

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

July 9, 2015

**PERMIT TO INSTALL**  
108-15

**ISSUED TO**  
Fritz Enterprises, Inc.

**LOCATED AT**  
1 Quality Drive  
Ecorse, Michigan

**IN THE COUNTY OF**  
Wayne

**STATE REGISTRATION NUMBER**  
A7809

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:

**June 19, 2015**

DATE PERMIT TO INSTALL APPROVED:

**July 9, 2015**

SIGNATURE:

DATE PERMIT VOIDED:

SIGNATURE:

DATE PERMIT REVOKED:

SIGNATURE:

**PERMIT TO INSTALL**

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### 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
CO <sub>2</sub> e	Carbon Dioxide Equivalent	°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
GHGs	Greenhouse Gases	kW	Kilowatt
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	ng	Nanogram
MAP	Malfunction Abatement Plan	NO <sub>x</sub>	Oxides of Nitrogen
MDEQ	Michigan Department of Environmental Quality (Department)	PM	Particulate Matter
MSDS	Material Safety Data Sheet	PM10	PM with aerodynamic diameter ≤10 microns
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	PM with aerodynamic diameter ≤ 2.5 microns
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute
PTI	Permit to Install	psig	Pounds per square inch gauge
RACT	Reasonably Available Control Technology	scf	Standard cubic feet
ROP	Renewable Operating Permit	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	Toxicity Equivalence Quotient	VOC	Volatile Organic Compound
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. **(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 48909-7760, 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 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 R 336.1219 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 R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **(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 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.

<b>Emission Unit ID</b>	<b>Emission Unit Description (Process Equipment &amp; Control Devices)</b>	<b>Installation Date / Modification Date</b>	<b>Flexible Group ID</b>
EUSALVAGE	Salvage System for recovering and processing iron-bearing slag materials. Emission unit includes a screening system, a diesel engine with a maximum of 250 HP, associated conveyors, and other material handling equipment.	July 9, 2015	NA
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: EUSALVAGE**

**DESCRIPTION:** Salvage System for recovering and processing iron-bearing slag materials. Emission unit includes a screening system, a diesel engine with a maximum of 250 HP, associated conveyors, and other material handling equipment.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT:** NA

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	12.42 tpy <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	EUSALVAGE	SC VI.5	R 336.1331
2. PM10	5.56 tpy <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	EUSALVAGE	SC VI.5	40 CFR 52.21 Subparts (c) & (d)
3. PM2.5	2.71 tpy <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	EUSALVAGE	SC VI.5	40 CFR 52.21 Subparts (c) & (d)

<sup>1</sup> Calculated using the maximum hourly emissions of 11.94 lb PM/hr, 5.35 lb PM10/hr, and 2.61 lb PM2.5/hr based upon the maximum capacity of the equipment included in EUSALVAGE.

4. Visible emissions from each screening unit of EUSALVAGE shall not exceed a six-minute average of 10 percent opacity. **(R 336.301(1)(c))**
5. Visible emissions from the material handling operations of EUSALVAGE shall not exceed a three-minute average of 5 percent opacity. **(R 324.5524(2))**

**II. MATERIAL LIMITS**

1. The permittee shall not operate EUSALVAGE more than 2080 hours per 12-month rolling time period as determined at the end of each calendar month. **(R 336.1205, R 336.1225, 40 CFR 52.21(c) & (d))**
2. The permittee shall not process more than 600 tons per hour based on a daily average through EUSALVAGE. **(R 336.1225, 40 CFR 52.21 (c) & (d))**
3. The permittee shall burn only diesel fuel, with the maximum sulfur content of 500 ppm (0.05 percent) by weight, in the engine portion of EUSALVAGE. **(R 336.1205(1)(a), R 336.1402(1))**

### **III. PROCESS/OPERATIONAL RESTRICTIONS**

1. No later than 60 days after issuance of this permit, the permittee shall submit to the AQD District Supervisor, for review and approval, a fugitive dust control plan for the material handling and screening operations in EUSALVAGE. The permittee shall not operate EUSALVAGE after the date of submittal unless the fugitive dust control plan is implemented and maintained. If, at any time, the fugitive dust plan is determined to be insufficient by the AQD District Supervisor, the permittee shall update the plan. The permittee shall provide an updated fugitive dust plan to the AQD District Supervisor for review and approval within 30 days of notification that the plan is insufficient. **(R 336.1371(5), R 336.1371, R 336.1372, R 336.1901, Act 451 324.5524)**

### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate EUSALVAGE unless the unit is installed, maintained, and operated in a satisfactory manner consistent with the manufacturer's specifications. Configuration and maintenance of the equipment in accordance with the manufacturer's specifications is sufficient to minimize particulate emissions. **(R 336.1205, R 336.1301, R 336.1331(1)(a), 40 CFR 52.21(c) & (d))**
2. The permittee shall install and maintain a belt scale on EUSALVAGE which records the daily throughput rate. **(40 CFR 52.21 (c) & (d))**

### **V. TESTING/SAMPLING**

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

NA

### **VI. MONITORING/RECORDKEEPING**

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

1. 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 336.1301, R 336.1303, R 336.1331(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
2. The permittee shall keep, in a satisfactory manner, daily records of materials processed for EUSALVAGE. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **(R 336.1205(1)(a))**
3. The permittee shall keep, in a satisfactory manner, daily records of hours of operation for EUSALVAGE. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **(R 336.1205(1)(a))**
4. The permittee shall keep, in a satisfactory manner, daily calculations of the average tons per hour of materials processed operation for EUSALVAGE. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **(R 336.1205(1)(a))**
5. The permittee shall keep, in a satisfactory manner, calculations of the hours of operation on a monthly and 12-month rolling time period basis for EUSALVAGE. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **(R 336.1205(1)(a))**

6. The permittee shall perform a non-certified visible emission observation of the screening operations including screen, transfer points, and material handling operations for EUSALVAGE at least once per week for a minimum of 15-minutes during screening activity. After one year of visible emission observations, the permittee may petition to the Department to reduce the minimum time of an observation from 15 minutes to a shorter timeframe, as approved by the District Supervisor. The permittee shall initiate appropriate corrective action upon observation of visible emissions and shall keep a written record of each required observation and corrective action taken. **(R 336.1301, R 336.1303)**
7. The permittee shall perform a Method 9 certified visible emission observation of the screening and Method 9D for material handling operations for EUSALVAGE at least once per month during screening activity. The permittee shall initiate corrective action upon observation of visible emissions exceeding the applicable visible emission limits of this permit and shall keep a written record of each required observation and corrective action. **(R 336.1301, R 336.1303)**
8. The permittee shall keep records of, in a satisfactory manner, the maximum sulfur content of the fuel for each shipment of fuel received. If supplier certification is used for this purpose, records of certification must contain the name of the supplier. **(R336.1205, R336.1225, R336.1331, R 336.1402, R336.1702)**

## **VII. REPORTING**

1. 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 EUSALVAGE. **(R 336.1201(7)(a))**

## **VIII. STACK/VENT RESTRICTIONS**

NA

## **IX. OTHER REQUIREMENTS**

NA