

DEPARTMENT OF ENVIRONMENTAL QUALITY
 AIR QUALITY DIVISION
 ACTIVITY REPORT: Scheduled Inspection

B4146

B414634743

FACILITY: FPT-PONTIAC DIVISION L.L.C.		SRN / ID: B4146
LOCATION: 500 COLLIER RD, PONTIAC		DISTRICT: Southeast Michigan
CITY: PONTIAC		COUNTY: OAKLAND
CONTACT:		ACTIVITY DATE: 05/26/2016
STAFF: Iranna Konanahalli	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: FY 2016 level 2 annual scheduled inspection of Ferrous Processing and Trading Pontiac Division (legal name for Pontiac location: FPT-Pontiac Division, LLC)		
RESOLVED COMPLAINTS:		

B4146 - SAR - ~~2016~~ 05 26

Ferrous Processing and Trading (B4146)
 Pontiac Division
 FPT-Pontiac Division, LLC
 500 Collier Road
 Pontiac, Michigan 48340-1309

Name / ownership changes: Fragment Products → Sam Allen and Son → TBS Industrial Recycling, Inc. → FPT-Pontiac Division, LLC (owner: Ferrous Processing and Trading)

Permit to Install No.: 120-80 Hammer Mill Fragmentizer Model 96104 (aka Shredder) - Active

PTIs: 2 active permits (one [Tire Pyrolyzer] of two permits to be voided), 4 permits voided, 4 PTI applications voided.

PTIs voided: PTI Nos. 338-90A for Pyrolytic Recovery Unit with 1800 degrees Fahrenheit after-burner to reclaim metal from lead cables and copper wires (voided on 09/19/2005), 771-80 for aluminum crushing operation with dual cyclone, two cyclones in series (voided on 09/19/2005) and 204-91 for fume / smoke collection system for torch-cutting operation (voided on 09/19/2005; a smoke and particulate capture dome with a baghouse was never installed; Consent Order prohibits torch-cutting)

To be voided: PTI No. 523-82 Tire Pyrolyzer, which never operated. Equipment removed over a couple of decades ago.

PTI Applications voided: Nos. 476-81(04/26/1982) for wire reclaim incinerator, 517-80 (08/09/1989) for aluminum crusher, 516-80 (03/06/1981) for motor crusher, and 80-79 (11/19/1984) for wire reclaim furnace with after burner.

Consent Order No.: AQD No. 18-1996. \$50,000.00 is a settlement. Torch-cutting is prohibited. Torch-cutting (at multiple sites within the FTP- Pontiac's yard) was source of visible emissions (up to 80% opacity based upon both MEDQ-AQD and US EPA readings) at multiple locations concurrently, frequent fires (one 36-hour fire in July 1997) and complaints (MDEQ, US EPA, US Congress).

On May 09 (neither Ms. Hoogterp nor Mr. Adamus was present) and May 26, 2016, I

conducted a level 2 annual **scheduled** inspection of Ferrous Processing and Trading Pontiac Division (legal name for Pontiac location: FPT-Pontiac Division, LLC) located at 500 Collier Road, Pontiac, Michigan 48340-1309. The inspection was conducted to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451; and Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) rules and Permit to Install No.120-80 (all other permits are either voided or to be voided).

During the FY 2016 inspection, Ms. Sarah Hoogterp (Phone: 313-347-4700 ext. 237; Cell: 313-400-7708; Fax: 313-925-1331; E-mail: Sarah.Hoogterp@FPTscrap.com), Regulatory Coordinator and Asst. Purchasing Manager, and Mr. Steve Adamus (Phone: 248-335-8141 ext. 243; Cell: 229-400-6161; Fax: NA; E-mail: Steve.Adamus@FPTscrap.com), General Manager FPT-Pontiac, Mr. Robert Szczesny (Phone: 586-214-4202), Asst. to GM, assisted me. Also, Mr. Hrisimir (Chris) Hristov, Maintenance Manager, assisted with equipment; especially shredder and its operation.

Ms. Linda M. George (FTP-Pontiac, Phone: 248-335-8141 ext. 246, Cell: 313-350-2188, fax: 248-335-8714, email: linda.george@fpt1.com), Regulatory Coordinator, retired about October 2015. Mr. Jim Mathieson retired about 2010. Ms. Susan Johnson (248-258-1307), FTP's Attorney, Butzel-Long, was not present.

TBS Industrial Recycling was owned and operated by Messrs. Tony Benacquisto (T), Barry Briskin (B) and Steve Benacquisto (S); about 1995, they purchased Sam Allen and Sons. The owners (TBS), about 1999, sold the company to Ferrous Processing and Trading (FPT) of Detroit. Former owners, Tony Benacquisto (T), and Steve Benacquisto (S), joined this new company. Mr. Barry Briskin (B) quit the company altogether. Benacquisto brothers are still present with FPT.

The company's scrap metal plant at Pontiac recycles ferrous and nonferrous scrap metal. It buys scrap metal and subjects ferrous metals to various processes to facilitate re-melting in Electric Arc Furnace (EAF) at a steel mill. Non-ferrous metals such as copper, aluminum, bronze are not processed at this site but sent to other sites for further processing. It used to buy (but not anymore since 1997) refuse machinery, beams, and other metal chunks and cut them to a manageable size using propane-oxygen torch-cutting (torch-cutting is prohibited by the consent order AQD No. 18-1996). It buys metal clips from stamping plants and compresses them into cubes of 4000 pounds. Shredded clips are also sold. Cars are crushed and shredded in Hammer Mill (Hammer Mill Fragmentizer Model 96104), aka Shredder, where fluff is separated. Fluff is combustible material and hence causes fires. FTP needs to minimize storage of fluff separated from shredded cars due to fires. Scrap sheet metal pieces are either sold as is or compressed into cubes depending upon customer specification. It ships the finished products to customers, steel mills, for re-melting in EAF by railroad cars and trucks.

The company has not operated torch-cutting since April 1997 (except as noted below) as required by consent order AQD No. 18-1996. Discontinuing torch cutting has eliminated fire / spark and smoke sources and attendant visible emissions (up to 80% opacity at multiple locations simultaneously).

The company quit processing municipal scrap, with substantial metallic content, from the Greater Detroit Resource Recovery Authority (GDRRA) or Detroit Garbage Incinerator. This municipal scrap was a source of infamous July 1997 36-hour fire.

About 2005, Mr. Jim Voss of AQD informed FPT that torch-cutting was a violation of the consent order. During my visit on May 20, 2005, Mr. Jim Mathieson stated that torch-cutting was done until Mr. Voss advised the company that further torch-cutting could invoke stipulated penalties pursuant to the consent order. I reiterated that FPT was required to comply with the consent order. During my visit of May 20, 2005, I did not observe smoke due to either torch-cutting or scrap processing. During the FY 2016 inspection, there was no sign of torch-cutting.

523-82 (a tire pyrolyzer) – to be voided

The process has not operated for over a couple of decades and the equipment has been removed. The PTI No. **523-82** will be voided soon.

338-90A (pyrolytic recovery unit with afterburner for the purpose of burning lead cable and copper wire)

The process has not operated for over a couple of decades and the equipment has been removed. The PTI No. **338-90A** was voided September 19, 2005.

771-80 (Aluminum crushing operation with dual cyclone [two in series] collectors)

The process has not operated for over a couple of decades and the equipment has been removed. The PTI No. **771-80** was voided September 19, 2005.

204-91 (fume / smoke collection system for torch cutting operation)

The fume / smoke collection system for torch cutting operation has never been installed. The PTI No. **204-91** was voided September 19, 2005.

120-80 Fragmentizer (Shredder Hammer Mill Fragmentor Model 9604)

Ms. Susan L. Johnson, Environmental Counsel, Butzel-Long, stated in her June 17, 1999, letter to Ms. Lynn Fiedler, that FPT-Pontiac Division, LLC assumed all responsibilities for the permit and the consent order.

I observed steam from Fragmentor but practically nil particulate matter visible emissions (SC10: max. opacity 20%). Water mist is injected into the fragmentor / shredder to cool the machine, prevent fire and explosion, and prevent visible emissions (SC30: shall operate water spray nozzles). The steam is due to this water mist. The amount of water mist sprayed is proportional to power input (KWH). Excess water into the hammer mill is avoided. One Tenant sweeper, which is equipped with a baghouse, is on site but not used for sweeping paved surfaces but CAT sweeper brush is used to brush aside dirt from paved surfaces on wet basis (using either rain or water truck). While paved areas are swept on wet basis using 938 CAT with metal brush attachment, unpaved areas are sprayed with water using 5000-gallon fire truck, which is equipped with a sprinkler system (SC11: fugitive dust control). The hammer mill or shredder is equipped with one large cyclone (primary), four small high efficiency cyclones (secondary), and one roller filter media (tertiary); this triple system handles only particulate laden air. There is a Z-box cascade cleaning system where the product goes through. Z-box system is a closed loop system i.e. same air is recycled upon removing particulates. In other words, air for removal of particulate matter due shredding is a closed system and air is not released to atmosphere and its dust content is removed using a dust collection system consisting of one large cyclone for very large particles (primary), four small

cyclones for large particles (secondary) and roller cloth filter for fine particles (tertiary) (SC 12: 0.05 lbs. / 1,000 lbs. and SC 13: 0.1 lbs. / 1,000 lbs.) As gas tanks are explosive, they are not put through the hammer mill (SC14: no gas tanks). Exhaust gases are recycled into the process but not discharged (SC15-17: stack heights of 73 ft., 45 ft. and 45 ft.: 80-ft. stack is present for emergency releases). All cyclones and fabric filter were operating properly based upon negligible visible emissions (SC18: install and operate properly primary, secondary and tertiary dust control systems). Cyclones are monitored for power (KWH) usage. The roller filter is equipped with manometric gauge to monitor pressure drop (ΔP) between 20-27 inches of water. When the filter roll is empty, the operator hears an alarm. Filter cloth is automatically rolled based upon pressure drop ($\Delta P = \text{max } 26$ inches of water). I asked the company to keep all records of inspection and maintenance (SC19: schedule of maintenance). Water is sprayed on fluff to prevent fire (SC21: application of water to prevent fire). Vibration ruins hammer mill (SC29: proper balance of shredder). Water mist is injected into the fragmentor / shredder to cool the machine, prevent fire and explosion, and prevent visible emissions (SC30: shall operate water spray nozzles).

During FY 2016 inspection, since the shredder was operating, I did not observe filter cloth, manometric pressure gauge, etc. due to safety reasons.

Multi-metal emission testing has never been done (SC22-28: Beryllium < 2 micrograms per cubic meter [$2 \mu\text{g} / \text{m}^3$], Cadmium $< 50 \mu\text{g} / \text{m}^3$, Chromium $< 50 \mu\text{g} / \text{m}^3$, Nickel $< 100 \mu\text{g} / \text{m}^3$, Lead $< 150 \mu\text{g} / \text{m}^3$, Copper $< 1,000 \mu\text{g} / \text{m}^3$ and Zinc $< 500 \mu\text{g} / \text{m}^3$). Shredder is not a combustion process although some combustion may be taking place owing to heat of friction due to shredding. At this time, a stack test to determine multi-metal emission rates (SC22-28) is not required; may be in future if a situation warrants it.

Fugitive dust control (PTI No. 120-80, SC11)

All paved yard is wet-swept using 938 CAT with metal brush attachment. Unpaved yard is sprayed with water using a water truck. Same water truck is used to wet paved areas during sweeping if not rained. 5 mph speed limit signs are posted. Concerning yard dust, the yard has substantially more paved area upon purchase by FPT.

Conclusion

FPT appears to be in compliance. No torch-cutting occurring.

NAME *D. Hernandez* DATE *06/01/2016* SUPERVISOR *CJE*

Sweeping records

Self Inspection Checklist
Fugitive Dust Control Log (**Street Sweeper**)

DATE	TIME	Control Method: (List all areas serviced)
12/23/2014	Day	all roadways in entire yard with 938 CAT with Sweeper attachment
3/11/2015	Day	all roadways in entire yard with 938 CAT with Sweeper attachment
3/25/2015	Day	all roadways in entire yard with 938 CAT with Sweeper attachment
4/8/2015	Day	all roadways in entire yard with 938 CAT with Sweeper attachment
6/24/2015	Day	all roadways in entire yard with 938 CAT with Sweeper attachment
7/6/2015	Day	all roadways in entire yard with 938 CAT with Sweeper attachment
7/14/2015	Day	all roadways in entire yard with 938 CAT with Sweeper attachment
8/3/2015	Day	all roadways in entire yard with 938 CAT with Sweeper attachment
8/18/2015	Day	all roadways in entire yard with 938 CAT with Sweeper attachment
8/20/2015	Day	all roadways in entire yard with 938 CAT with Sweeper attachment
8/21/2015	Day	all roadways in entire yard with 938 CAT with Sweeper attachment
11/15/2015	Day	all roadways in entire yard with 938 CAT with Sweeper attachment
4/22/2016	Day	all roadways in entire yard with 938 CAT with Sweeper attachment
5/3/2016	Day	all roadways in entire yard with 938 CAT with Sweeper attachment
5/10/2016	Day	all roadways in entire yard with 938 CAT with Sweeper attachment
5/13/2016	Day	all roadways in entire yard with 938 CAT with Sweeper attachment
5/16/2016	Day	all roadways in entire yard with 938 CAT with Sweeper attachment
5/20/2016	Day	all roadways in entire yard with 938 CAT with Sweeper attachment/spread water with water truck
5/26/2016	Day	all roadways in entire yard with 938 CAT with Sweeper attachment/spread water with water truck

Permit No. 120-80

FPT – Pontiac Fugitive Dust Control Program

A. All Roadways and Yard

1. Sweep and treat with water as needed to maintain visible emissions within compliance. Apply suitable suppressant twice monthly from April to September.
2. Post speed limit 5 mph.

B. Open Storage Piles

1. Treat outside storage piles with water as needed to maintain visible emissions within compliance.
2. Minimize drop height where possible.

C. Plant Property

1. Promptly clean up and remove any upholstery, plastic and other non-metal material which falls on the plant property or perimeter of the plant property and which may become windblown.