DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

ACTIVITY REPORT: Scheduled Inspection

A475055337

FACILITY: Ferrous Processing and Trading Co. (SLC Recycling)		SRN / ID: A4750
LOCATION: 8701 Eight Mile Rd, WARREN		DISTRICT: Warren
CITY: WARREN		COUNTY: MACOMB
CONTACT: Tony Levin , General Manager		ACTIVITY DATE: 08/31/2020
STAFF: Joe Forth	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: On-site Inspection		
RESOLVED COMPLAINTS:		

On August 31, 2020, AQD staff Joseph Forth conducted a scheduled inspection of SLC Recycling LLC (A4750). SLC is owned by Ferrous Processing and Trading (FPT). The facility is located at 8701 Eight Mile Rd, Warren, MI. The purpose of the inspection was to determine the facility's compliance with the Federal Clean Air Act; and Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451 and Permit to Install (PTI) No. 309-00B.

SLC separates a variety of metal scrap and sells the aluminum, brass, copper, etc. to other facilities for further processing. SLC currently has 40 employees and operates 8:00 am – 4:30 pm, Monday through Friday.

The facility has the following permitted equipment:

- 1) EU-SHREDDER: Scrap metal shredder with cyclone, baghouse, and associated conveyors.
- 2) EU-TROMMEL: Rotating trommel screen with baghouse, and scrap metal size separator.
- 3) EU-EDDYCURRENT: Shaker tables, four (4) eddy current machines with cyclone followed in series by a baghouse, and associated conveyors.
- 4) EU-SANDFLOW: Eight (8) sand flow separators with baghouse, and associated conveyors.
- 5) EU-THERMALSAND: Feed hopper, indirect natural gas-heated rotary kiln, rotary cooling drum, air classifier, associated transfer conveyors, and a high efficiency cyclone followed in series by a cartridge filter dust collector to control the kiln, cooling drum, and classifier.

The facility also has a back-up generator. The generator has a max heat input of 1,373,000 BTU/hr, it appears to be exempt from permitting per Rule 285(2)(g).

The facility has no cold-cleaners, boilers or other machinery that could feasibly produce air emissions.

I arrived at the facility at 12:00 pm. I was met by Tony Levin, Vice President, and Lisa Carroll, Environmental Director. I introduced myself, presented my credentials, and stated the purpose of the inspection. During the inspection, Mr. Levin brought me to the baghouse for each of the emission units. Each baghouse was properly equipped with a broken bag detector, and a pressure monitor. Baghouse pressure is monitored every day, if large differences in pressure occur the baghouses are inspected for damaged or full bags. Most emission units were not operating at the time of inspection, but Mr. Levin provided pressure drop records for all 5 emission units. EU-EDDYCURRENT was operational at the time of inspection, the pressure on the baghouse pressure gauge was 1.1 inches of water.

Compliance

All records, unless otherwise specified, were provided electronically and can be located in: S:\Air Quality Division\STAFF\Joe Forth\A4750 SLC Recycling FY20 Inspection

PTI No. 309-00B

EU-SHREDDER

Scrap metal shredder with cyclone, baghouse, and associated conveyors.

1.1a A PM emission limit of 0.60 lbs/hr. Emission limit was confirmed during a stack test in 2002. The permittee has not altered the process since the test, so compliance with the emission limit will be met with proper operation of the control.

- 1.1b A PM emission limit of 0.01 lbs / 1000 lbs of exhaust gas. Emission limit was confirmed during a stack test in 2002. The permittee has not altered the process since the test, so compliance with the emission limit will be met with proper operation of the control.
- 1.1c A mercury emission limit of 0.0012 lbs/hr. Emission limit was confirmed during a stack test in 2002. The permittee has not altered the process since the test, so compliance with the emission limit will be met with proper operation of the control.
- 1.2 Visible emissions from EU-SHREDDER were not able to be evaluated during the inspection.
- 1.3 Only non-ferrous material, primarily aluminum, is processed in EU-SHREDDER.
- 1.4 No abstetstos containing material is processed in EU-SHREDDER.
- 1.5 EU-SHREDDER can not be operated more than 6,240 hours per 12-month rolling time period. Mr. Levin provided hours of operation back to 2014. The highest 12-month total was in March 2016 at 4,307 hours. Most recent month August 2020 had 1,003 hours.
- 1.6 Based on my inspection the permittee appears to be following the continuous fugitive emissions control program as described in Appendix A of PTI No. 309-00B. No track out to the public road was noticed.
- 1.7 All-non metallic waste is collected and disposed of using a waste disposal company.
- 1.8 The baghouse for EU-SHREDDER appears to be installed and operated properly.
- 1.9 The baghouse for EU-SHREDDER is equipped with a broken bag detector, it is a light and alarm that sounds if the system detects a certain difference in pressure.
- 1.10 The baghouse for EU-SHREDDER is equipped with a pressure gauge to measure the pressure drop across the baghouse. EU-SHREDDER was not operating at the time of inspection, but records of pressure drop readings were provided.
- 1.11 The permittee monitors and records the pressure of the baghouse daily. Some days they do not operate the system, these days are denoted N/A in the records.
- 1.12 The permittee provided monthly records of the amount of all non-ferrous scrap metal processed in EU-SHREDDER.
- 1.13 The permittee provided records of the baghouse pressure drop for EU-SHREDDER.
- 1.13a The exhaust of the baghouse for EU-SHREDDER appeared to be unobstructed.

EU-TROMMEL

Rotating trommel screen with baghouse, and scrap metal size separator.

- 2.1a A PM emission limit of 0.64 lbs/hr. Emission limit was confirmed during a stack test in 2002. The permittee has not altered the process since the test, so compliance with the emission limit will be met with proper operation of the control.
- 2.1b A PM emission limit of 0.01 lbs / 1000 lbs of exhaust gas. Emission limit was confirmed during a stack test in 2002. The permittee has not altered the process since the test, so compliance with the emission limit will be met with proper operation of the control.
- 2.2 EU-TROMMEL was not operating at the time of inspection, visible emission were not able to be evaluated.
- 2.3 No abstetstos containing material is processed in EU-TROMMEL.
- 2.4 Based on my inspection the permittee appears to be following the continuous fugitive emissions control program as described in Appendix A of PTI No. 309-00B. No track out to the public road was noticed.
- 2.5 All-non metallic waste is collected and disposed of using a waste disposal company.
- 2.6 The baghouse for EU-TROMMEL appears to be installed and operated properly.

- 2.7 The baghouse for EU-TROMMEL is equipped with a broken bag detector, it is a light and alarm that sounds if the system detects a certain difference in pressure.
- 2.8 The baghouse for EU-TROMMEL is equipped with a pressure gauge to measure the pressure drop across the baghouse. EU-TROMMEL was not operating at the time of inspection, but records of pressure drop readings were provided.
- 2.9 EU-TROMMEL is located inside the SLC main building, satisfying the requirement of being located in within a structure with at least three walls and a roof.
- 2.10 and 2.11 The permittee monitors and records the pressure of the baghouse daily. Some days they do not operate the system, these days are denoted N/A in the records.
- 2.12 The exhaust of the baghouse for EU-TROMMEL appeared to be unobstructed.

EU-EDDYCURRENT

Shaker tables, four (4) eddy current machines with cyclone followed by a baghouse, and associated conveyors.

- 3.1a A PM emission limit of 0.38 lbs/hr. Emission limit was confirmed during a stack test in 2002. The permittee has not altered the process since the test, so compliance with the emission limit will be met with proper operation of the control.
- 3.1b A PM emission limit of 0.01 lbs / 1000 lbs of exhaust gas. Emission limit was confirmed during a stack test in 2002. The permittee has not altered the process since the test, so compliance with the emission limit will be met with proper operation of the control.
- 3.2 EU-EDDYCURRENT was operating at the time of inspection, no visible emissions were observed.
- 3.3 No abstetstos containing material is processed in EU-EDDYCURRENT.
- 3.4 Based on my inspection the permittee appears to be following the continuous fugitive emissions control program as described in Appendix A of PTI No. 309-00B. No track out to the public road was noticed.
- 3.5 All-non metallic waste is collected and disposed of using a waste disposal company.
- 3.6 The baghouse for EU-EDDYCURRENT appears to be installed and operated properly.
- 3.7 The baghouse for EU-EDDYCURRENT is equipped with a broken bag detector, it is a light and alarm that sounds if the system detects a certain difference in pressure.
- 3.8 The baghouse for EU-EDDYCURRENT is equipped with a pressure gauge to measure the pressure drop across the baghouse. EU-EDDYCURRENT baghouse pressure at time of inspection was 1.1 inches of water. Records of pressure drop readings were provided.
- 3.9 EU-EDDYCURRENT is located inside the SLC main building, satisfying the requirement of being located within a structure with at least three walls and a roof.
- 3.10 and 3.11 The permittee monitors and records the pressure of the baghouse daily. Some days they do not operate the system, these days are denoted N/A in the records.
- 3.12 The exhaust of the baghouse for EU-EDDYCURRENT appeared to be unobstructed.

EU-SANDFLOW

Eight (8) sand flow separators with baghouse, and associate conveyors.

- 4.1a A PM emission limit of 2.0 lbs/hr. Emission limit was confirmed during a stack test in 2002. The permittee has not altered the process since the test, so compliance with the emission limit will be met with proper operation of the control.
- 4.1b A PM emission limit of 0.01 lbs / 1000 lbs of exhaust gas. Emission limit was confirmed during a stack test in 2002. The permittee has not altered the process since the test, so compliance with the emission limit will be met with proper operation of the control.

- 4.2 EU-SANDFLOW was not operating at the time of inspection, visible emissions were not able to be evaluated.
- 4.3 No abstetstos containing material is processed in EU-SANDFLOW.
- 4.4 Based on my inspection the permittee appears to be following the continuous fugitive emissions control program as described in Appendix A of PTI No. 309-00B. No track out to the public road was noticed.
- 4.5 All-non metallic waste is collected and disposed of using a waste disposal company.
- 4.6 The baghouse for EU-SANDFLOW appears to be installed and operated properly.
- 4.7 The baghouse for EU-SANDFLOW is equipped with a broken bag detector, it is a light and alarm that sounds if the system detects a certain difference in pressure.
- 4.8 The baghouse for EU-SANDFLOW is equipped with a pressure gauge to measure the pressure drop across the baghouse. EU-SANDFLOW was not operating at the time of inspection, but records of pressure drop readings were provided.
- 4.9 EU-SANDFLOW is located inside the SLC main building, satisfying the requirement of being located within a structure with at least three walls and a roof.
- 4.10 and 4.11 The permittee monitors and records the pressure of the baghouse daily. Some days they do not operate the system, these days are denoted N/A in the records.
- 4.12 The exhaust of the baghouse for EU-SANDFLOW appeared to be unobstructed.

EU-THERMALSAND

Feed hopper, rotary kiln, rotary cooling drum

- 5.1a A PM emission limit of 0.1 lbs/hr. Emission limit was confirmed during a stack test in 2002. The permittee has not altered the process since the test, so compliance with the emission limit will be met with proper operation of the control.
- 5.1b A PM emission limit of 0.01 lbs / 1000 lbs of exhaust gas. Emission limit was confirmed during a stack test in 2002. The permittee has not altered the process since the test, so compliance with the emission limit will be met with proper operation of the control.
- 5.1c A VOC emission limit of 0.6 lbs/hr. Emission limit was confirmed during a stack test in 2002. The permittee analyzes samples of the sand processed for VOC content. Records show that the sand rarely contains VOCs or organic material.
- 5.2 EU-THERMALSAND was not operating at the time of inspection, visible emissions were not able to be evaluated.
- 5.3 Sand analysis reports provided show that the amount of organic material/VOCs present in the sand processed never exceeds the permitted limit of 2% by weight.
- 5.4 Records dating back to January 2014 show that SLC has not exceeded the permitted limit of 1,000 pounds of sand processed per hour, or the permitted limit of 1,040 pounds of sand processed per 12-month period. In July 2020, SLC processed 3,110 pounds of sand in 4.75 hours of operation for a production rate of 655 pounds of sand per hour. The 12-month rolling total from August 2019 through July 2020 was 204 tons of sand processed.
- 5.5 No abstestos containing material is processed in EU-THERMALSAND.
- 5.6 Based on my inspection the permittee appears to be following the continuous fugitive emissions control program as described in Appendix A of PTI No. 309-00B. No track out to the public road was noticed.
- 5.7 All nonmetallic waste is collected and disposed of using a waste disposal company.
- 5.8 The permittee keeps the rotary kiln of EU-THERMALSAND at a minimum of 1400 °F. Mr. Levin provided logs from EU-THERMALSAND where the facility records operating temperature. I also collected physical copies of the temperature monitor disks for EU-THERMALSAND. (See Attached)

- 5.9 Compliance with NSPS 40 CFR Part 60 Subpart UUU will be met as the conditions of this emission unit have redundancy with the requirements of Subpart UUU.
- 5.10 The cyclone with cartridge dust filter for EU-THERMALSAND appears to be installed and operated properly.
- 5.11 The cyclone for EU-THERMALSAND is equipped with a pressure gauge and a light and alarm that sounds if the system detects a certain difference in pressure. Pressure reading records were provided for EU-THERMALSAND.
- 5.12 EU-THERMALSAND is located inside the SLC main building, satisfying the requirement of being located within a structure with at least three walls and a roof.
- 5.13 The cyclone for EU-THERMALSAND is equipped with a pressure gauge and a light and alarm that sounds if the system detects a certain difference in pressure. Pressure reading records were provided for EU-THERMALSAND.
- 5.14 The rotary kiln of EU-THERMALSAND is equipped with a device that monitors and records the temperature of the kiln. Records of the operating temperatures were provided.
- 5.15 The permittee provided monthly sand analysis reports of the amount of organic material/VOCs present in the sand. Records of sand analyses show it is very rare for the sand to contain VOCs.
- 5.16 VOC emission limit was tested in 2002. The facility analyzes the sand processed in EU-THERMALSAND for organic material/VOCs. Records of sand analyses show it is very rare for the sand to contain VOCs.
- 5.17a The permittee provided records for pounds of sand processed per hour. In July 2020, SLC processed 3,110 pounds of sand in 4.75 hours of operation for a production rate of 655 pounds of sand per hour.
- 5.17b The permittee provided records for tons of sand processed per 12-month rolling time period. The 12-month rolling total from August 2019 through July 2020 was 204 tons of sand processed.
- 5.18 The permittee keeps and provided daily pressure drop readings for the cyclone control of EU-THERMALSAND.
- 5.19 The permittee keeps and provided daily temperature records for the rotary kiln of EU-THERMALSAND.
- 5.20 The exhaust of the cyclone control for EU-THERMALSAND appeared to be unobstructed.

Conclusion

SLC Recycling (FPT) appears to be operating in compliance with the Federal Clean Air Act; and Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451 and Permit to Install (PTI) No. 309-00B.

DATE 9-28-2020 SUPERVISOR Sebastiang Kallumkal