPerformance SpecificationpsiPSPerformance StandardsSol						
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\* 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 conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition 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 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 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 Identification**

Emission Unit ID	Emission Unit Description	Stack Identification		
EU-RETBASIN	An odor control system for a combined sewer	SV-BASIN1		
	overflow (CSO) retention basin at the Belle Isle	SV-BASIN2		
	CSO Pump Station. The odor control system			
	uses activated carbon.			
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: EU-RETBASIN

**Description:** An odor control system for a combined sewer overflow (CSO) basin at the Belle Isle CSO Pump Station. The odor control system uses activated carbon.

#### **Emission Limits**

	Pollutant	Limit	Time Period	Equipment	Testing/ Monitoring Method	Applicable Requirement
1.1a	Hydrogen Sulfide	0.0107 pph	Test Method	EU-RETBASIN	GC 13, SC 1.4, 1.5, 1.6	R 336.1901

#### Process/Operational Limits

- 1.2 The permittee shall operate the odor control system when the retention basin contains wastewater, except in the event of an odor control system malfunction (which shall be expeditiously corrected) or scheduled maintenance. The operation and maintenance plan required in special condition No. 1.3 shall include provisions to repair the odor control system, and bring it back into operation, as expeditiously as possible. (R 336.1224, R 336.1901, R 336.1910)
- 1.3 Within 30 calendar days of the date of permit approval or equipment start-up, whichever is later, the permittee shall submit to the AQD District Supervisor, an approvable operation and maintenance plan for EU-RETBASIN. (R 336.1224, R 336.1225, R 336.1901, R 336.1910)

#### Testing

- 1.4 Upon request by the AQD District Supervisor, the permittee shall verify the hydrogen sulfide emission rate from EU-RETBASIN, 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. (R 336.2001, R 336.2003, R 336.2004)
- 1.5 The permittee shall test, in a satisfactory manner, the activated carbon bed for breakthrough at least once each calendar quarter. The permittee shall evaluate breakthrough by sampling the exhaust air using Tedlar bag sampling followed by laboratory analysis; by use of a hand-held instrument capable of detecting concentrations at the levels expected; or by sampling the carbon to determine the remaining bed life, in accordance the operation and maintenance plan required in special condition No. 1.3. The permittee shall submit any request for a change in the testing

frequency to the AQD District Supervisor for review and approval. (R 336.1224, R 336.1901, R 336.1910)

## Recordkeeping/Reporting/Notification

1.6 The permittee shall keep, in a satisfactory manner, records of each activated carbon bed breakthrough test. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1224, R 336.1901, R 3136.1910)

### Stack/Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement		
1.7a	SV-BASIN1	24	33	R 336.1901		
1.7b	SV-BASIN2	24	30	R 336.1901		
	The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.					