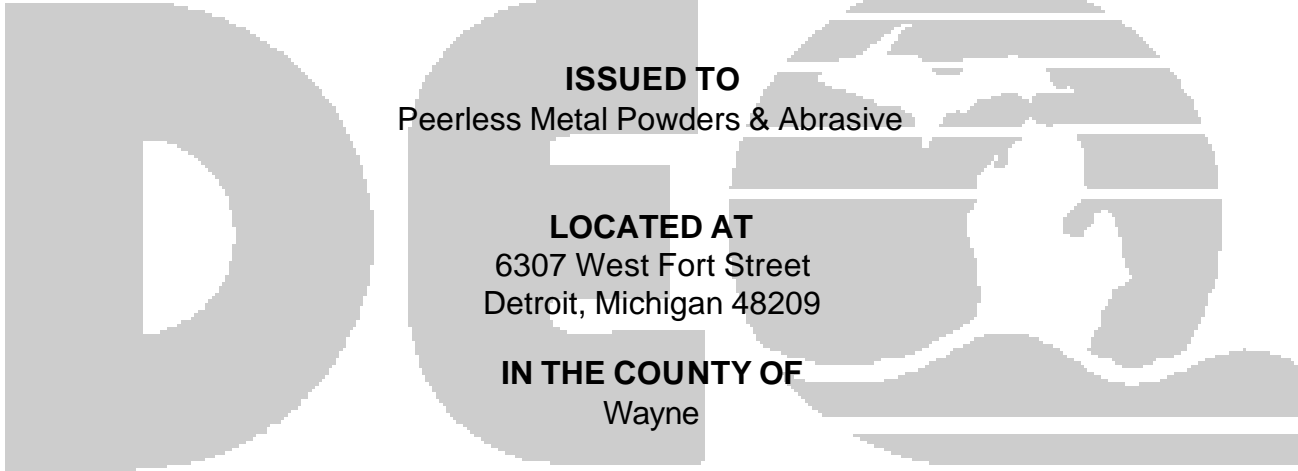


**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION**

August 13, 2004

**NEW SOURCE REVIEW PERMIT TO INSTALL**

No. 165-04



**ISSUED TO**

Peerless Metal Powders & Abrasive

**LOCATED AT**

6307 West Fort Street  
Detroit, Michigan 48209

**IN THE COUNTY OF**

Wayne

**STATE REGISTRATION NUMBER**

B4847

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 Part 5505(1) of Article II, Chapter I, Part 55 (Air Pollution Control) of P.A. 451 of 1994. 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>8/11/2004</b>	
DATE PERMIT TO INSTALL APPROVED: <b>8/13/2004</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
Appendices.....	7

**Common Abbreviations / Acronyms**

<b>Common Acronyms</b>		<b>Pollutant / Measurement Abbreviations</b>	
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 <sub>2</sub> 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	MM	Million
MAERS	Michigan Air Emissions Reporting System	MW	Megawatts
MAP	Malfunction Abatement Plan	NO <sub>x</sub>	Oxides of Nitrogen
MDEQ	Michigan Department of Environmental Quality	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	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	Reasonable Available Control Technology	sec	Seconds
ROP	Renewable Operating Permit	SO <sub>2</sub>	Sulfur Dioxide
SC	Special Condition Number	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
VE	Visible Emissions	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. **[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. 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>
EUSPMILLLINE	A steel milling line used to manufacture steel powders and abrasive materials. The line consists of a feed hopper, a pan feeder, a bucket conveyor, a 3-bin storage silo, a hammer mill, a cooler, a classifier, and a discharge hopper and is controlled by a baghouse dust collector.	SV1
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: EUSPMILLLINE**

**Emission Limits**

	<b>Pollutant</b>	<b>Equipment</b>	<b>Limit</b>	<b>Time Period</b>	<b>Testing/ Monitoring Method</b>	<b>Applicable Requirements</b>
1.1a	PM-10	EUSPMILLLINE	1.35 Pounds Per Hour	Test Protocol	General Condition No. 13	40 CFR 52.21(c) & (d)
1.1b	PM-10	EUSPMILLLINE	0.02 Pounds per 1000 Pounds of Exhaust Gases*	Test Protocol	General Condition No. 13	R336.1331
* Calculated on a dry gas basis.						

**Visual Emission Limits**

1.2 Visible emissions from EUSPMILLLINE shall not exceed a six-minute average of 10 percent opacity. [R336.1301, R336.1303, R336.1331]

**Process / Operational Limits**

1.3 The permittee shall not operate EUSPMILLLINE unless the program specified in Appendix A has been implemented and is maintained. [R336.1371, R336.1372, R336.1901]

**Equipment**

1.4 The permittee shall not operate EUSPMILLLINE unless the baghouse dust collector is installed, maintained and operated in a satisfactory manner. [R336.1331, R336.1901, R336.1910]

**Stack / Vent Restrictions**

	<b>Stack &amp; Vent ID</b>	<b>Maximum Diameter (inches)</b>	<b>Minimum Height Above Ground Level (feet)</b>	<b>Applicable Requirement</b>
1.5	SV1	32	20	R336.1901, 40 CFR 52.21(c) & (d)
The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.				

## APPENDIX A

### FUGITIVE DUST OPERATING PROGRAM<sup>1</sup> PEERLESS METAL POWDERS AND ABRASIVE FORT STREET PLANT

(A) Facility Name and Address:

Peerless Metal Powders and Abrasive  
6307 West Fort Street  
Detroit, Michigan 48209

(B) Name and Address of Responsible Person:

President and Chief Executive Officer  
Peerless Metal Powders and Abrasive  
6307 West Fort Street  
Detroit, Michigan 48209

(C) A Facility Map Showing the Traffic Patterns within the Facility is attached as Figure 1. The Facility Does Not Include Storage Piles or Conveyor Loading Operations,

(D) No Transporting or Unloading Operations with Pollution Control Equipment Exist at the Facility,

(E) Following is a Detailed Description of the Best Management Practices Utilized to Achieve Compliance with the Fugitive Dust Operating Program Requirement:

The Peerless Metal Powders and Abrasive Fort Street Plant mills, classifies, and heat treats waste metal materials for the purpose of manufacturing metal powders and abrasive materials. All metal processing and transport operations occur inside the Fort Street building and the Fort Street building is not equipped with general ventilation exhaust equipment. The Fort Street Plant does, however, include a single baghouse dust collector located outside the building. Consequently, fugitive dust emitted from the Fort Street Plant can be categorized as follows:

- (i) Fugitive dust emitted to the outer air through building openings due to air currents that pass through the Fort Street Plant,
- (ii) Fugitive dust generated due to metal dust that is tracked out of the Fort Street Plant by trucks exiting the facility, and
- (iii) Fugitive dust generated due to the storage and handling of particulate matter collected by the baghouse dust collector.

The best management practices utilized to address each of these fugitive dust categories are summarized as follows:

#### **Building Openings**

Indoor airborne dust is inherent in the operations of the Fort Street Plant. However, this indoor airborne dust is typically only transported to the outer air when air enters the building through building openings on one side of the building and then exits through other building openings on the other side of the

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<sup>1</sup> The fugitive dust operating program was prepared in accordance with and using the format of Chapter 324, Section 5524(5) of the Michigan Compiled Laws.



building. Because of the location of the Fort Street Plant as well as other surrounding buildings, this typically happens when the wind is out of the Southwest or Northeast.

To mitigate the likelihood of fugitive dust exiting through building openings, Peerless Metal Powders and Abrasive will:

- (i) Perform a semi-annual inspection of the building to identify building openings that can be additionally sealed (i.e., building openings that do not need to be periodically opened for human or equipment entry and exit);
- (ii) Seal (with plastic sheeting, glass, plywood, or other appropriate materials) any building openings identified as necessary by the semi-annual inspection;
- (iii) Perform a daily (on days when the plant is operating) visible emissions evaluation<sup>2</sup> on the Southwest and Northeast sides of the building to identify periods when fugitive dust is exiting the facility; and,
- (iv) If fugitive dust is exiting the facility, other building doors (e.g., truck bay doors and man doors) will be closed as appropriate.

Records of the various inspections performed and the resulting fugitive dust mitigation activities will be maintained by Peerless.

### **Trackout**

Trucks can enter and exit the Fort Street Plant only through the truck bay door located at the Northeast corner of the building (with the truck bay facing South Livernois Avenue) and through the truck bay door located at the Northwest corner of the building (with the truck bay facing Crawford Street). Due to metal dust on the floor of the building, trucks may track metal dust outside the Fort Street Plant. To mitigate the eventual airborne entrainment of this dust, Peerless will sweep trackout from South Livernois Avenue and Crawford Street once per week. It should be noted, however, that this sweeping will not be performed on days when the pavement is consistently wet (e.g., during much of the winter).

Peerless will maintain records of weeks when street sweeping has been performed.

### Baghouse

The baghouse dust collector has the potential to emit fugitive dust if (i) collected dust is not contained properly or (ii) if the collected dust is not handled properly when transferring collected dust. Peerless will (1) inspect the baghouse dust collection container on a weekly basis to ensure that collected dust remains inside the container, (2) inspect the baghouse fabric filters for torn material on a monthly basis, and (3) maintain records of these inspections. In addition, Peerless will transfer collected dust in a manner that minimizes its introduction to the outer air.

(F) Waste or Recycled Oils Will Not be Used at the Fort Street Plant.

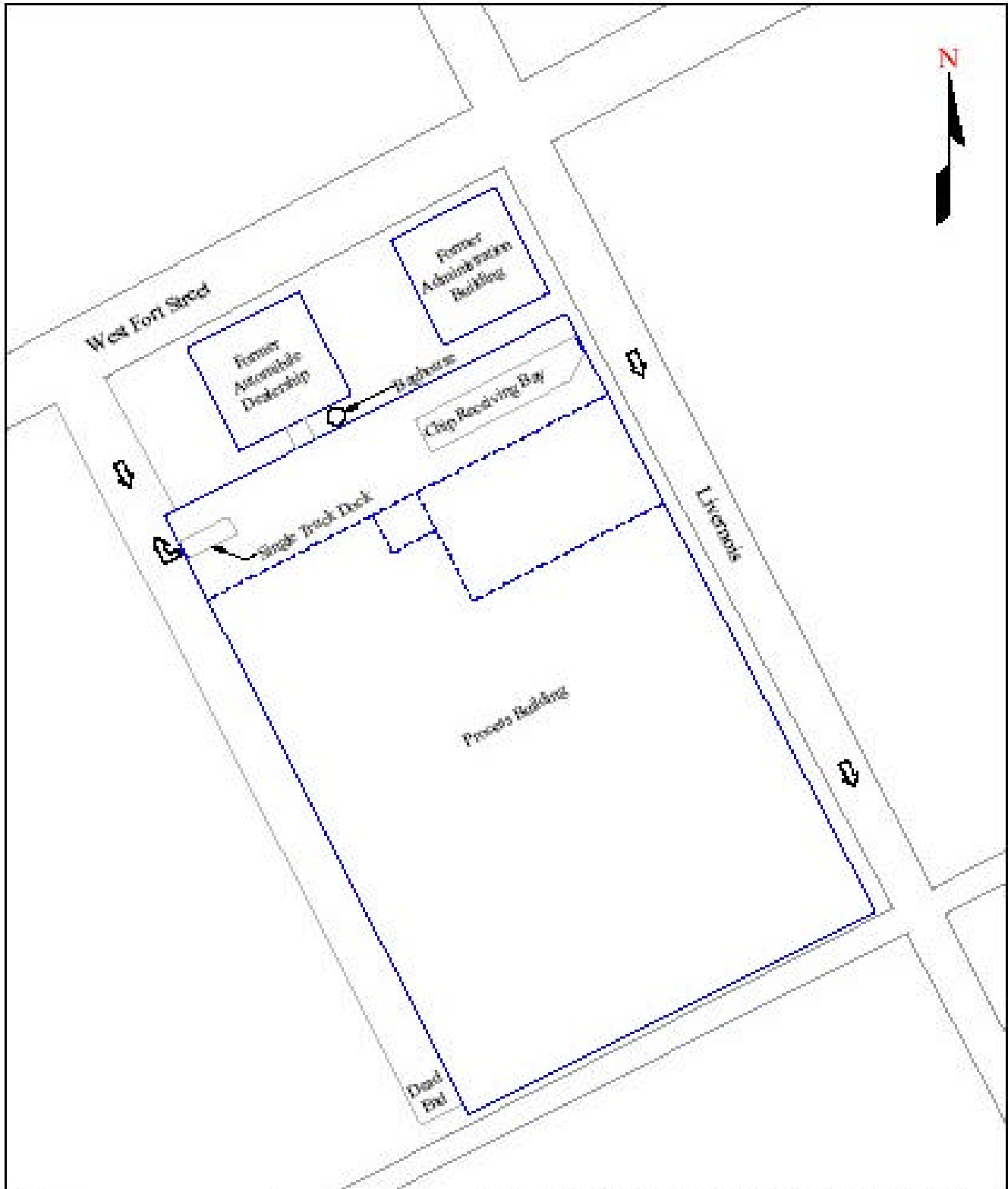
(G) Dust Suppressants Will Not be Used at the Fort Street Plant.

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<sup>2</sup> This visible emissions evaluation will not be by 40 CFR 60, Appendix A, Method 9 but will consist of a minimum of three minutes of observation on both sides of the building.

(H) The Frequency of Cleaning Paved Traffic Pattern Roads and Parking Areas is Described in Section (E) of this Document.

(I) Additional Information will be Supplied by Peerless Following its Request by AQD.



<p>Figure 1                  Site Plan</p>		<p>Peerless Metal Powders and                  Abrasive                  Fort Street Plant                  6307 West Fort Street                  Detroit, Michigan</p>	<p>Peerless Metal Powders and Abrasive                  Fort Street Plant                  6307 West Fort Street                  Detroit, Michigan</p>	<p>Page No. 11-00004-01                  Last Update                  Aug 11, 2004</p>
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