

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION**

March 11, 2003



**PERMIT TO INSTALL**

No. 280-90C

**ISSUED TO**

Demolition Contractors, Inc.

**LOCATED AT**

200 North Park Street  
Walker, Michigan 49544

**IN THE COUNTY OF**

Kent



**STATE REGISTRATION NUMBER**

N2532

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: <b>March 4, 2003</b>	
DATE PERMIT TO INSTALL APPROVED: <b>March 11, 2003</b>	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

**PERMIT TO INSTALL**

**Table of Contents**

<b>Section</b>	<b>Page</b>
Alphabetical Listing of Common Abbreviations / Acronyms .....	2
General Conditions .....	3
Emission Unit Identification.....	5
Emission Unit Special Conditions.....	5
Emission Unit Special Conditions.....	7
Emission Unit Special Conditions.....	7
Appendices.....	8

**Common Abbreviations / Acronyms**

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 <sub>2</sub> S	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	NO <sub>x</sub>	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 <sub>2</sub>	Sulfur Dioxide
RACT	Reasonable Available Control Technology	THC	Total Hydrocarbons
SC	Special Condition Number	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		

\* 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. **[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, 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. **[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 malfunction, 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.

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 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. Except as allowed by Rule 285 (a), (b), and (c), the 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**

<b>Emission Unit ID</b>	<b>Emission Unit Description</b>	<b>Stack Identification</b>
EU – Process	A combination of process equipment (screens, crushers, feeders, conveyors, etc.) used to recycle concrete and reduce the larger materials down to smaller sizes, classify and sort materials into various product types, material handling and transporting of material to storage areas. Control methods include equipment enclosures, water spray system, drop chutes and/or pant legs for transfer points. A complete list of process equipment is listed in appendix A.	N/A – None
EU – Truck Traffic	Truck traffic for incoming products and delivery of recycled concrete material products to customers, truck traffic within the plant yard/processing area and loader traffic associated with processing equipment, storage pile handling and loading delivery trucks.	N/A – None
EU – Storage	Open area stock piles of various recycled concrete material sizes and product types.	N/A – None
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 meet their specific opacity limit as 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 150,000 tons of recycled concrete materials per 12-month rolling time period as determined at the end of each calendar month through EU – Process. **[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 of this permit. **[R336.1901, R336.1910, 40 CFR 52.21 (c) & (d)]**
- 1.8 The permittee shall not operate any portion of EU – Process unless a water filtering system for the water spray system listed in Appendix A is installed, maintained and operated properly in a satisfactory manner. Any change to the water spray system listed in appendix A shall have prior AQD District Supervisor Approval. **[R336.1901, R336.1910, 40 CFR 52.21 (c) & (d)]**
- 1.9 Within 60 days of issuance of this permit, the permittee shall label all equipment associated with EU - Process, according to the company identification numbers shown on the equipment list in Appendix A with a method acceptable to the AQD District Supervisor. Within seven days of completing the labeling, the permittee shall notify the AQD District Supervisor, in writing, as to the date the labeling was completed. **[R336.1201]**
- 1.10 By no later than March 1, 2003, the permittee shall install, maintain and operate in a satisfactory manner a new water spray system. The new water spray system shall consist of a pumping system to provide high pressure (100 psi) water to the spray nozzles. In addition, all tubing will be of high pressure composite or metal materials, water system will have a filtration device and will utilize industrial spray nozzles. **[R336.1901]**

#### **Testing**

- 1.11 Within 60 days after achieving maximum production rate, but not later than 180 days after commencement of trial operation, federal Standards of Performance for New Stationary Sources require evaluation of visible emissions from all equipment portions of EU - Process, at owner's expense, in accordance with 40 CFR Part 60 Subparts A and OOO. Visible emission observation procedures must have prior approval by the AQD. Verification of visible emissions includes the submittal of a complete report of opacity observations to the AQD within 45 days following the last date of the evaluation. **[R336.1301, 40 CFR Part 60 Subparts A & OOO]**

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

- 1.12 The permittee shall keep, in a satisfactory manner 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. Records of the amount of material processed shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request. **[R336.1901, 40 CFR 52.21 (c) & (d)]**
- 1.13 The permittee shall keep, in a satisfactory manner, a daily record of the operational performance (water pressure, etc.), water filter cleanings, spray nozzle cleaning/replacement and maintenance of the water spray system. Records of the daily operational performance, filter cleanings, spray nozzle cleaning/replacement and maintenance of the water spray system shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request. **[R336.1901, R336.1910]**
- 1.14 Within 60 days after initial start-up, the applicant shall submit to the AQD District Supervisor, for review and approval, a malfunction abatement plan for the water spray system portion of EU-Process. The

malfunction abatement plan shall include, a list of all spray equipment, the number of spray nozzles for each piece of equipment, spray nozzle cleaning/replacement frequency, a flow rate and pressure range in pounds per square inch which will define proper operation of the water spray system. If the malfunction abatement plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the malfunction abatement plan within 30 days after such an event occurs. The revised plan shall include procedures for maintaining and operating in a satisfactory manner the water spray system portion of EU-Process during similar malfunction events, and a program for corrective action for such events. **[R336.1901, R336.1911]**

**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 5 percent opacity. **[R336.1301, 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, Act 451 324.5521]**

**Material Usage Limits**

- 2.3 The permittee shall not handle any material which contains any asbestos tailing or asbestos containing waste materials in EU – Truck Traffic pursuant to the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 61 Subpart M. **[40 CFR Part 61 Subpart M]**

**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 5 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, Act 451 324.5521]**

**Material Usage Limits**

- 3.3 The permittee shall not handle any material which contains any asbestos tailing or asbestos containing waste materials in EU - Storage pursuant to the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 61 Subpart M. **[40 CFR Part 61 Subpart M]**

**Appendix A**

<b>Equipment Description</b>	<b>ID Number</b>	<b>Opacity Limit</b>	<b>Control Device</b>
Feed Hopper	F1	10	Water Spray System
Cedar Rapids 4851 Jaw Crusher	CR1	15	Water Spray System
5x20 screen	S1	10	Water Spray System
Murowsky 5165 Impact Crusher	CR2	15	Water Spray System
48" Conveyor	C1	10	
72" Underscreen Conveyor	UC1	10	
18" Cross Conveyor	CC1	10	
32" Conveyor	C2	10	Water Spray System
36" Conveyor	C3	10	
30" Stacker	C4	10	Water Spray System
30" Conveyor	C5	10	
33" Stacker	C6	10	

## **APPENDIX B**

### **Fugitive Dust Control Plan**

#### **I. Site Roadways / Plant Yard**

- A. The dust on the site roadways/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 the date and time for all watering/dust suppressant applications shall be kept on file and be made available to the AQD upon request.
- B. All paved roadways/plant yards shall be swept as needed between applications. A record of the date and time for all roadway/plant yard sweepings shall be kept on file and made available to the AQD upon request.
- C. Any material spillage on roads shall be cleaned up immediately.
- D. The speed limit for all vehicles on site shall be posted at 10 miles per hour or less.

#### **II. Plant**

- A. 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 opacity limit of 5 percent. Also, 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 the date and time of all watering/dust suppressant applications shall be kept on file and be made available to the AQD upon request.

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

- A. 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 tail gate, otherwise, the truck shall be tarped.

#### **V. AQD/MDEQ Inspection**

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