## MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

**DECEMBER 1, 2005** 



# STATE REGISTRATION NUMBER N6573

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:

10/13/2005	
DATE PERMIT TO INSTALL APPROVED: <b>12/1/2005</b>	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

# PERMIT TO INSTALL

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<b>Common Abbreviations / Acronyms Used in this Permit to Install</b>				
	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	
СОМ	Continuous Opacity Monitoring	gr	Grains	
EPA	Environmental Protection Agency	Hg	Mercury	
EU	Emission Unit	hr	Hour	
GACS	Gallon of Applied Coating Solids	$H_2S$	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	MM	Million	
MAERS	Michigan Air Emissions Reporting System	MW	Megawatts	
MAP	Malfunction Abatement Plan	ng	Nanogram	
MDEQ	Michigan Department of Environmental Quality	NOx	Oxides of Nitrogen	
MIOSHA	Michigan Occupational Safety & Health Administration	PM	Particulate Matter	
MSDS	Material Safety Data Sheet	PM-10	Particulate Matter less than 10 microns diameter	
NESHAP	National Emission Standard for Hazardous Air Pollutants	pph	Pounds 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	Reasonable Available Control Technology	sec	Seconds	
SC	Special Condition	SO <sub>2</sub>	Sulfur Dioxide	
SCR	Selective Catalytic Reduction	THC	Total Hydrocarbons	
SRN	State Registration Number	tpy	Tons per year	
TAC	Toxic Air Contaminant	μg	Microgram	
TEQ	Toxic Equivalent	VOC	Volatile Organic Compound	
VE	Visible Emissions	yr	Year	

88 Common Abbreviations / Acronyms Used in this Permit to Install

\* 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, altered, 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, reconstruction, relocation, or alteration 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 person to whom this permit was issued, 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, reconstruction, relocation, or alteration 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 owner or operator of a source, process, or process equipment shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant in excess of standards for more than one hour, or of any air contaminant in excess of standards for more than two hours, as required in this rule, to the District Supervisor, Air Quality Division. 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 District Supervisor within ten days, with the information required in this rule. [**R336.1912**]
- 8. Approval of this permit does not exempt the person to whom this permit was issued from complying with any future applicable requirements which may be promulgated under Part 55 of Act 451, PA 1994 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 Act 451, PA 1994, 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, a person 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. Except as allowed by Rule 285 (a), (b), and (c), permittee shall not substitute any fuels, coatings, nor raw materials for those described in the application and allowed by this permit, nor make changes to the process or process equipment described in the application, without prior notification to and approval by the Air Quality Division. **[R336.1201(1)]**
- 14. 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	<b>Stack Identification</b>		
EU – Process	A fixed concrete crushing plant consisting of two crushers,	N/A – None		
	one primary and one secondary, and various screens and			
	conveyors. Equipment is controlled by water sprays.			
EU – Truck Traffic	Truck traffic for delivery of material products to customers;	N/A – None		
	loader traffic associated with processing equipment, storage			
	pile handling and loading delivery trucks.			
EU – Storage	Open area stock piles of various material sizes and product	N/A – None		
_	types. Water spray of material products are used when			
	necessary for material storage piles.			
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.				

#### The following conditions apply to: EU - Process

## Visible Emission Limits

- 1.1 The permittee shall not operate any portion of EU Process unless each portion of EU Process meets the specific opacity limit listed in Appendix A of this permit. [R336.1301, 40 CFR 52.21 (c) & (d), 40 CFR 60.670]
- 1.2 Visible emissions from the drop point and transfer point portions of EU Process shall not exceed 10 percent opacity. [R336.1301, 40 CFR 52.21 (c) & (d), 40 CFR 60.670]

#### Material Usage Limits

1.3 The permittee shall not process any asbestos tailing or asbestos containing waste materials in EU - Process pursuant to the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 61 Subpart M. [40 CFR Part 61 Subpart M]

#### **Process/Operational Limits**

- 1.4 The permittee shall not process more than 200 tons of material per hour nor 300,000 tons of material through EU Process per 12-month rolling time period as determined at the end of each calendar month. **[R336.1901, 40 CFR 52.21 (c) & (d)]**
- 1.5 The permittee shall not operate EU Process unless the program for continuous fugitive emissions control for all plant roadways, the plant yard, all material storage piles, and all material handling operations specified in Appendix B has been implemented and is maintained. **[R336.1371, R336.1901]**
- 1.6 The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and OOO, as they apply to EU Process [40 CFR Part 60 Subparts A & OOO]

### Equipment

- 1.7 The permittee shall not operate any portion of EU Process unless the equipment's specified control device is installed, maintained and operated in a satisfactory manner as listed in Appendix A. [R336.1901, R336.1910, 40 CFR 52.21 (c) & (d)]
- 1.8 The permittee shall label all equipment using the company ID Numbers in Appendix A, according to a method acceptable to the AQD District Supervisor. Labels shall be in a conspicuous location on the equipment. **[R336.1201]**

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

1.10 The permittee shall keep hourly and monthly records of the amount of material processed through EU – Process. Further the permittee shall calculate on a monthly basis, the yearly throughput rate based upon the most recent 12-month rolling time period. The permittee shall keep records of the amount of material processed on file for a period of at least five years and make them available to the Department upon request. **[40 CFR 52.21 (c) & (d)]** 

## The following conditions apply to: EU – Truck Traffic

#### Visible Emission Limits

2.1 Visible emissions from all wheel loaders and all truck traffic, operated in conjunction with EU – Truck Traffic, shall not exceed a six (6) minute average of five percent opacity. [R336.1301, R336.1372, 40 CFR 52.21 (c) & (d)]

#### **Process/Operational Limits**

2.2 The permittee shall not operate EU – Truck Traffic unless the program for continuous fugitive emissions control for all plant roadways, the plant yard, all material storage piles, and all material handling operations specified in Appendix B has been implemented and is maintained. **[R336.1371, R336.1372]** 

#### The following conditions apply to: EU - Storage

#### **Visible Emission Limits**

3.1 Visible emissions from each of the material storage piles maintained under EU - Storage shall not exceed a six (6) minute average of five percent opacity. **[R336.1301, 40 CFR 52.21 (c) & (d)]** 

#### **Process/Operational Limits**

3.2 The permittee shall not operate EU - Storage unless the program for continuous fugitive emissions control for all plant roadways, the plant yard, all material storage piles, and all material handling operations specified in Appendix B has been implemented and is maintained. **[R336.1371, R336.1372]** 

# Appendix A

Equipment Description	ID Number	Opacity Limit (Percent)	Control Device
1989 Cedar Rapid Jaw Crusher model	1	15	Water Spray
5430 w/feeder			
50' Conveyor	2	10	N/A – None
1989 Simplicity Screen	3	10	Water Spray
20' Conveyor	4	10	N/A – None
1994 Murawski Horizontal Impact	5	15	Water Spray
Crusher model 5165			
100' Stacker	6	10	N/A – None
100' Stacker	7	10	N/A – None
15' Conveyor (under main crusher)	8	10	N/A – None
20' Conveyor	9	10	N/A – None
20' Conveyor	10	10	N/A – None
20' Conveyor	11	10	N/A – None
20' Conveyor	12	10	N/A – None
30' Conveyor	13	10	N/A – None

## Appendix B

### **Fugitive Dust Control Plan**

#### I. Site Roadways / Plant Yard

- A. The dust on the site roadways and the plant yard shall be controlled by applications of water, calcium chloride or other acceptable and approved fugitive dust control compounds. Applications of dust suppressants shall be done as often as necessary to meet all applicable emission limits. A record of all watering/dust suppressant applications shall be kept on file and be made available to the AQD upon request.
- B. All paved roadways within permittee's control and the plant yards shall be swept as needed between applications.
- C. Any material spillage on roadways within permittee's control shall be cleaned up immediately.

#### II. Plant

The drop distance at each transfer point shall be reduced to the minimum the equipment can achieve. The transfer point from the re-circulating belt to the feed belt shall be equipped with an enclosed chute.

#### **III. Storage Piles**

- A. Stockpiling of all nonmetallic minerals shall be performed to minimize drop distance and control potential dust problems.
- B. Stockpiles shall be watered on an as needed basis in order to meet the six (6) minute average opacity limit of five percent. Equipment to apply water or dust suppressant shall be available at the site or on call for use at the site within a given operating day. A record of all watering/dust suppressant applications shall be kept on file and be made available to the AQD upon request.

#### **IV. Truck Traffic**

On-site vehicles shall be loaded to prevent their contents from dropping, leaking, blowing or otherwise escaping. This shall be accomplished by loading so that no part of the load shall come in contact within 6 inches of the top of any side board, side panel or tailgate. Otherwise, the truck shall be tarped.

#### V. AQD/MDEQ Inspection

The provisions and procedures of this plan are subject to adjustment by written notification from the AQD if, following an inspection, the AQD finds the fugitive dust requirements and/or permitted emission limits are not being met.

# Appendix B continued

# VI. Fugitive Dust Control Plan Records

Month & year:

Site Roadways / Plant Yard				
Date & time	Amount of dust suppressant used	Areas of application (e.g. Plant-to-12 Mile Road Roadway).	Name and initials, who applied the dust suppressant	Comments

1989 Cedar Rapid Jaw Crusher & 1994 Murawski Horizontal Impact Crusher					
Date	Water spray operating correctly (yes/no)	Jaw or Impact	Name and initials	Comments	