# MICHIGAN DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT AIR QUALITY DIVISION

February 7, 2011

PERMIT TO INSTALL 278-06A

ISSUED TO
Louis Padnos iron & Metal

LOCATED AT 2001 Turner Avenue NW Grand Rapids, Michigan

IN THE COUNTY OF Kent

## STATE REGISTRATION NUMBER A2457

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Natural Resources and Environment. 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:  December 9, 2010			
DATE PERMIT TO INSTALL APPROVED: February 7, 2011	SIGNATURE:		
DATE PERMIT VOIDED:	SIGNATURE:		
DATE PERMIT REVOKED:	SIGNATURE:		

## **PERMIT TO INSTALL**

## **Table of Contents**

Section	Page
Alphabetical Listing of Common Abbreviations / Acronyms	2
General Conditions	3
Special Conditions	5
Emission Unit Summary Table	5
Special Conditions for EU-SHREDDER	6
Special Conditions for EU-OLDSHREDDER	8
Special Conditions for EU-NONFERROUS	10
Special Conditions for EU-FERROUSZBOX	12
Flexible Group Summary Table	14
Special Conditions for FG-SHREDDEROP	14
Appendices	17

## **Common Abbreviations / Acronyms**

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	ng	Nanogram	
MAP	Malfunction Abatement Plan	NO <sub>x</sub>	Oxides of Nitrogen	
MDNRE	Michigan Department of Natural Resources and Environment (Department)	PM	Particulate Matter	
MIOSHA	Michigan Occupational Safety & Health Administration	PM10	PM less than or equal to 10 microns diameter	
MSDS	Material Safety Data Sheet	PM2.5	PM less than or equal 2.5 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	Reasonably Available Control Technology	sec	Seconds	
ROP	Renewable Operating Permit	SO <sub>2</sub>	Sulfur Dioxide	
SC	Special Condition	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	
TEQ	Toxicity Equivalence Quotient	yr	Year	
VE	Visible Emissions			

<sup>\*</sup> 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 Natural Resources and Environment, 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 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 Natural Resources and Environment. (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.
- 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.

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Flexible Group ID			
EU-SHREDDER	4,000-HP Scrap Metal Shredder equipped with a Smart Water Injection System, the shredder has exhaust hoods that discharge through a single exhaust stack, feed shaker, discharge conveyor; and a shared magnetic drum separator, ferrous separation process with a z-box / cyclone system, non-ferrous separation system with cyclone separator, associated conveyors, material storage, and all associated process activities including but not limited to management of materials from the shredding operations.	FG-SHREDDEROP			
EU-OLDSHREDDER	2,500-HP 74 x 104 Hammermill Scrap Metal Shredder, feed shaker, discharge conveyor; and a shared magnetic drum separator, ferrous separation process with a z-box / cyclone system, non-ferrous separation system with cyclone separator, associated conveyors, material storage, and all associated process activities including but not limited to management of materials from the shredding operations.	FG-SHREDDEROP			
EU-FERROUSZBOX	A ferrous separation process with a z-box / cyclone. The cyclone discharges through a single exhaust stack.	FG-SHREDDEROP			
EU-NONFERROUS	A non-ferrous separation system with cyclone separator. The cyclone discharges through a single exhaust stack.	FG-SHREDDEROP			
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.					

allowed by R 336.1278 to R 336.1290.

## The following conditions apply to: EU-SHREDDER

**<u>DESCRIPTION</u>**: A 4,000-HP Scrap Metal Shredder equipped with a Smart Water Injection System. The shredder has exhaust hoods that discharge through a single exhaust stack.

Flexible Group ID: FG-SHREDDEROP

**POLLUTION CONTROL EQUIPMENT:** Smart Water Injection System

#### I. EMISSION LIMITS

	Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1.	PM10	3.82 pph	Test protocol will specify averaging time.	EU-SHREDDER	GC 13, SC V.1	R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
2.	PM	0.050 lb / 1000 lb of exhaust gases	Test protocol will specify averaging time.	EU-SHREDDER	GC 13, SC V.1	R 336.1331
3.	Mercury	0.013 pph	Test protocol will specify averaging time.	EU-SHREDDER	GC 13, SC V.1	R 336.1225
4.	Chromium, hexavalent	0.0030 pph	Test protocol will specify averaging time.	EU-SHREDDER	GC 13, SC V.1	R 336.1225

5. Visible emissions from around the enclosure hood portion and the stack from EU-SHREDDER shall not exceed a six-minute average of 10 percent opacity except for uncombined water vapor. (R 336.1224, R 336.1301, R 336.1301)

## II. MATERIAL LIMITS

 The permittee shall not process more than 873,600 tons per 12-month rolling time period as determined at the end of each calendar month of material through EU-SHREDDER. (R 336.1224, R 336.1225, R 336.1901)

### III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EU-SHREDDER for more than 15 hours per calendar day and 5,460 hours per 12-month rolling time period as determined at the end of each calendar month. (R 336.1224, R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

## IV. <u>DESIGN/EQUIPMENT PARAMETERS</u>

1. The permittee shall not operate EU-SHREDDER unless the Smart Water Injection System is installed, maintained, and operated in a satisfactory manner. (R 336.1224, R 336.1225, R 336.1301, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

## V. TESTING/SAMPLING

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

1. Within 120 days of achieving maximum production capacity or greater than 120 tons/hr of material throughput, verification of PM10, PM, chromium-hexavalent, and mercury emission rates at maximum operating conditions from EU-SHREDDER, by testing at owner's expense, in accordance with Department requirements, will be required. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD 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 336.1224, R 336.1225, R 336.1331, R 336.1901, R 336.2001, R 336.2003, R 336.2804, 40 CFR 52.21(c) and (d))

#### 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 and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))
- 2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner devices to monitor the water injection rate and the shredder motor current on a continuous basis for the Smart Water Injection System on EU-SHREDDER. (R 336.1910)
- 3. The permittee shall record (when operating) and keep, in a satisfactory manner, records of the water injection rate and the shredder motor current from the Smart Water Injection System on EU-SHREDDER. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1910)

## VII. REPORTING

1. Within 7 days of achieving maximum production capacity or greater than 120 tons/hr of material throughput in EU-SHREDDER, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. (R 336.1201(7)(a))

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

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-SHREDDER	30	45	R 336.1225, R 336.1901, R 336.2803, R 336.2804,
			40 CFR 52.21(c) and (d)

## IX. OTHER REQUIREMENTS

NA

#### Footnotes:

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

## The following conditions apply to: EU-OLDSHREDDER

**DESCRIPTION:** A 2,500-HP 74 x 104 Hammermill Scrap Metal Shredder.

Flexible Group ID: FG-SHREDDEROP

POLLUTION CONTROL EQUIPMENT: Water injection system or foam dust suppressant applicator

### I. EMISSION LIMITS

NA

## **II. MATERIAL LIMITS**

1. The permittee shall not process more than 1,800 tons per calendar day of material through EU-OLDSHREDDER. (R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

#### III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EU-OLDSHREDDER for more than 18 hours per calendar day. (R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

## IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EU-OLDSHREDDER unless the water injection system or the foam dust suppressant applicator is installed, maintained, and operated in a satisfactory manner. (R 336.1301, R 336.1901, R 336.1910)

#### 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))

NA

## VII. REPORTING

NA

#### VIII. STACK/VENT RESTRICTIONS

NA

Louis Padnos Iron & Metal Permit No. 278-06A

February 7, 2011 Page 9 of 17

## IX. OTHER REQUIREMENTS

NA

Footnotes: <sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

## The following conditions apply to: EU-FERROUSZBOX

**<u>DESCRIPTION</u>**: A ferrous separation process with a z-box / cyclone. The cyclone discharges through a single exhaust stack.

Flexible Group ID: FG-SHREDDEROP

**POLLUTION CONTROL EQUIPMENT:** Cyclone

## I. <u>EMISSION LIMITS</u>

	Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1.	PM10	3.71 pph	Test protocol will specify averaging time.	EU- FERROUSZBOX	GC 13	R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
2.	PM	0.050 lb / 1000 lb of exhaust gases	Test protocol will specify averaging time.	EU- FERROUSZBOX	GC 13	R 336.1331

3. Visible emissions from EU-FERROUSZBOX exhaust shall not exceed a six-minute average of 10 percent opacity. (R 336.1301, R 336.1331, R 336.1901)

### II. MATERIAL LIMITS

NA

## III. PROCESS/OPERATIONAL RESTRICTIONS

NA

## IV. DESIGN/EQUIPMENT PARAMETERS

 The permittee shall not operate EU-FERROUSZBOX unless the cyclone is installed, maintained, and operated in a satisfactory manner. (R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (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))

NA

## VII. REPORTING

NA

## VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-FERROUSZBOX	24	35	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

## IX. OTHER REQUIREMENTS

NA

<u>Footnotes:</u> <sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

## The following conditions apply to: EU-NONFERROUS

**<u>DESCRIPTION</u>**: A non-ferrous separation system with cyclone separator. The cyclone discharges through a single exhaust stack.

Flexible Group ID: FG-SHREDDEROP

**POLLUTION CONTROL EQUIPMENT: Cyclone** 

## I. <u>EMISSION LIMITS</u>

	Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1.	PM10	2.25 pph	Test protocol will specify averaging time.	EU- NONFERROUS	GC 13	R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
2.	PM	0.050 lb / 1000 lb of exhaust gases	Test protocol will specify averaging time.	EU- NONFERROUS	GC 13	R 336.1331

3. Visible emissions from EU-NONFERROUS exhaust shall not exceed a six-minute average of 10 percent opacity. (R 336.1301, R 336.1331, R 336.1901)

## II. MATERIAL LIMITS

NA

## III. PROCESS/OPERATIONAL RESTRICTIONS

NA

## IV. <u>DESIGN/EQUIPMENT PARAMETERS</u>

 The permittee shall not operate EU-NONFERROUS unless the cyclone is installed, maintained, and operated in a satisfactory manner. (R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (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))

NA

## VII. REPORTING

NA

## VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-NONFERROUS	24	35	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

## IX. OTHER REQUIREMENTS

NA

<u>Footnotes:</u> <sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

#### **FLEXIBLE GROUP SUMMARY TABLE**

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-SHREDDEROP	Shredding Operation - Scrap metal shredder (two options) to a material separation system consisting of a magnetic drum separator, ferrous separation process with a z-box / cyclone system, non-ferrous separation system with cyclone separator, associated conveyors, material storage, and all associated process activities including but not limited to management of materials from the shredding operations.	EU-SHREDDER, EU-OLDSHREDDER, EU-FERROUSZBOX, EU-NONFERROUS

## The following conditions apply to: FG-SHREDDEROP

<u>DESCRIPTION:</u> Shredding Operation - Scrap metal shredder (two options) to a material separation system consisting of a magnetic drum separator, ferrous separation process with a z-box / cyclone system, non-ferrous separation system with cyclone separator, associated conveyors, material storage, and all associated process activities including but not limited to management of materials from the shredding operations.

Emission Units: EU-SHREDDER, EU-OLDSHREDDER, EU-FERROUSZBOX, EU-NONFERROUS

<u>POLLUTION CONTROL EQUIPMENT:</u> Smart Water Injection System, water injection system or foam dust suppressant applicator, cyclones

## I. <u>EMISSION LIMITS</u>

1. Visible emissions from the conveyors and transfer points of FG-SHREDDEROP shall not exceed a six-minute average of 10 percent opacity. (R 336.1301, R 336.1901)

## II. MATERIAL LIMITS

NA

#### III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall not operate EU-SHREDDER and EU-OLDSHREDDER at the same time in FG-SHREDDEROP. (R 336.1224, R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))
- The permittee shall remove and properly dispose of fluids from materials to be shredded as specified in the plan in SC III.9. Materials include but are not limited to vehicles, appliances, and industrial machinery (or inspect and/or document that removal has been performed). Fluids shall include, at a minimum, gasoline, motor oil, antifreeze, transmission oil, brake oil, power steering fluid, hydraulic fluid, and differential fluid. (R 336.1224, R 336.1702(a), R 336.1901)
- 3. The permittee shall remove and properly dispose of freon or other chlorofluorocarbons/halogenated chlorofluorocarbons (CFCs/HCFCs) from materials to be shredded as specified in the plan in SC III.9. Materials include but are not limited to air conditioning units in vehicles, appliances, and industrial machinery (or inspect and/or document that removal has been performed). (R 336.1224, R 336.1901)

- 4. The permittee shall remove and properly dispose of mercury-containing devices from materials to be shredded as specified in the plan in SC III.9. Materials include but are not limited to vehicles, appliances, and industrial machinery (or inspect and/or document that removal has been performed). (R 336.1224, R 336.1225, R 336.1901)
- 5. The permittee shall not process any asbestos tailing or waste materials containing asbestos in FG-SHREDDEROP pursuant to the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 61, Subpart M. (R 336.1224, R 336.1225, R 336.1901, 40 CFR Part 61 Subpart M)
- 6. The permittee shall not process batteries and gas tanks shall only be processed if they are flattened or punctured. (R 336.1224, R 336.1901)
- 7. The permittee shall stage all non-metal and automotive shredder residue (e.g., fluff) generated by FG-SHREDDEROP in a total volume not to exceed 6,480 cubic yards. (R 336.1301, R 336.1901)
- 8. All fluids, non-metal, and waste materials generated by the FG-SHREDDEROP shall be contained and disposed of or recycled in an acceptable manner in compliance with all applicable state and federal rules and regulations. (R 336.1224, R 336.1702(a), R 336.1901)
- 9. Prior to commencement of operations, the permittee shall submit to the AQD District Supervisor an acceptable written plan demonstrating compliance with SCs III.2, III.3, III.4, III.5, and III.6. The permittee shall not operate FG-SHREDDEROP unless the plan, or an alternate plan is implemented and maintained. Any changes to the plan by the permittee or as reasonably requested by the AQD shall be submitted to the AQD District Supervisor within 30 days. (R 336.1224, R 336.1702(a), R 336.1901)
- 10. The permittee shall implement and maintain an acceptable written malfunction abatement plan (MAP). The MAP shall include, at a minimum, the following:
  - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of control devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
  - b. Identification of the emission source(s) and control device(s) operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
  - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits. This includes ceasing operations when monitoring indicates a malfunction of a control system, and documentation and duration of the malfunction and corrective action.

If the MAP fails to address, or inadequately addresses a malfunction, the permittee shall revise the MAP within 45 days after such an event occurs. The MAP shall be made available to the Department upon request. (R 336.1911)

- 11. The permittee shall prevent fires from starting in the pile of non-metal and automotive shredder residue (e.g., fluff) through regular and frequent applications of water as needed. (R 336.1310, R 336.1901)
- 12. The permittee shall not operate FG-SHREDDEROP 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 A has been implemented and is maintained. (R 336.1371, R 336.1372, R 336.1901)

Louis Padnos Iron & Metal February 7, 2011
Permit No. 278-06A Page 16 of 17

## IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate FG-SHREDDEROP unless the conveyor(s), which carries the dry non-metal and automotive shredder residue, is covered and a chute at the discharge end of the conveyor is in place. (R 336.1301, R 336.1901)

#### 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 recordkeeping, reporting or notification special condition. (R 336.1224, R 336.1225, R 336.1901)
- 2. The permittee shall keep records of the amount of material processed in FG-SHREDDEROP in tons per calendar day and tons per 12-month rolling time period as determined at the end of each calendar month. The records shall be kept in a format acceptable to the AQD District Supervisor. 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 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))
- 3. The permittee shall keep records of operating hours per calendar day and operating hours per 12-month rolling time period as determined at the end of each calendar month. The records shall be kept in a format acceptable to the AQD District Supervisor. 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 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

## VII. REPORTING

NA

### VIII. STACK/VENT RESTRICTIONS

NA

## IX. OTHER REQUIREMENTS

NA

### Footnotes:

<sup>&</sup>lt;sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

#### **APPENDIX A**

## **Fugitive Dust Control Plan**

#### I. Plant

The drop distance at each transfer point throughout the plant shall be reduced to the minimum the equipment can achieve.

#### II. 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 six inches of the top of any sideboard, side panel or tailgate, otherwise, the truck shall be tarped.

## III. Site Roadways and the 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 an opacity limit of five percent as determined by reference test method 9D.
- b. All paved roadways/plant yard shall be swept, as needed, between applications of dust suppressants.
- c. A record of all applications of dust suppressants, and roadway and the plant yard sweepings shall be kept on file for the most recent five-year period and be made available to the AQD upon request.

## IV. Storage Piles

- a. Stockpiling of all nonmetallic materials 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 an opacity limit of five percent as determined by reference test method 9D. 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.
- c. A record of all watering shall be kept on file for the most recent five-year period and be made available to the AQD upon request.

## 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 the permitted opacity limits are not being met.