

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

B436467764

FACILITY: EDW C LEVY CO PLANT 3		SRN / ID: B4364
LOCATION: 100 WESTFIELD, ECORSE		DISTRICT: Detroit
CITY: ECORSE		COUNTY: WAYNE
CONTACT:		ACTIVITY DATE: 06/12/2023
STAFF: Katherine Koster	COMPLIANCE STATUS: Compliance	
SUBJECT: FY23 Targeted Inspection		SOURCE CLASS: MAJOR
RESOLVED COMPLAINTS:		

REASON FOR INSPECTION: Targeted Inspection
 INSPECTED BY: Katie Koster, AQD
 PERSONNEL PRESENT: Tom Green, Levy Corporate Environmental Director
 CONTACT INFO: 313-690-0139
 SAFETY EQUIPMENT: Hard hat, safety glasses, steel toed boots, greens, high vis vest

FACILITY BACKGROUND

Edward C. Levy Co. Plant 3 is a support facility for U.S. Steel – Great Lakes Works (USSGLW) operations. All of the plant operations are entirely dependent on US Steel. The facility operates 24 hours a day, 7 days a week, and handles and processes slag such as basic oxygen furnace (BOF) slag, desulfurization byproduct (kish) slag, runway/pit slag, caster slag, and other miscellaneous slag and debris generated by the mill. Blast furnace slag is not processed here; it is loaded into Levy trucks on Zug Island and transported to Levy Plant 1. All metallics in the materials are separated, crushed, screened, and returned to USS. The non-metallic portion of the slag is screened and separated into different sizes and sold by Levy. This happens in the slag plant. However, US Steel idled most of their operations in March 2020 and operations at this facility have been significantly curtailed. At the time of the inspection, the facility was scheduled to totally shut down by September 1, 2023.

REGULATORY ANALYSIS

Although this site is a support facility and AQD considers it part of the same stationary source with USSGLW, it was negotiated through a court order that the facility be issued its own renewable operating permit (ROP).

While the two facilities are considered the same source for Title V applicability, individual Title V permits are issued to Edw. C. Levy Co., Plant 3 and USSGLW separately. Edw. C. Levy Co., Plant 3 was originally intended to be aggregated in the USSGLW's Title V permit as a Section. However, through negotiations that arose from the court judgment of the suit filed by the company against the AQD contesting the aggregation of the Levy Plant 6 with Severstal North America, Inc. (use to be Rouge Steel Company) ROP, Edward C. Levy Company agreed to submit a separate ROP application for Edward C. Levy Company Plant 3 and was issued an ROP of its own."

The facility is operating under its own Wayne County fugitive dust SIP consent order No. 17-1993 revised September 9, 1994. ROP MI-PTI-B4364-2015 was issued as a renewal on December 2, 2015.

New Source Performance Standards (NSPS) /NESHAPS

It appears that the facility is not subject to Subpart OOO. Slag is not considered a non-metallic mineral. See attached applicability determination.

I reviewed the list of the NSPS source categories. The regulation for metallic mineral processors (Subpart LL) relates to mining and recovery of materials from ore which is not the situation at Plant 3.

There are three generators that were included in the ROP Title V renewal that are subject to the RICE MACT and/or NSPS IIII.

PROCESS OVERVIEW

Edw. C. Levy Co. Plant 3 consists of the following major operations:

The slag processing plant (EUSLAGPLANT) is a 350 ton per hour slag processing operation including one grizzly feeder, four screens, two crushers and up to twenty conveyors and stackers. It is equipped with water spray systems for air pollution control.

The scrap beneficiation processing plant (EUFEBENEFICATION) is a 150 ton per hour operation where the desulfurization slag (kish) is separated into metallics and non-metallics and screened into two main sizes for USS. Processing equipment includes one grizzly feeder, three screens, and up to eleven conveyors and stackers. It is equipped with water spray systems for air pollution control. Formerly referred to as the kish debris plant in the SIP consent order No. 17-1993.

At the kish wetting station (EUKISHPOTDUMP), kish pots are transferred from USSGLW's No. 2 BOP iron skimming station to Levy's watering station where pots are quenched with water for a minimum of 24 hours to cool the kish and control particulate matter when kish pots are dumped and emptied at the kish pot dump station. There are a total of 10 watering stations that comprise the kish wetting station. USSGLW was issued a permit to install for the kish wetting station but it is installed at Levy Plant 3. Also, the day-to-day operation and maintenance of this station is handled by Levy. USSGLW claims that compliance responsibility of this station with all the applicable air pollution regulations lies with Levy Plant No. 3. However, USS is the owner of all of the equipment and the kish pots.

There are two basic oxygen furnace (BOF) slag pits (EUBOFSLAGPIT), with water spray systems for air pollution control. A skull knocking station is in between the two pits. Dust boss misters are installed at the knock station as well as one for each pit at the stockpile while loading into the grizzly feeder.

The following processes are sources of air emissions that meet R336.1290 exemption criteria according to the facility:

The drop ball crane process (EUDROPBALLCRANE) consists of dropping a large steel ball from a crane onto scrap steel to break it into small pieces to be reused at the USSGLW steel mill. There are two pits with one crane each; one for BOF skull breaking and the other for kish skull breaking.

The debris plant (EUDEBRISPLANT) is made up of 1-200 ton per hour hopper, 1-200 ton per hour grizzly feeder, and 1-200 ton per hour conveyor with 4 transfer points. The material is watered at the Euclid watering station prior to being fed into the debris plant for fugitive dust control. This is formerly referred to as the mill scale plant in the SIP consent order.

The recycle material operation (EURECYCLEMATOPERATION) is made up of 1-100 ton per hour hopper, and 1-100 ton per hour conveyor with 2 transfer points (aka the pot slagger). Levy puts seven tons of slag in the bottom of the pot for protection. The slag acts as a cushion as molten steel can burn a hole right through the pot.

The material transfer conveyor system (EUMATRANSFERCONVEYOR) is made up of 1-200 ton per hour conveyor with 4 transfer points.

Cold cleaners that meet the applicable requirements of R336.1281(2)(h) are installed.

INSPECTION NARRATIVE

AQD inspector, Katie Koster, arrived at Levy Plant 3 on June 12, 2023, at 12:30 p.m. I met with Mr. Tom Green, Levy Corporate Environmental. There were no other employees on site. Based on a phone call I had with Mr. Green and Mr Deaton on June 5, 2023, Levy has been ordered to vacate the premises by September 1, 2023, by the landowner, USS. As such, Levy is in the process of dismantling and removing all remaining equipment. Scale and power are locked out. Levy was told to leave everything; do not ship anything out. As such, there is no truck traffic except for trucks coming to remove equipment.

Mr. Green drove me around the site. All of the emission units have been dismantled except for the two cranes and the kish watering station. As already stated, the kish watering is owned by USS. According to Mr. Green, Levy continues to meet its fugitive dust requirements and is still applying calcium chloride. There was no truck traffic during the visit. At one point, Levy was going to demolish the office buildings but was instructed not to by USS.

Tall berms in and around the site, visible from West Jefferson, are iron and steel fines for which there is no market. According to Levy, some of the material has been stockpiled for 20-30 years. The piles have developed a hard crust layer and some have vegetation growing on them. Based on my observations, they do not appear to be a fugitive dust source.

APPLICABLE RULES/PERMIT CONDITIONS EVALUATED

Facility is operating under MI-ROP-B4364-2016. This ROP includes conditions from fugitive dust SIP Consent Order 17-1993 revised 9/9/94. I requested and reviewed the records I outlined in the attached email.

Sourcewide Fugitive Dust Requirements. NOT IN OPERATION. Facility not operating at the time of the inspection so none of these conditions below were evaluated.

- To minimize the fugitive emissions from the loading of trucks and the transporting of material off-site, the following operating practices shall be adhered to:
 - o All trucks transporting finished product that has the potential to emit fugitive particulate matter, or material for the landfill, shall be tarped before leaving the property.
 - o Drop heights of the front end loader bucket will be no more than two (2) feet above sideboard of the trucks.
 - o All trucks transporting finished product, or material for the landfill, shall pass through the truck wheel wash before leaving the property, weather permitting.
 - o Additional water can be added to the finished product stockpiles, with the use of portable rainbirds, if emissions from load-out exceed 5% opacity.

NOT IN OPERATION. There are no more stockpiles in use. Historically, company submitted proposed demonstration to AQD as part of the recent ROP renewal application and has been applying calcium chloride dust suppressant and it is applied at the same frequency. This has been accepted by AQD over the past several years. See attached log. Control of emissions due to vehicle movement about the stockpiles shall be accomplished by applying lignosulfonate or an equivalent or more effective material to the traveled areas among the piles. If lignosulfonate is used, the application rate shall be 5 gal/100 sq. ft., the diluted ratio shall be 3:1, and the application frequency shall be once every three (3) weeks. The actual square footage to be controlled shall be dependent upon the amount of material in storage. If a dust suppressant other than lignosulfonate is used, facility shall submit the demonstration required in SC IX.1.B.1.

NOT IN OPERATION. Spilled material under conveyors shall be attended to on an ongoing basis. Spillage on roadways shall be removed daily. A truck operator who has spilled material onto the road shall be notified so that appropriate action can be taken to prevent future incidences.

B. STOCKPILE AREAS and ACTIVITIES.

1. **NOT IN OPERATION.** There is no slag from the slag pits anymore. Raw slag shall be watered prior to transfer by front end loader to the grizzly/feeder at the beginning of the process plant. Water is added to the material at a rate of 4.0 gallons per ton of slag processed.

2. **NOT IN OPERATION.** Load-out emissions shall be controlled by limiting drop height of the bucket to a maximum of two (2) feet above the sideboard of the truck.

C. ROADWAYS AND PARKING LOTS

Paved roads

- a. **IN COMPLIANCE.** Paved roads were being watered at the time of my inspection. Paved roads shall be cleaned daily during operating hours, weather permitting, with a power flush truck.
- b. **IN COMPLIANCE.** No track out was observed while on site. Track-out shall be cleaned up daily when it occurs.
- c. **IN COMPLIANCE.** Speed limit signs are posted. Speed limit on paved roads is 15 MPH.

Unpaved Roads

- a. **IN COMPLIANCE.** Company submitted proposed demonstration to AQD as part of the recent ROP renewal application and has been applying calcium chloride dust suppressant and it is applied at the same frequency. This has been accepted by AQD over the past several years. See attached log. Unpaved roads shall be treated with a lignosulfonate (or equivalent) dust suppressant. If lignosulfonate is used, the application frequency shall be once every three weeks at an application rate of 1.0 gallons per square yard and a dilution ratio of 3:1. If a dust suppressant other than lignosulfonate is used, facility shall submit the demonstration required in SC IX.1.B.1.
- b. **IN COMPLIANCE.** Speed limit signs are posted. Speed limit on unpaved roads is 5 MPH.

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. **IN COMPLIANCE.** Records include the required data. See attached log. The permittee shall record the data and information specified in Appendix 4, Section 4.1- Required Records for Fugitive Dust Sources and shall keep the record for a period of at least two years, and records shall be made available to AQD upon written or verbal request. The permittee may use alternate formats with the approval by the AQD District Supervisor for recording equivalent information without the need to modify or amend this permit.

4.1 Required Records for Fugitive Dust Sources

A. Unpaved Roads / Lots

- 1. Date of Treatment
- 2. Control Measure Used
- 3. Responsible Person's Initial
- 4. Name of Product Applied
- 5. Amount of Solution / Water Applied
- 6. Dilution Ratio
- 7. Road Segment / Lot Identification

B. Paved Roads / Lots

- 1. Date of Treatment
- 2. Control Measure Used
- 3. Responsible Person's Initial
- 4. Road Segment / Lot Identification

C. Storage Piles / Material Handling

- 1. Date of Treatment
- 2. Control Measure Used
- 3. Responsible Person's Initial
- 4. Dilution Ratio
- 5. Amount of Dust Suppressant / Water Applied
- 6. Identification of Pile / Material Handling Operation Treated

D. Optional Records

- 1. Precipitation
- 2. Temperature
- 3. Wind Direction and Velocity

2. IN COMPLIANCE. See attached log. The minimum of 5 days per week is being met and the facility is performing observations beyond the minimum required time period of March – October. The permittee shall perform a non-certified visible emission observation of the fugitive dust sources in SC III.A, B and C at least 5 days per week excluding non-operating days during March through October. The permittee shall initiate corrective action upon observation of visible emissions and shall keep a written record of each required observation and corrective action taken.

VII. REPORTING

4. IN COMPLIANCE. Facility has begun submitted these reports since it was discussed during the prior inspection. A quarterly report shall be submitted by the permittee to AQD identifying each day in which an emission limit, operational requirement, or recording requirement, as specified in SIP No. 17-1993 (Revised 9/9/94) Exhibit A (Fugitive Dust Control Plan, Edward C. Levy Co. – Plant #3), was not met. This report shall, for each instance, explain the reason that the emission limit, operational requirement, or recordkeeping requirement was not met, the duration of the event, the remedial action taken, and a description of the steps which were taken to prevent a recurrence. These reports shall be submitted within 30 days following the end of the calendar quarter in which the data was collected.

EUSLAGPLANT – NOT OPERATING. HAS BEEN DISMANTLED AS OF OCTOBER 2022 AND REMOVED FROM SITE.

Processing equipment associated with a 350 ton per hour slag processing operation located at Levy Plant 3. Processing equipment includes one grizzly feeder, four screens, two crushers and up to 20 conveyors and stackers.

EUFBENEFICATION – DISMANTLED AND REMOVED FROM SITE.

EUKISHPOT DUMP - This emissions unit stopped operating as of April 2, 2020. Components of the system are still in place. Water is shut off and kish pots are not on site and have been sent to other US Steel facilities according to Levy.


EUBOFLAGPIT – DISMANTLED AND REMOVED FROM SITE. This emission unit has stopped operating as of March 31, 2020, and has been dismantled.

EXEMPT EMISSION UNITS

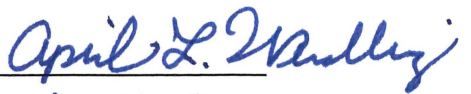
ALL REMOVED FROM SITE including EUDEBRISPLANT, EURECYCLEMATOPERATION, EUMATRANSFERCONVEYOR, EUPORTBIV, Generators and cold cleaners except for the cranes which will be removed by September 1, 2023.

COMPLIANCE DETERMINATION

At this time, the facility is no longer operating. Equipment has been dismantled and removed or is in the process of being dismantled and removed.

NAME 

DATE 9/29/23

SUPERVISOR 
10110/23