

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: On-site Inspection

B353355270

FACILITY: EDW C LEVY CO PLANT 1		SRN / ID: B3533
LOCATION: 8800 DIX AVE, DETROIT		DISTRICT: Detroit
CITY: DETROIT		COUNTY: WAYNE
CONTACT: Thomas E. Green , Manager, Environmental Services		ACTIVITY DATE: 09/25/2020
STAFF: Jonathan Lamb	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection, FY 2020		
RESOLVED COMPLAINTS:		

DATE OF INSPECTION: September 25, 2020

TIME OF INSPECTION: 8:00 AM

WEATHER CONDITION: Overcast, hazy

REASON FOR INSPECTION: Scheduled, FY 2020

INSPECTED BY: Jonathan Lamb, EGLE-AQD

PERSONNEL PRESENT: Alicia Ramsdell, Environmental Engineer – Levy Plant 1; Matt Perko, Environmental Engineer – Levy Plant 6; George Hoenicke, Plant Manager

CONTACT PHONE NUMBER (Alicia Ramsdell): 313-402-5823

**SAFETY REQUIREMENTS:**

Required personal protective equipment include steel-toed boots with metatarsal guards, safety glasses, hard hat, and reflective vest. At the time of this inspection, masks are also required due to COVID safety protocols.

**FACILITY BACKGROUND:**

Edward C. Levy Company Plant 1 (Levy Plant 1) processes basic oxygen furnace (BOF) and blast furnace slag received from AK Steel via Edw. C. Levy Plant 6. Note: The facility also used to process slag from U.S. Steel via Edw. C. Levy Co. Plant 3 before U.S. Steel ceased operations of its blast furnace operations on Zug Island. The facility uses a series of crushers and screeners to produce an aggregate to be used in road construction.

The facility currently has 15 employees and operates one shift, 6 AM to 4 PM, Monday through Friday with some maintenance work on Saturdays. The facility is located in a mixed industrial/residential area with a cemetery and park nearby.

**COMPLAINT/COMPLIANCE HISTORY:**

Levy Plant 1 is operating under State Implementation Plan (SIP) Consent Order 16-1993 (revised September 9, 1994).

There are no violations currently outstanding.

Levy Plant 1 was determined to be in noncompliance during the most recent full compliance inspection performed on October 21, 2015, for various violations of Wayne County Permit Nos. C-8611 through C-8614 and SIP Consent Order 16-1993 (Revised September 9, 1994). The facility took appropriate corrective actions to resolve the violations. In addition, the facility applied for a permit modification to remove obsolete conditions and processes which were in Wayne County Permit Nos. C-8611-C-8614. Permit to Install (PTI) No. 104-16 was issued on September 23, 2016.

Facility was issued a violation notice on April 9, 2014, for a violation of Rule 901(b) due to a fallout incident attributed to operations at Levy Plant 1 which occurred on March 14, 2014. This violation has since been resolved.

**PROCESS DESCRIPTION/EQUIPMENT:**

Slag produced from the BOF or blast furnace at AK Steel is initially processed at Levy Plant 6 before being delivered to Levy Plant 1 by truck for further processing to produce the final aggregate product. The facility has the capacity to process up to 700 tons of slag per hour.

The slag arriving on trucks from Levy Plant 6 is sprayed with water before being unloaded into open storage piles. Prior to processing, a magnet is used to remove any iron from the slag. The slag is moved via front end loaders to the primary crusher tower where it is conveyed to one of two secondary crusher buildings. There are two crushers inside each secondary crusher building. After the slag goes through the crushing process, it is transferred via conveyor to screening Tower 2 and then to screening Tower 1. Tower 1 and Tower 2 are equipped with a total of eight screens between the two towers, which separate the crushed slag into various sizes of aggregate according to customer specifications. The conveyors are equipped with water sprays to minimize fugitive dust. After screening, the slag aggregate is moved into stockpiles where it is stored until it is loaded into trucks for delivery to customers.

There are two 1,000-gallon diesel tanks and one 1,000-gallon gasoline tank used to fuel vehicles on site. These tanks are exempt per Rule 284(2)(g)(ii).

**APPLICABLE RULES/ PERMIT CONDITIONS:**

Levy Plant 1 is a synthetic minor source operating under Permit to Install (PTI) No. 104-16, issued on September 23, 2016. This permit replaced Wayne County Permit Nos. C-8611 through C-8614, and contains limits on PM and PM10 to allow the facility to opt out of Title V permitting requirements.

Levy Plant 1 is operating under State Implementation Plan (SIP) Consent Order 16-1993 (revised September 9, 1994). For the purpose of this inspection, compliance with the Nuisance Minimization Plan found in Appendix B of PTI No. 104-16 is determined to demonstrate compliance with SIP Consent Order 16-1993 (revised September 9, 1994).

Note: Since slag is not considered to be a nonmetallic mineral, the facility is not subject to 40 Code of Federal Regulations (CFR) Part 60, Subpart OOO.

Records from January 2017 through August 2020 were reviewed to determine compliance during this inspection.

PTI No. 104-16, Special Conditions:

**EUPROCESS****I. Emission Limits:**

1: IN COMPLIANCE. Facility did not exceed the permit limit of 20.4 tons PM per 12-month rolling time period. The highest 12-month rolling total PM emissions was 4.84 tons for the 12-month rolling time period ending April 2019. The 12-month rolling total PM emissions for August 2020 was 2.83 tons.

2: IN COMPLIANCE. Facility did not exceed the permit limit of 7.1 tons PM10 per 12-month rolling time period. The highest 12-month rolling total PM10 emissions was 1.68 tons for the 12-month rolling time period ending April 2019. The 12-month rolling total PM emissions for August 2020 was 0.98 tons.

3: NOT EVALUATED. AQD has not requested visible emissions testing to verify compliance with the 10% opacity limit. However, the facility uses water sprays at various points of processing to minimize fugitive dust and performs visual observations regularly during processing and takes corrective actions if visible emissions are observed. During the inspection, I did not observe any visible emissions from the slag processing.

**II. Material Limits:**

- 1: IN COMPLIANCE. The facility did not exceed the daily limit of 16,800 tons per day of slag processed. The highest daily average was 3,886 tons for the month of September 2018. A cursory review of daily production records was performed during the inspection to make sure no single day exceeded 16,800 tons.
- 2: IN COMPLIANCE. The facility did not exceed the 12-month rolling limit of 2,100,000 tons of slag processed. The highest 12-month rolling total of slag processed was 989,614 tons for the 12-month time period ending April 2019. The 12-month rolling total of slag processed for August 2020 was 577,936 tons.
- 3: IN COMPLIANCE. The facility does not process any asbestos tailing or asbestos-containing waste materials in EUPROCESS.

### III. Process/Operational Restrictions:

- 1: IN COMPLIANCE. The facility uses water sprays at various points of the process to minimize fugitive dust emissions. All slag first processed at Levy Plant 6 is quenched with water prior to deliver to Levy Plant 1. Water sprays are inspected weekly to assure proper operation.
2. IN COMPLIANCE. A Nuisance Minimization Plan (NMP) is implemented and maintained for the roadways, plant yard, material storage piles, and material handling processes, as specified in Appendix B of PTI No. 104-16.

### IV. Design/Equipment Parameters:

1. IN COMPLIANCE. Control devices are installed, maintained, and operated in a satisfactory manner.
2. IN COMPLIANCE. The plant feed conveyor is equipped to a belt scale to monitor daily throughput rate.
3. IN COMPLIANCE. Water sprays are used in various points of the process to minimize fugitive dust. Water sprays are inspected weekly to assure proper operation.

### V. Testing/Sampling:

1. NOT APPLICABLE. AQD has not requested visible emissions testing at this facility.

### VI. Monitoring/Recordkeeping:

1. IN COMPLIANCE. Facility maintains records of the amount of slag processed on a daily, monthly, and 12-month rolling time period basis. Records were provided to AQD during the inspection.
2. IN COMPLIANCE. Facility calculates PM and PM10 emission rate on a monthly and 12-month rolling time period basis. Records were provided to AQD during the inspection.

### XI. Other Requirements:

1. IN COMPLIANCE. All equipment is labeled in an easily identifiable manner acceptable to AQD.

## EUTRUCKTRAFFIC

### I. Emission Limits:

1. IN COMPLIANCE. Visible emissions from truck traffic and loaders do not exceed 5% opacity. Facility uses water trucks and wet sweepers daily (except during rain and freezing conditions) to control fugitive dust. During the inspection, the dust observed from truck traffic on site was very minimal.

### III. Process/Operational Restrictions:

1. IN COMPLIANCE. A Nuisance Minimization Plan (NMP) is implemented and maintained for the roadways, plant yard, material storage piles, and material handling processes, as specified in Appendix B of PTI No. 104-16. Facility uses water trucks and wet sweepers daily (except during rain and freezing conditions) to control fugitive dust. The facility also sprays calcium chloride on unpaved lots periodically during the year. Per the fugitive dust records, calcium chloride was most recently applied by Suburban Oil on June 8, 2020.

## EUSTORAGE

I. Emission Limits:

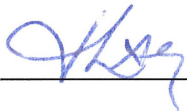
1. IN COMPLIANCE. Visible emissions from storage piles do not exceed 5% opacity. The material storage piles are kept at a reasonable height to minimize drop height. The storage piles may be sprayed with water to control fugitive dust, but this is usually not necessary. During the inspection, I did not observe any visible emissions from the storage piles.

III. Process/Operational Restrictions:

1. IN COMPLIANCE. A Nuisance Minimization Plan (NMP) is implemented and maintained for the roadways, plant yard, material storage piles, and material handling processes, as specified in Appendix B of PTI No. 104-16. The material storage piles are kept at a reasonable height to minimize drop height. The storage piles may be sprayed with water to control fugitive dust, but this is usually not necessary.

**FINAL COMPLIANCE DETERMINATION:**

At the time of inspection, Levy Plant 1 is determined to be in substantial compliance with PTI 104-16 and other applicable State and federal air regulations.

NAME 

DATE 10-30-23

SUPERVISOR 