FERROUS
Processing & Trading Co.
9100 John Kronk, Detroit, Michigan 48210
Phone: (313) 582-2911 • Fax: (313) 582-1949 • www.FPTscrap.com

November 30, 2020
Project No. 201415

Mr. Todd Zynda, PE
Air Quality Division
Michigan Department of the Environment, Great Lakes and Energy
Cadillac Place
3058 West Grand Boulevard, Suite 2-300
Detroit, MI 48202

Re: Response to Violation Notice dated November 9, 2020
Ferrous Processing and Trading Company (FPT) – Schlafer Division (N7683)
1350 Medbury Street, Detroit, Michigan

Dear Mr. Zynda:
This letter is in response to the EGLE, Air Quality Division Violation Notice (VN) dated November 9, 2020. The VN alleges the following violation:

Process Description	Rule/Permit Condition Violated	Comments
Torch cutting operations	*Rule 336.2101(1)*	*Installation of a non-portable torch cutting, without enclosure or particulate control*

As requested, this letter provides information regarding the above citation including: the date the alleged violation occurred; an explanation of the causes and duration of the alleged violation; whether the violation is ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the violation; the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

FPT does not believe that the torch cutting operations at the facility require a Michigan Permit to Install (PTI), as the activity is exempt from such requirement pursuant to Rule 285j. Moreover, in the VN, EGLE alleges that, because the storage tank associated with the portable torch cutting operations is relatively new, the torch cutting operations are new to the Schlafer location. This is not the case; torch cutting operations have taken place at the Schlafer site for more than 20 years. In fact, during the last EGLE site visit, on April 9, 2014, you witnessed torch cutting operations taking place at the site.

We would also like to note that, because the portable torch cutting operations were conducted at the site in 2014, the exemption that would apply is the one that was in place prior to 2016 when the rule was changed. It reads differently than the exemption that is in place now. The exemption in place in 2014 read:

> *R 336.1285 Permit to install exemptions; miscellaneous.*
> *Rule 285. The requirement of R 336.1201(1) to obtain a permit to install does not apply to any of the following:*
> ...
> *(j) Portable cutting torches*

The Staff Activity Report (included as Attachment 1) from the 2014 site visit includes a description of the torch cutting operations as witnessed at the time. This description similarly portrays the activities that take place today at the Schlafer Division. In fact, the explanation of the exemption in the 2014 Staff Activity Report specifically points out that while the tank is not portable, the torching activity itself is portable and eligible for the exemption that was in place in 2014. Attachment 2 provides a photograph of the tank referenced in the VN; the VN suggests that the tank would require *significant deconstruction* before being moved. FPT respectfully disagrees; however, as noted in the 2014 Staff Activity Report, the *tank* need not be portable to classify the *torching* as portable.

It should be noted that even if EGLE changes its stance on this particular portable torch cutting operation and refuses to acknowledge that the activity is exempt under Rule 285(j) as outlined in the 2014 Staff Activity Report, emissions from this process are very low. Emissions were estimated as part of a Rule 278a demonstration and are provided as Attachment 3. In most cases, pursuant to Rule 278a(2), EGLE would have requested this analysis before writing the VN. This particular analysis was designed to demonstrate conformance with Rule 291, rather than Rule 285(j), as the emissions are low enough that the process also qualifies for exemption under Rule 291. FPT believes use of either Rule 291 or Rule 285(j) exemptions are appropriate.

It is our understanding that your most recent site visit was precipitated by a complaint you received on October 28, 2020. In addition, we are aware that EGLE staff have visited or driven by the site a few times since the complaint but have witnessed no violations of Rule 301 (opacity) or Rule 901 (nuisance). While the VN does not address compliance with either of these rules, FPT wanted to assure you that compliance with all applicable environmental regulations is very important to us. We previously developed a Scrap Metal Management Plan for the site to help personnel operate in compliance with these important air quality regulations. The Scrap Metal Metal Management Plan is provided as Attachment 4. In response to the VN and site visits, we have reviewed our Scrap Management Plan with staff and reminded them of actions we can take to ensure compliance. These include:

- Use of shearing and cutting whenever possible
- Inspection of scrap to avoid torching of rubber or plastic
- Proper sorting of scrap metal to avoid torching materials that would smoke excessively
- Immediate extinguishing of any accidental fires that occur

Finally, environmental compliance is important to FPT. Facilities like FPT play an important part in Michigan's recycling efforts. The analysis in Attachment 3 was prepared some time ago to ensure that our use of PTI exemptions is appropriate and that it is properly documented. To ensure environmental compliance, FPT has prepared a Scrap Metal Management Plan that outlines internal procedures that can ensure compliance. We work hard to be a good neighbor and your recent inspection did not identify noncompliance with either Rule 301 or Rule 901. If you have any questions regarding these issues, or this response, please contact me at 313.582.2911 or lisa.carroll@fptscrap.com.

Sincerely,

Lisa Carroll

Lisa Carroll
Ferrous Processing and Trading Company

Attachments
By email and USPS
Copy: Susan Johnson – Butzel Long

Attachment 1

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

N768324828

FACILITY: FPT SCHLAFER LLC		SRN / ID: N7683
LOCATION: 1950 MEDBURY AVE, DETROIT		DISTRICT: Detroit
CITY: DETROIT		COUNTY: WAYNE
CONTACT: Steven Benacquisto , Executive Vice President		ACTIVITY DATE: 04/09/2014
STAFF: Todd Zynda	COMPLIANCE STATUS: Compliance	SOURCE CLASS: Minor
SUBJECT: April 9, 2014 Self Initiated Inspection		
RESOLVED COMPLAINTS: C-14-00529		

REASON FOR INSPECTION: Self-Initiated Inspection
INSPECTED BY: Todd Zynda, AQD
PERSONNEL PRESENT: Steven Benacquisto, Executive Vice President
FACILITY PHONE NUMBER: 313-582-2911
FACILITY FAX NUMBER: 313-582-1949
FACILITY WEBSITE: www.fptscrap.com

FACILITY BACKGROUND

Ferrous Processing and Trading Company (FPT) Schlafer Division, LLC, is metal processing facility that processes ferrous and nonferrous scrap metal. The facility is located at 1950 Medbury, Detroit, Michigan. Property boundaries are as follows: Interstate-94 (I-94) is located to the north; Detroit Renewable Power (DRP) and the City of Detroit Department of Public Works service yards are located to the west; residential properties are located to the east; and industrial commercial property is located to the south. The nearest residential property is located approximately 100 feet to east, along St. Aubin Street.

PROCESS OVERVIEW

Operations at the facility include sorting scrap metal, shearing metal, torch cutting metal, and bailing metal. Semi-trucks bring scrap metal in the storage yard, which are weighed at the entrance of the facility. Material is sorted into piles for additional processing. As necessary material is sheared or torch cut into smaller pieces for handling and processing. A storage building at the property includes an enclosed indoor welding area, and engineering/machine shop which houses milling, grinding, and drilling equipment.

COMPLAINT/COMPLIANCE HISTORY

The most recent complaint for this facility occurred on April 7, 2014. The complainant, who requested to remain anonymous, described a very strong, pungent burning odor, along with opacity/smoke originating from the FPT facility located at Medbury and St. Aubin. The complainant provided a photo of opacity that occurred at FPT property on April 7, 2014 (see attached photo). This self-initiated inspection was conducted as a result of the complaint.

On September 21, 2006, an inspection of the facility was conducted. The inspection concluded that operations at the facility are exempt from Permit to Install (PTI) requirements. The inspection did identify a Rule 301 violation for opacity observed from the torch cutting process. The inspection indicated that a violation notice (VN) would be issued. However, the VN correspondence did not appear in the file, and did not appear to be issued.

OUTSTANDING CONSENT ORDERS

None

OUTSTANDING VIOLATION NOTICES

None

INSPECTION NARRATIVE

On April 9, 2014 the Michigan Department of Environmental Quality (MDEQ) AQD inspector, Mr. Todd Zynda, conducted an unannounced level 2 inspection of FPT. During the inspection, Mr. Steven Benacquisto, Executive Vice President, provided information and a tour of facility operations relating to air quality permits and regulations. The inspection was conducted to determine the facility's compliance with the Natural Resources and Environmental Protection Act (NREPA), Act 451, Part 55 and to address the April 7, 2014 odor/opacity complaint.

At 10:00 AM, AQD staff arrived onsite and performed outside observations. Visible emissions were not observed at the time of the inspection. At 10:15 AM Mr. Zynda entered the facility, stated the purpose for the inspection, and was greeted by Mr. Benacquisto. During the opening meeting the facility operations were discussed. Mr. Zynda explained that AQD is responding to an odor and opacity complaint that was attributed to FPT and would like to perform an inspection of the facility.

Following an introductory meeting, a tour of the facility was conducted. During the tour the compactor/bailer equipment was observed from a distance. The primary focus of the inspection was to determine if there was incident that occurred on April 7, 2014, (i.e. open burning or torch cutting resulting in smoke/opacity) and to obtain a general feel of facility operations. During the inspection, Mr. Benacquisto stated that facility does not conduct open burning. Evidence of open burning was not observed during the site visit. During the inspection large piles of scrap metal (up to 2 stories high) were observed. The facility roadways are unpaved and at the time of the inspection covered in deep mud.

Mr. Benacquisto provided a tour of the torch cutting area, and associated oxygen and propane tanks. According to Mr. Benacquisto, torch cutting occurs approximately three days a week, and is conducted on metal pieces that cannot be cut with the mobile shears (excavators equipped with cutting attachments). At the torch cutting area, there was no evidence of open burning. According to Mr. Benacquisto, the torch cutting process generates a low amount of smoke that typically does not migrate offsite. Torch cutter operators at the site stated that on Monday, April 7, 2014 there was an incident were they accidentally "torched" a steel tank that was lined with rubber. At that time the rubber caught on fire resulting in excessive smoke. According to Mr. Benacquisto the metal is visually sorted for torch cutting, and that the rubber lined tank was missed during visual evaluation. The associated oxygen and propane tank appear to be stationary tanks at the facility, while the actual torches are portable. Based on discussions with other AQD staff, these torches are considered exempt as they are portable throughout the facility. Mr. Benacquisto stated that the tanks are also "portable" as they could be moved using heavy equipment at the facility. At this time, Mr. Benacquisto was provided copies of Rule 301 and Rule 901. Mr. Benacquisto was informed that AQD can issue citations for these both of these regulations if torch cutting activities are in violation opacity or provides "unreasonable interference with the comfortable enjoyment of life and property". Mr. Benacquisto was also informed that AQD staff is in the area frequently because of other sources in the area and will be monitoring FPT as appropriate.

The tour concluded with observation of the storage building. The building includes an enclosed indoor welding area, and engineering/machine shop which houses milling, grinding, and drilling equipment. All emission generated in the building area released to the general in-plant environment.

APPLICABLE RULES/PERMIT CONDITIONS

The facility currently does not operate equipment that is subject to PTI requirements.

Permit to Install Exempt Equipment

Compactor/bailer Equipment
The metal compactor and bailing equipment appear to be exempt from PTI requirements under the following rule:

R336.1285(l)(i): "Permit to install does not apply to..Equipment used exclusively for bending, forming, expanding, rolling, pressing....either hot or cold metals."

Welding Operations
The welding operation is conducted in an indoor enclosure and is not subject to PTI requirements under the following rule:

R336.1285(i): "The requirement to obtain a PTI does not apply to ...brazing, soldering, welding equipment."

Milling, Grinding, Drilling Equipment
The milling, grinding, and drilling equipment located in the engineering/machine shop are not subject to PTI requirements under the following rule.

R336.1285(l)(vi)(B): "The requirement to obtain a PTI does not apply to equipment for carving, cutting, sawing, surface grinding, sanding, etc. which emissions are released only into the general in-plant environment."

Torch Cutting
Torch cutting activities appear to be exempt from PTI requirements under the following rule:

R336.1285(j): "The requirement to obtain a PTI does not apply to ... Portable cutting torches."

APPLICABLE FUGITIVE DUST CONTROL PLAN CONDITIONS:

The majority of FPT is unpaved. At the time of the inspection, roadways and storage areas were wet. Deep mud was observed in the back portion of the facility near the torch cutting area.

Per the NREPA, Act 451, Part 55, Sec. 5524, FPT is considered a fugitive dust source as defined under 324.5524(1), and required to submit a fugitive dust operating program (324.5524(4)). At this time FPT has not submitted a fugitive dust plan. Because fugitive dust has not been an issue at the facility (no complaints or opacity issues as result of fugitive dust) AQD is currently not pursuing a fugitive dust plan from FPT.

MAERS REPORT REVIEW:

The facility is not required to submit Michigan Air Emissions Reporting System (MAERS).

FINAL COMPLIANCE DETERMINATION:

At the time of the inspection, the facility was in compliance with current federal and state air quality regulations. The facility has been notified of the applicable rules (Rules 301 and 901) that may be applied to torch cutting activities in the future. The complaint was likely the result of the accidental fire that occurred during torch cutting activities. The associated complaint is considered resolved. The complainant was notified of AQD's findings. Additional surveillance will be conducted in the area as necessary.

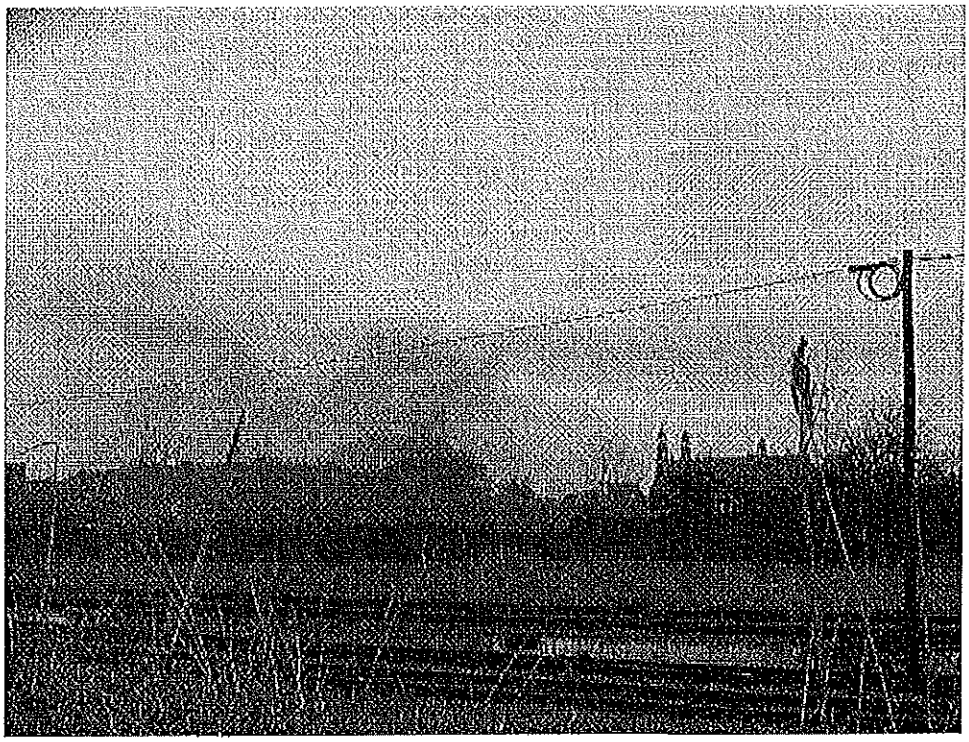
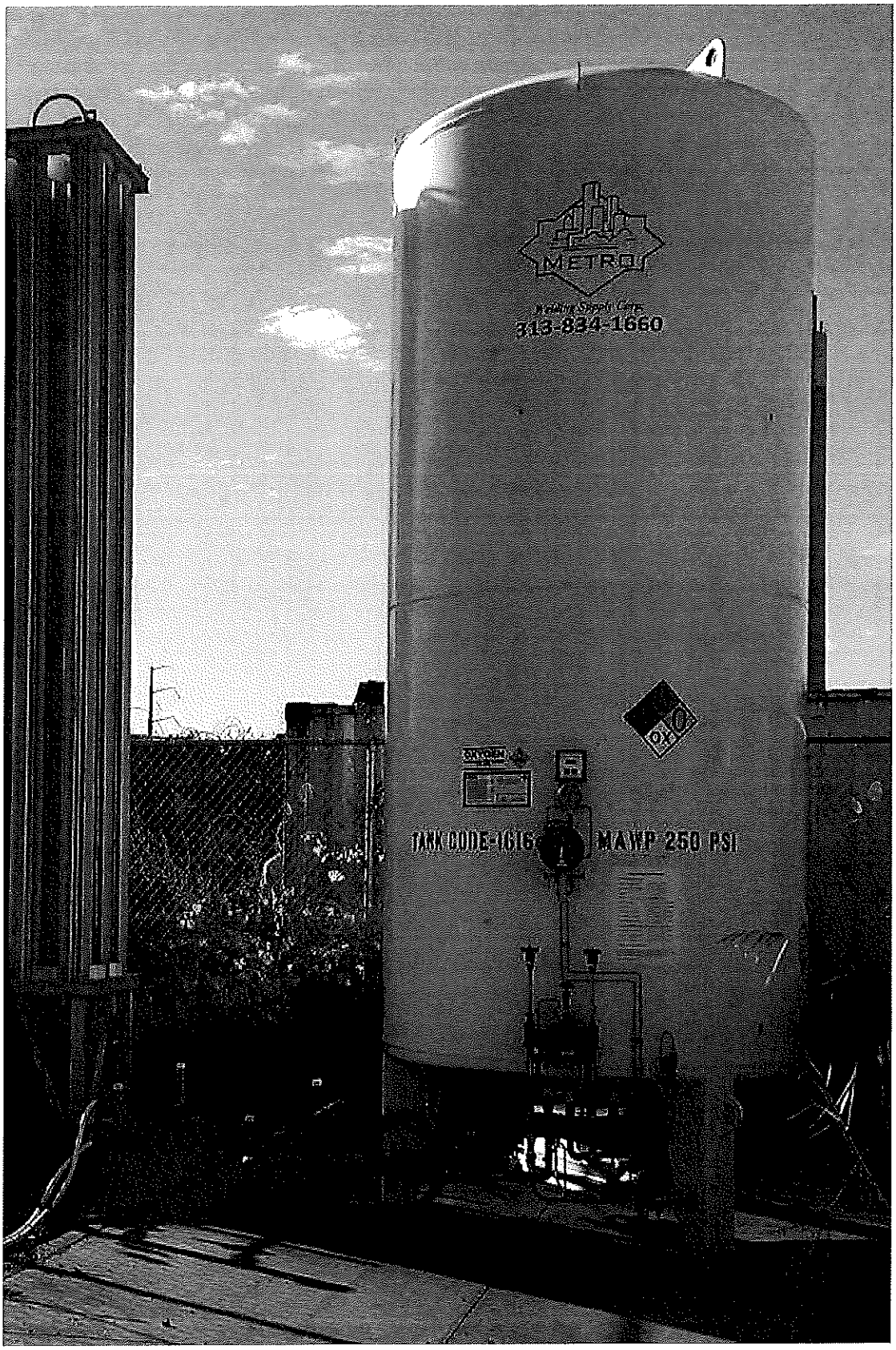


Image 1(Opacity at FPT) : Complainant photo documenting observed opacity orginating from FPT properly.

NAME _____ DATE 4/10/14 SUPERVISOR _____

Attachment 2


METRO
313-834-1660
TANK CODE 1616
MAWP 250 PSI

Attachment 3

fishbeck
Engineers | Architects | Scientists | Constructors

39500 MacKenzie Drive, Suite 100
Novi, Michigan 48377

248.324.2090 | fishbeck.com

Technical Memo

SUBJECT: Exemption Record Rule 291
Torch Cutting Operations
Ferrous Processing and Trading, Schlafer, Michigan

FROM: Lillian L. Woolley, PE – Fishbeck

DATE: October 9, 2019 **PROJECT NO.:** 201415
REVISED: November 23, 2020

Table of Contents

Introduction

Torch cutting operations at the Ferrous Processing and Trading - Schlafer, Division (FPT) is exempt under either Michigan Rule 285(j) or the current Michigan Rule 291. FPT retained Fishbeck to document use of either exemption as it relates to the torch cutting operations and to perform emission calculations showing that use of either exemption is appropriate under Rule 278 and Rule 278a.

Background

FPT has been handling recyclable metals at this location for more than 20 years and has employed torch cutting as a method of dismantling or resizing material the entire time. When evaluating an activity to determine whether it is exempt, the exemptions in place at the time the activity began or the exemptions in place at the time of the evaluation can be reviewed. At the time this activity started, torch cutting was exempt under Rule 285(j) which simply listed *portable cutting torches* as exempt from the Michigan PTI Program (see Attachment 1). Therefore,

FPT could argue that this activity is exempt under Michigan Rule 285(j) as it read when torch cutting operations began at the site.

That being said, because emissions from the torch cutting operations are so low, FPT can also demonstrate that these operations are exempt under Rule 291 (see Attachment 2), as its emissions are below emission thresholds in Rule 291 that would require a PTI.

Process Description and Emission Calculation Methodology

Torch cutting is performed at scrap metal facilities to dismantle and resize large pieces of metal, mostly steel, to make the metals saleable to mills and foundries, who then melt the material into new metal, which starts the life cycle of the metal again. At scrap metal facilities, oxy-fuel torches are used for rough cutting larger scrap items into smaller pieces. Oxy-fuel torches are the most common means of cutting metals in the scrap yard for numerous reasons. Torches are available in extended lengths to keep the operator at a distance from the heat, flames, and slag produced while cutting. Different tips can be used on the torch to facilitate cutting different materials or materials of different thicknesses.

Oxy-fuel torches are most commonly used with 75- to 100-foot hoses, though in some operations torch hoses of up to 200 feet may be used. Torch hoses are connected to a portable fuel source. The use of long hoses allows greater portability than is afforded by other metal cutting options, which may require electrical power and a compressed air source. In the event a fire starts, FPT keeps a tub of water nearby with which to douse material. FPT also keeps portable fire extinguishers in the vicinity of the torch cutting area.

The size and thickness of the scrap being cut can vary, though emissions tend to increase or decrease proportionally with changing plate thickness. It also takes longer to cut thicker pieces. For example, cutting a 2-inch plate would take at least twice as long as cutting a 1-inch plate and emissions would be twice as high. Calculations documenting the Facility's potential to emit are provided in Table 1. Emissions were calculated using *Compilation of Air Pollutant Emission Factors (Fifth Edition) Table 12.5.1* including emission factors for billet cutting at mini mills. An excerpt is provided as Attachment 3. Metal emissions were estimated using *Clarification and Guidance for the Metal Fabrication Industry* (USEPA, January 1990). An excerpt of the section outlining emission estimates is provided as Attachment 4.

The Facility is aware of the challenges of Michigan Rules 301 and 901 and has implemented a Scrap Metal Management Plan (SMP) to address air emissions and smoke opacity.

Michigan Rule 291

Michigan Rule 291 exempt sources based on their potential emissions as outlined in Table 1:

Michigan Rule 291 Exempt Sources

Air Contaminant	Potential Emissions (tpy)
CO_2e	75,000
CO	10
NO_X	10
SO_2	10
VOC	5
PM	10
PM_{10}	5
$PM_{2.5}$	3
Lead	0.1
Fluorides	1
Sulfuric acid mist	0.12
Hydrogen sulfide	2
Total reduced sulfur	2
Reduced sulfur compounds	2
Total mercury	0.12
Total TACs not listed in Table 23 with any screening level	5
Total air contaminants not listed in Table 23 that are non-carcinogenic and do not have a screening level	6

An individual torch cutting process has potential emissions less than the Rule 291 thresholds presented in Table 1. TAC emissions also meet the requirements of Rule 291 (2)(a), (b) and (c). Torch cutting emits no asbestos or other TACs that would prohibit use of this exemption.

Michigan Rule 278a(1)(a) Scope of Permit Exemptions – Description

To qualify for permit exemptions under Michigan Air Pollution Control Rules, emission units must meet the scope of permit exemptions identified in Rule 336.1278a, which states:

> ***R 336.1278a Scope of Permit Exemptions***
>
> *(1) To be eligible for a specific exemption listed in R 336.1280 to R 336.1291, any owner or operator of an exempt process or exempt process equipment must be able to provide information demonstrating the applicability of the exemption. The demonstration may include the following information:*
> *(a) A description of the exempt process or process equipment, including the date of installation.*
> *(b) The specific exemption being used by the process or process equipment.*
> *(c) An analysis demonstrating that R 336.1278 does not apply to the process or process equipment.*

A copy of Rule 278a is included in Attachment 5. The process equipment description is provided in the *Process Description and Emission Calculation Methodology* section of this document and demonstrates eligibility for the specific exemption outlined in Rule 291.

Rule 278a(1)(c) Scope of Permit Exemptions – Rule 278 Exclusions

In addition to the Rule 336.1278a(1)(a) and (b) scope of permit exemptions previously identified, Rule 336.1278a(1)(c), requires an analysis demonstrating that R 336.1278 does not apply to any of the processes or process equipment. A copy of Rule 278 is included as Attachment 6. Rule 336.1278 states:

> ***Rule 278.***
>
> *(1) The exemptions specified in R 336.1280 to R 336.1291 do not apply to either of the following:*
> *(a) Any activity that is subject to prevention of significant deterioration of air quality regulations or new source review for major sources in nonattainment areas regulations.*
> *(b) Any activity that results in an increase in actual emissions greater than the significance levels defined in R 336.1119. For the purpose of this rule, "activity" means the concurrent and related installation, construction, reconstruction, relocation, or modification of any process or process equipment.*
> *(2) The exemptions specified in R 336.1280 to R 336.1291 do not apply to the construction of a new major source of hazardous air pollutants or reconstruction of a major source of hazardous air pollutants, as defined in 40 C.F.R. §63.2 and subject to §63.5(b)(3), national emission standards for hazardous air pollutants, adopted by reference in R 336.1902.*
> *(3) The exemptions specified in R 336.1280 to R 336.1291 do not apply to a construction or modification as defined in and subject to 40 C.F.R. part 61, national emission standards for hazardous air pollutants, adopted by reference in R 336.1902.*
> *(4) The exemptions in R 336.1280 to R 336.1291 apply to the requirement to obtain a permit to install only and do not exempt any source from complying with any other applicable requirement or existing permit limitation.*

As demonstrated in Table 1, none of the torch cutting equipment has a potential to emit more than the major source thresholds.

Rule 278a(2) Scope of Permit Exemptions – Records

> ***R 336.1278a Scope of Permit Exemptions***
>
> *(2) The demonstration required by this rule shall be provided within 30 days of a written request from the department. Any other records required within a specific exemption shall be provided within timeframes established within that specific exemption.*

This memorandum and its attachments serve as the required Rule 278 demonstration. As long as the process description is accurate, this memorandum and its attachments provide adequate documentation for demonstrating that each torch cutting activity is exempt from permitting.

List of Tables

List of Attachments

List of Abbreviations and Acronyms

CO	carbon monoxide
CO2e	carbon dioxide equivalent (greenhouse gas)
FPT	Ferrous Processing and Trading Company
NO_X	nitrogen oxides
PM	particulate matter
PM_{10}	fine particulate matter less than 10 microns
$PM_{2.5}$	fine particulate matter less than 2.5 microns
PTI	Permit to Install
SO_2	sulfur dioxide
TAC	toxic air contaminant
tpy	tons per year
VOC	volatile organic compound

Tables

Table 1 - Torch Cutting Rule 291 Emissions Estimate
Ferrous Processing and Trading Company
Detroit, Michigan

Air Contaminant	Throughput (tons/mo)	Emission Factor (lb/ton)	Emissions per Unit (lb/hr)	Annual Emissions (tpy)	Rule 291 Limit (tpy)
Particulate Matter	1000	0.032	0.04	0.19	10.0

Emissions calculated using *Compilation of Air Pollutant Emission Factors (Fifth Edition) Table 12.5.1*
Metal emissions calculated using *Using Fumes and Gases in the Welding Environment, as outlined in Section 313 Reporting; Clarification and Guidance for the Metal Fabrication Industry published by USEPA in January, 1990*

Air Contaminant	CAS No.	% Metal	Initial Threshold Screening Level (mg/m^3)	Secondary Threshold Screening Level (mg/m^3)	Initial Risk Screening Level (mg/m^3)	Minimum Screening Level (mg/m^3)	Maximum Short-Term Emissions per Unit (lb/hr)	Annual Emissions per Unit (tpy)	Rule 291 Limit (tpy)
Barium	7440-39-3	0.01%	5			5	0.000	0.00	D
Manganese	7439-96-5	0.3%	0.3			0.3	0.000	0.00	A
Chromium	18540-29-9	0.2%	0.1		0.000083	0.000083	0.000	0.00	C
Nickel	7440-02-0	0.05%			0.0058	0.0058	0.000	0.00	C
Aluminum	7429-90-5	0.02%					0.000	0.00	E
Vanadium	1314-62-1	0.01%	0.5			0.5	0.000	0.00	A
Copper	7440-50-8	0.1%	2			2	0.000	0.00	D
Zinc	7440-66-6	0.1%					0.000	0.00	E
Cobalt	7440-48-4	0.02%	0.2		0.00013	0.00013	0.000	0.00	C
Combined potential emissions of TACs with 0.04 $\mu g/m^3 \leq SL < 2$ $\mu g/m^3$ (tpy)								0.00	0.12
Combined potential emissions of TACs with 0.005 $\mu g/m^3 \leq SL < 0.04$ $\mu g/m^3$ (tpy)								0.00	0.06
Combined potential emissions of TACs with SL <0.005 $\mu g/m^3$ (tpy)								0.00	0.006
TACs not listed in Table 23 with any SL (R 291(2),Table 23)								0.00	5.000
Non-Carcinogen air contaminants not listed in Table 23 without a SL (R 291(2), Table 23)								0.00	6.000

A - Per R 336.1291(2)(a), the combined potential emissions of all toxic air contaminants with screening levels greater than or equal to 0.04 micrograms per cubic meter and less than 2 micrograms per cubic meter shall not exceed 0.12 tons per year.
B - Per R 336.1291(2)(a), the combined potential emissions of all toxic air contaminants with screening levels greater than or equal to 0.005 micrograms per cubic meter and less than 0.04 micrograms per cubic meter shall not exceed 0.06 tons per year.
C - Per R 336.1291(2)(c), the combined potential emissions of all toxic air contaminants with screening levels less than 0.005 micrograms per cubic meter shall not exceed 0.006 tons per year.
D - Per R 336.1291(2) and Table 23, the combined potential emissions of all toxic air contaminants not listed in Table 23 with any screening level shall not exceed 5 tons per year.
E - Per R 336.1291(2) and Table 23, the combined potential emissions of all non-carcinogenic toxic air contaminants not listed in Table 23 which do not have a screening level shall not exceed 6 tons per year.

Rule 285. The requirement of R 336.1201(1) to obtain a permit to install does not apply to any of the following:

(a) Routine maintenance, parts replacement, or other repairs that are considered by the department to be minor, or relocation of process equipment within the same geographical site not involving any appreciable change in the quality, nature, quantity, or impact of the emission of an air contaminant therefrom. Examples of parts replacement or repairs considered by the department to be minor include the following:
- *(i) Replacing bags in a baghouse.*
- *(ii) Replacing wires, plates, rappers, controls, or electric circuitry in an electrostatic precipitator which does not measurably decrease the design efficiency of the unit.*
- *(iii) Replacement of fans, pumps, or motors which does not alter the operation of a source or performance of air pollution control equipment.*
- *(iv) Boiler tubes.*
- *(v) Piping, hoods, and ductwork.*
- *(vi) Replacement of engines, compressors, or turbines as part of a normal maintenance program.*

(b) Changes in a process or process equipment which do not involve installing, constructing, or reconstructing an emission unit and which do not involve any meaningful change in the quality and nature or any meaningful increase in the quantity of the emission of an air contaminant therefrom. Examples of such changes in a process or process equipment include the following:
- *(i) Change in the supplier or formulation of similar raw materials, fuels, or paints and other coatings.*
- *(ii) Change in the sequence of the process.*
- *(iii) Change in the method of raw material addition.*
- *(iv) Change in the method of product packaging.*
- *(v) Change in process operating parameters.*
- *(vi) Installation of a floating roof on an open top petroleum storage tank.*
- *(vii) Replacement of a fuel burner in a boiler with an equally or more thermally efficient burner.*
- *(viii) Lengthening a paint drying oven to provide additional curing time.*

(c) Changes in a process or process equipment which do not involve installing, constructing, or reconstructing an emission unit and which involve a meaningful change in the quality and nature, or a meaningful increase in the quantity, of the emission of an air contaminant resulting from any of the following:
- *(i) Changes in the supplier or supply of the same type of virgin fuel, such as coal, no. 2 fuel oil, no. 6 fuel oil, or natural gas.*
- *(ii) Changes in the location, within the storage area, or configuration of a material storage pile or material handling equipment.*
- *(iii) Changes in a process or process equipment to the extent that such changes do not alter the quality and nature, or increase the quantity, of the emission of the air*

contaminant beyond the level which has been described in and allowed by an approved permit to install, permit to operate, or order of the department.

(d) Reconstruction or replacement of air pollution control equipment with equivalent or more efficient equipment.

(e) Installation, construction, or replacement of air pollution control equipment for an existing process or process equipment for the purpose of complying with the national emission standards of hazardous air pollutants regulated under section 112 of part A of title I of the clean air act, 84 Statutes 1685, 42 U.S.C. §7412.

(f) Installation or construction of air pollution control equipment for an existing process or process equipment if the control equipment itself does not actually generate a significant amount of criteria air contaminants as defined in R 336.1119(e) or a meaningful quantity of toxic air contaminants.

(g) Internal combustion engines that have less than 10,000,000 Btu/hour maximum heat input.

(h) Vacuum pumps in laboratory or pilot plant operations.

(i) Brazing, soldering, welding, or plasma coating equipment.

(j) Portable cutting torches

(ii) An air cleaning device for particulate matter shall be installed, maintained, and operated in accordance with the manufacturer's specifications or the owner or operator shall develop a plan that provides to the extent practicable for the maintenance and operation of the equipment in the manner consistent with good air pollution control practices for minimizing emissions. It shall also be equipped to monitor appropriate indicators of performance, for example, static pressure drop, water pressure, and water flow rate.

(c) A description of the emission unit is maintained throughout the life of the unit.

(d) Records of material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions are maintained in sufficient detail to demonstrate that the emissions meet the emission limits outlined in this rule. Volatile organic compound emissions shall be calculated using mass balance, generally accepted engineering calculations, or another method acceptable to the department.

(e) The records are maintained on file for the most recent 2-year period and are made available to the department upon request.

History: 1993 AACS; 1995 AACS; 1997 AACS; 2016 AACS.

R 336.1291 Permit to install exemptions; emission units with "de minimis" emissions.

Rule 291. (1) This rule does not apply if prohibited by R 336.1278 and unless the requirements of R 336.1278a have been met.

(2) The requirement of R 336.1201(1) to obtain a permit to install does not apply to any emission unit in which potential emissions meet the conditions listed in subdivisions (a) to (d) of this subrule and table 23 for all air contaminants listed. In addition, records shall be maintained in accordance with subdivisions (e) and (f) of this subrule.

(a) The combined potential emissions of all toxic air contaminants with screening levels greater than or equal to 0.04 micrograms per cubic meter and less than 2 micrograms per cubic meter shall not exceed 0.12 tons per year.

(b) The combined potential emissions of all toxic air contaminants with screening levels greater than or equal to 0.005 micrograms per cubic meter and less than 0.04 micrograms per cubic meter shall not exceed 0.06 tons per year.

(c) The combined potential emissions of all toxic contaminants with screening levels less than 0.005 micrograms per cubic meter shall not exceed 0.006 tons per year.

(d) The emission unit has no potential emissions of asbestos and/or subtilisin proteolytic enzymes.

(e) A description of the emission unit shall be maintained throughout the life of the unit.

(f) Documentation and/or calculations identifying the quality, nature, and quantity of the air contaminant emissions are maintained in sufficient detail to demonstrate that the potential emissions are less than those listed in subdivisions (a) to (d) of this subrule and Table 23. Such documentation shall include the toxic air contaminant screening level applicable at the time of installation and/or modification of the emission unit.

Table 23. Potential Emissions from Air Contaminants

Air Contaminant	Potential Emissions

	Not to be Exceeded
CO_2 equivalent	75,000 tons per year
CO	10 tons per year
NO_x	10 tons per year
SO_2	10 tons per year
VOC (as defined in R 336.1122)	5 tons per year
PM	10 tons per year
PM-10	5 tons per year
PM-2.5	3 tons per year
Lead	0.1 tons per year
Fluorides	1 ton per year
Sulfuric acid mist	0.12 tons per year
Hydrogen sulfide	2 tons per year
Total reduced sulfur	2 tons per year
Reduced sulfur compounds	2 tons per year
Total mercury	0.12 pounds per year
Total toxic air contaminants not listed in table 23 with any screening level	5 tons per year
Total air contaminants not listed in table 23 that are non-carcinogenic and do not have a screening level	6 tons per year

History: 2016 AACS.

R 336.1299 Rescinded.

History: 1992 AACS; 1995 AACS; 1998-2000 AACS; 2001 AACS; 2003 AACS; 2008 AACS; 2012 AACS; 2016 AACS.

12.5.1-1. FILTERABLE PM EMISSION FACTORS FOR MINIMILLS

Source	EMISSION FACTOR RATING	Emission Factor	Unit[a]
Electric arc furnace, ladle metallurgy, and melt shop (SCC 3-04-003-04) Charging, melting, slagging, tapping, ladle transfer to ladle furnace, ladle preheater, alloy addition to ladle furnace, ladle furnace melting, continuous casting Controlled by direct shell evacuation and roof canopy hood exhausted to baghouse	B	2.0E-2	lb/ton
Metallized briquetter (SCC 3-04-003-19) Controlled by wet scrubber	E	1.5E-1	lb/ton
Reheat furnace, natural gas-fired (SCC 3-04-003-14) Uncontrolled	E	3.2E-2 3.5E-3	lb/ton lb/MMBtu
Cold reversing mill (SCC 3-04-003-30) Controlled by high efficiency mist eliminator	E	1.9E-2	lb/ton
Billet cutting torches, natural gas-fired (SCC 3-04-003-60) Uncontrolled	E	3.2E-2	lb/ton
Ladle metallurgy station (SCC 3-04-003-17) Controlled by baghouse	E	3.4E-3	lb/ton
Ladle heating and transfer and continuous casting (SCC 3-04-003-17) Uncontrolled	E	1.2E-1	lb/ton

[a] Unit of lb/ton is lb/ton of steel produced.
Unit of lb/MMBtu is calculated based on MMBtu/hr heat input.

Oxygen Cutting Releases

The following release rates are based on information contained in Fumes and Gases in the Welding Environment (see bibliography). The values shown are calculated based on the percent metal in the fume and a fume generation rate of 2.1 grams per meter for oxyacetylene cutting and 0.037 grams per inch for oxymethane cutting. Releases are affected by the percent of the listed section 313 chemical present in the metal. The values for carbon steel are presented below.

Release rates for oxyacetylene cutting were found to increase and decrease proportionally with changing plate thickness (e.g., cutting a 2 inch plate would result in twice the release rate shown in the table below). Rates of release for oxymethane cutting are independent and not affected by plate thickness.

Listed Section 313 Metal	Percent Metal in Fume	Oxyacetylene Cutting of Carbon Steel: lbs 313 metal emitted per million feet of cut plate (1" thick)	Oxymethane Cutting of Carbon Steel: lbs 313 metal emitted per million feet of cut plate (1" thick)
Ba	0.01	0.14	0.1
Mn	0.3	4.2	2.9
Cr	0.2	2.8	2.0
Ni	0.05	0.7	0.5
Al	0.02	0.3	0.2
V	<0.01	<0.14	<0.1
Cu	0.1	1.4	1.0
Zn	<0.1	<1.4	<1.0
Co	0.02	0.3	0.2

Total annual releases of each of the listed section 313 chemicals in the plate would be found by multiplying the emission factor by the total amount of cut plate (in million feet/year).

Oxygen Cutting Releases

The following release rates are based on information contained in Fumes and Gases in the Welding Environment (see bibliography). The values shown are calculated based on the percent metal in the fume and a fume generation rate of 2.1 grams per meter for oxyacetylene cutting and 0.037 grams per inch for oxymethane cutting. Releases are affected by the percent of the listed section 313 chemical present in the metal. The values for carbon steel are presented below.

Release rates for oxyacetylene cutting were found to increase and decrease proportionally with changing plate thickness (e.g., cutting a 2 inch plate would result in twice the release rate shown in the table below). Rates of release for oxymethane cutting are independent and not affected by plate thickness.

		Oxyacetylene Cutting of Carbon Steel	Oxymethane Cutting of Carbon Steel
Listed Section 313 Metal	Percent Metal in Fume	lbs 313 metal emitted per million feet of cut plate (1" thick)	lbs 313 metal emitted per million feet of cut plate (1" thick)
Ba	0.01	0.14	0.1
Mn	0.3	4.2	2.9
Cr	0.2	2.8	2.0
Ni	0.05	0.7	0.5
Al	0.02	0.3	0.2
V	<0.01	<0.14	<0.1
Cu	0.1	1.4	1.0
Zn	<0.1	<1.4	<1.0
Co	0.02	0.3	0.2

Total annual releases of each of the listed section 313 chemicals in the plate would be found by multiplying the emission factor by the total amount of cut plate (in million feet/year).

Rule 278a.

(1) To be eligible for a specific exemption listed in R 336.1280 to R 336.1291, any owner or operator of an exempt process or exempt process equipment must be able to provide information demonstrating the applicability of the exemption. The demonstration may include the following information:
   (a) A description of the exempt process or process equipment, including the date of installation.
   (b) The specific exemption being used by the process or process equipment.
   (c) An analysis demonstrating that R 336.1278 does not apply to the process or process equipment.

(2) The demonstration required by this rule shall be provided within 30 days of a written request from the department. Any other records required within a specific exemption shall be provided within timeframes established within that specific exemption.

History: 2003 AACS; 2016 AACS.

Rule 278.

(1) The exemptions specified in R 336.1280 to R 336.1291 do not apply to either of the following:
  (a) Any activity that is subject to prevention of significant deterioration of air quality regulations or new source review for major sources in nonattainment areas regulations.
  (b) Any activity that results in an increase in actual emissions greater than the significance levels defined in R 336.1119. For the purpose of this rule, "activity" means the concurrent and related installation, construction, reconstruction, relocation, or modification of any process or process equipment.

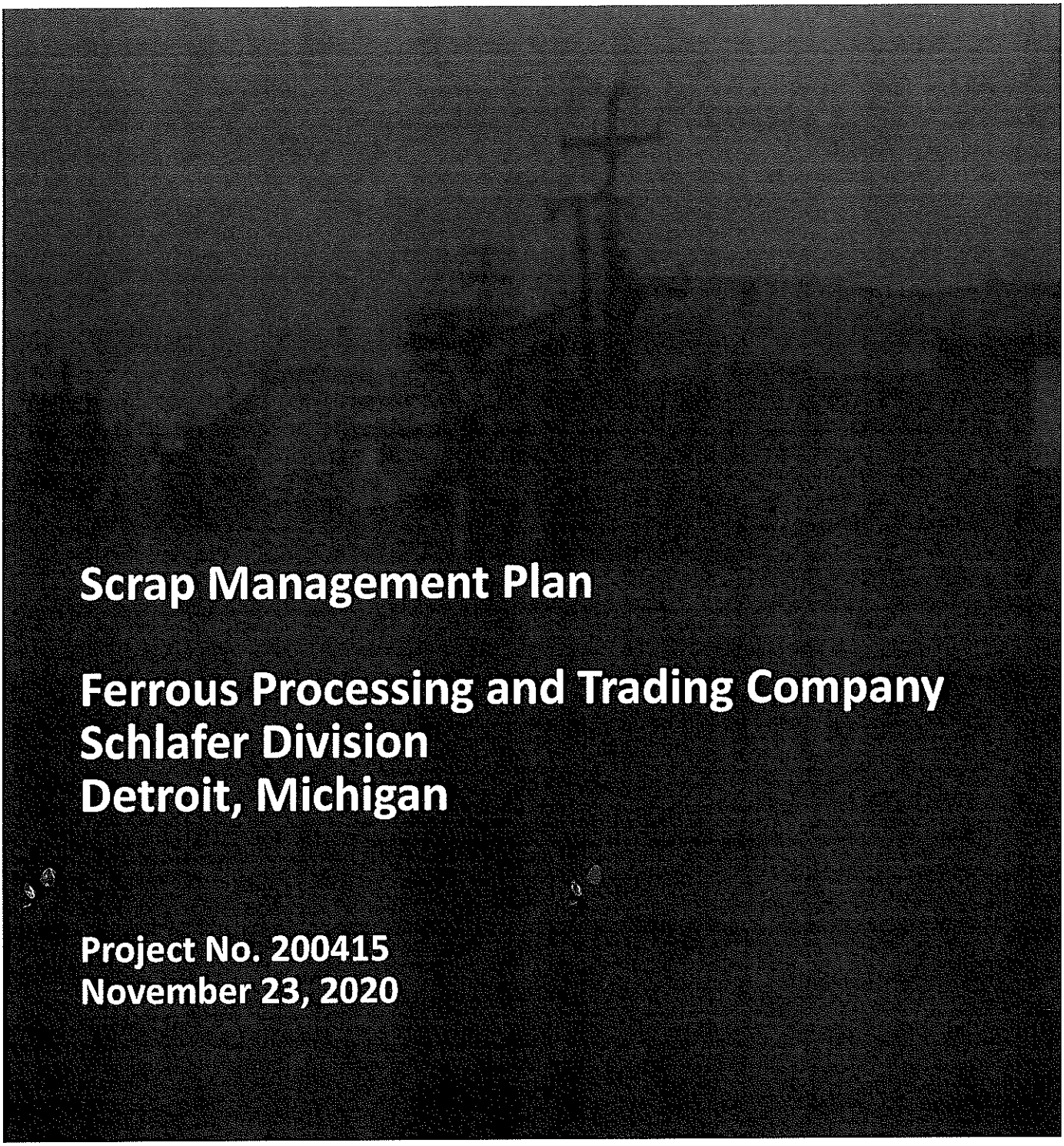
(2) The exemptions specified in R 336.1280 to R 336.1291 do not apply to the construction of a new major source of hazardous air pollutants or reconstruction of a major source of hazardous air pollutants, as defined in 40 C.F.R. §63.2 and subject to §63.5(b)(3), national emission standards for hazardous air pollutants, adopted by reference in R 336.1902.

(3) The exemptions specified in R 336.1280 to R 336.1291 do not apply to a construction or modification as defined in and subject to 40 C.F.R. part 61, national emission standards for hazardous air pollutants, adopted by reference in R 336.1902.

(4) The exemptions in R 336.1280 to R 336.1291 apply to the requirement to obtain a permit to install only and do not exempt any source from complying with any other applicable requirement or existing permit limitation.

History: 1993 AACS; 1994 AACS; 1995 AACS; 1996 AACS; 1997 AACS; 1998 AACS; 2003 AACS; 2008 AACS; 2016 AACS.

Attachment 4



Scrap Management Plan

Ferrous Processing and Trading Company
Schlafer Division
Detroit, Michigan

Project No. 200415
November 23, 2020

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Engineers | Architects | Scientists | Constructors

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Scrap Metal Management Plan

Ferrous Processing and Trading Company
Schlafer Division
1950 Medbury Street
Detroit, Michigan

Original: October 9, 2019
Revised: November 24, 2020
Project No. 201415

List of Figures

List of Abbreviations/Acronyms

FPT Ferrous Processing and Trading Company
PPE personal protective equipment
PTI Permit to Install
SMP Scrap Metal Management Plan
VE visible emission

1.0 Introduction

Fishbeck has been retained by Ferrous Processing and Trading Company (FPT) to prepare a Scrap Metal Management Plan (SMP) for the torch-cutting activities taking place at 1950 Medbury Avenue, Detroit, Michigan. The torch-cutting activities are exempt from an Air Use Permit to Install (PTI) under both Rule 285(j) and the current Michigan Rule 291. Documentation associated with these exemptions is filed separately and available for review.

Torch cutting is performed at metal recycling facilities to dismantle and resize large pieces of metal, mainly steel. Oxy-fuel torches can also be used for rough cutting larger metal items into smaller pieces. Oxy-fuel torches are the most common means of cutting metals in metal recycling facilities for a variety of reasons:

- Oxy torches are portable and can be used on large pieces of metal of different sizes and thicknesses.
- Oxy torches are available in extended lengths to keep the operator at a distance from the heat, flames, and slag produced while cutting.
- Different tips can be used on an oxy torch to facilitate cutting different materials or materials of different thicknesses.

This SMP has been developed to ensure that the torch-cutting activity is conducted in a manner to minimize air emissions and smoke opacity.

Air emissions associated with torch cutting include particulate matter and metals such as lead, chromium, cadmium, manganese, beryllium, aluminum, and nickel.

Opacity is *the measurement of how dense the dust particles are in the air and takes into account how much light is obscured by the rising dust when looking at a solid colored background*. Opacity is measured in percentages from 0 to 100%; measurement is performed by visible observation. When there is no visible smoke, the opacity is 0%, meaning all of the light is able to pass through the air. Therefore, when the statement is made that an activity is operating at a *20% opacity* level, that means that the dust, soot, and smoke levels are blocking only 20% of the visual background light, leaving 80% of the background light clearly visible. The more dust or smoke that is generated, the more difficult it is to see the landscape opposite the observer's position.

Michigan Rule 301(a) limits opacity from torch cutting to *...a 6-minute average of 20% opacity, except one 6-minute average of per hour not more than 27%.* Following procedures outlined in this document will ensure compliance with the exemption outlined in Rule 291 as well as the opacity limits in Rule 301.

2.0 Scrap Metal Management Procedures

Oxy-fuel torches are most commonly used with 75- to 100-foot hoses, although, in some operations, torch hoses of up to 200 feet may be used. Torch hoses are connected to a portable fuel source. The use of long hoses allows greater portability.

If a fire starts, FPT keeps a tub of water nearby with which to douse the material. FPT also keeps portable fire extinguishers in the vicinity of the torch cutting area.

FPT will follow best management practices, as required, for torch cutting to minimize emissions including:

- Selective cutting of materials
- Metal cleaning/housekeeping
- Use of aggregate
- Operational controls
- Fire Safety
- Training

2.1 Selective Cutting of Materials

FPT shall continuously analyze all of its metal recycling activities and shall determine ways to minimize torch cutting whenever possible (e.g., by shearing, cutting, breaking, etc., the recyclable metals to be processed). Torch cutting will only be done as needed on metals which are too large to otherwise process. Only metal materials will be cut with a torch, not plastics, wood, etc. When possible, FPT will avoid torching materials that could smoke

2.2 Metal Cleaning/Housekeeping

FPT will communicate with its customers that recyclable metal needs to be free of debris before it can be accepted. Only recyclable metals which are free of debris will be cut with a torch. If debris is present, FPT personnel will attempt to remove the debris by hand or other means.

FPT shall ensure that recyclable metals are drained of all fluids, have had all non-metal material removed, to the extent practicable, and have been properly and thoroughly cleaned prior to torch cutting. Flammable, combustible, or explosive fluids and materials will be properly disposed by FPT in approved receptacles or disposal facilities in accordance with applicable local, state, and/or federal laws. When recyclable metals contain non-metal materials, like hoses, insulation, or other material, personnel will use a torch to cut around the non-metal.

FPT shall conduct good housekeeping practices in the torch-cutting areas to eliminate, to the extent practicable, foreign material which could create visible emissions (VEs) if it were to come into contact with torch flames. If combustible materials begin to burn, the material will be immediately doused with water or extinguished using a portable fire extinguisher.

2.3 Use of Aggregate

FPT shall use only crushed concrete, aggregate, crushed limestone, slag, or gravel as ground cover in high-traffic areas and shall replace the material, as necessary, to help control emissions of fugitive dust. FPT may also apply calcium chloride to these areas to control fugitive dust.

FPT shall perform torch cutting only on surfaces of crushed concrete, aggregate, hard-packed clay, crushed limestone, slag, or gravel, unless there is no longer any space for cutting on such surfaces. The area will be free of debris that could accidentally catch fire.

2.4 Operational Controls

FPT shall implement the following operational controls:

- Develop site map(s) that identify what activities are conducted in what area(s), including traffic patterns, material storage areas, torch-cutting areas (along with alternative torch-cutting areas to be used when wind conditions result in excessive VEs), and torch-cutting equipment areas. FPT shall include the relevant map(s) in this SMP as Figure 1.
- Continuously analyze traffic patterns and determine ways to limit or eliminate traffic in and around the torch-cutting areas to minimize emissions of fugitive dust.
- Conduct daily wind pattern analyses through onsite wind socks, wind charts, and/or weather reports and adjust torch-cutting operations, as necessary, to prevent VEs.
- Use water turbines, water trucks, and/or sprinklers in and around torch-cutting areas, when appropriate, to help minimize emissions of fugitive dust.
- Periodically evaluate the feasibility of erecting portable or temporary structures designed to help prevent fugitive emissions from escaping the property.

- Conduct and document prevention maintenance of all torch-cutting equipment, to maintain them in proper working order. Torch-cutting equipment shall be inspected before and after every use for damaged hoses, regulators, valves, or tips, along with any oil or grease contamination. If any damage is observed, FPT shall not use the equipment until it is in proper working order.
- Use proper torch-cutting methods to prevent VEs due to excessive flame length/strength and/or building of torch-cutting gasses, which shall include, at a minimum, purging hose lines individually before lighting the torch with the proper flint-type device to ensure that no oxy-fuel gas mixture is present in the hoses and using fuels only at proper operation pressures.
- The yard manager will signal torch cutters if excessive smoking or other conditions occur that necessitate changes in torch cutting activities. If excessive VEs are observed, or if there is a change in wind patterns that could cause excessive VEs, the yard manager will notify torch cutters of the need to stop cutting and when it can begin again.

2.5 Fire Safety

FPT shall implement the following actions related to fire safety:

- Ensure that the torch-cutting areas have readily-available access to water, fire extinguishers, or other fire-suppression methods to be used if there is a flare-up during or after torch-cutting activities. FPT shall regularly inspect all fire extinguishers and ensure that they are properly maintained.
- Place oxygen and fuel gas cylinders far enough away from the torch-cutting area that they will not be unduly heated by radiating from torched materials, by sparks, or by misdirection of the torch flame.
- Ensure no torch-cutting shall be done in or near locations where flammable liquids or vapors, lint, dust, or loose combustible materials are located or arranged that sparks or hot metal from the cutting activities could cause ignition or explosion of such materials.
- Personnel who are torch-cutting shall wear appropriate personal protective equipment (PPE), including eye and face protection and non-flammable gloves/clothing.

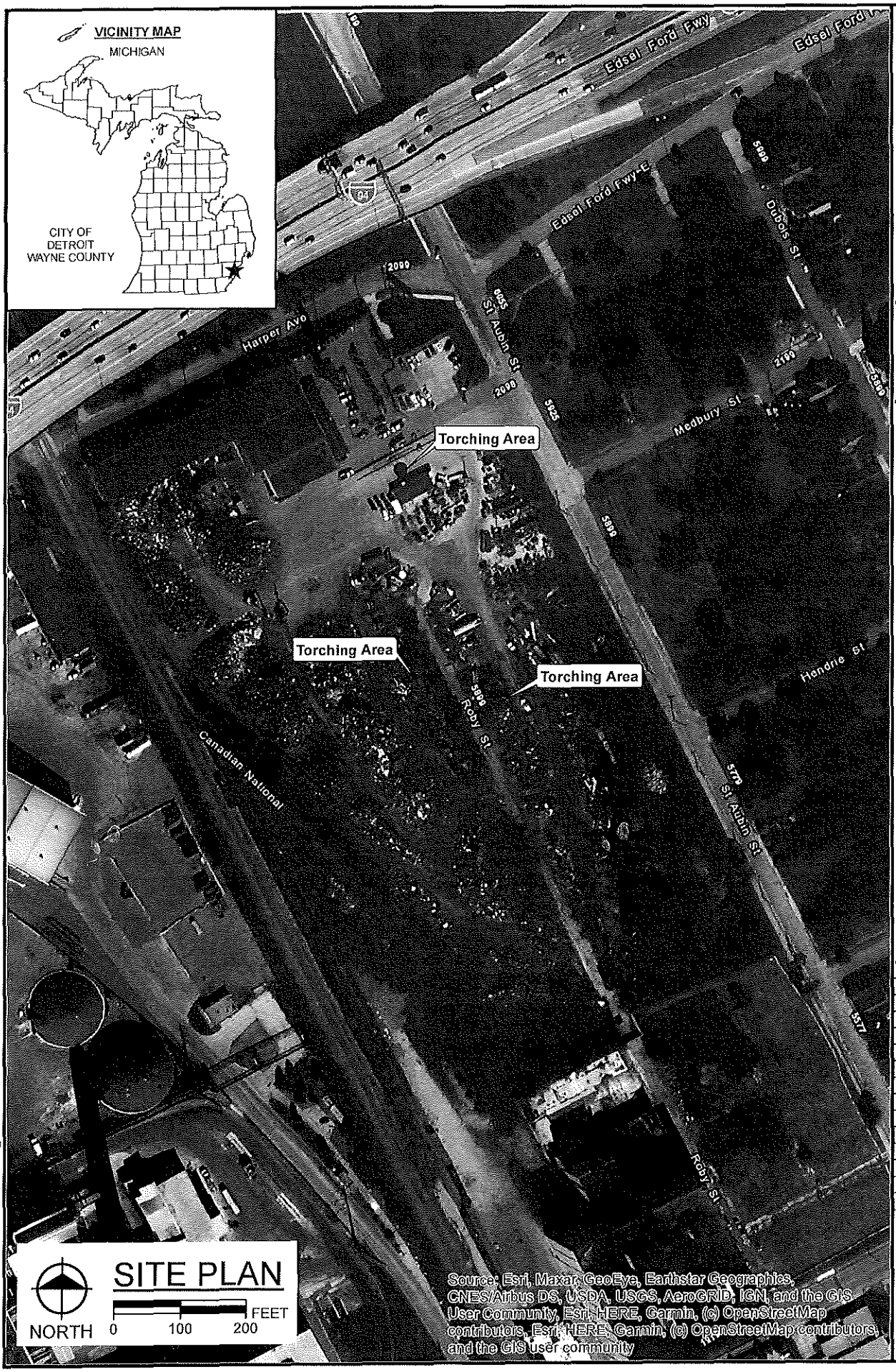
2.6 Training

Appropriate FPT personnel and contractors will be trained on the procedures outlined in Section 2.0. FPT shall ensure that its employees and subcontractors are aware of which materials are likely to produce higher VEs when torch cut and shall develop protocols to manage VEs when cutting those materials. Training will be documented and maintained.

3.0 Plan Implementation and Maintenance

The SMP will be adhered to by FPT personnel and contractors. The SMP Plan will be updated consistent with any changes in outlined procedures or practices, as necessary.

Figures



fishbeck
Engineers | Architects | Scientists | Constructors

Hard copy is intended to be 8.5"x11" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

Ferrous Processing and Trading, Company
Schlafer Yard - 1350 Medbury St., Detroit, Michigan

Scrap Management Plan

PROJECT NO.
201415

FIGURE NO.
1

PLOT INFO: Z:\2020\201415\CAD\GIS\mapdoc\FIG01_SITE PLAN.mxd Date: 11/23/2020 10:19:03 AM User: aschweller