

9300 Dix Avenue, Dearborn, Michigan 48120, (313) 843-7200

RECEIVED JUN 1 3 2017 Air Quality Division Detroit Office

June 12, 2017

Ms. Katie Koster MDEQ Detroit, AQD Cadillac Place 3058 West Grand Boulevard Suite 2-300 Detroit, MI 48202-6058

## Subject: Second Violation Notice, dated May 30, 2017 Edw. C. Levy Co., Plant 6 SRN: B4243

Dear Ms. Koster:

The Edw. C. Levy Co. (Levy) is in receipt of the subject Second Violation Notice, dated May 30, 2017, for an alleged January 27, 2017 citizen complaint concerning fallout on Mellon St., in Detroit.

The Second Violation Notice stated that AQD determined that the Levy Plant 6 response, dated April 4, 2017 to the original Notice of Violation, dated March 13, 2017, did not adequately address the cited violation. Additionally, the Second Violation Notice states that AQD investigations around this time noted that fine material was blowing from the eastern most conveyor of the Levy Plant 6 Mellon Street operations and that the drop height didn't appear to be sufficiently minimized.

In mid-January, Levy Plant 6 stopped making the 30X product that was stockpiled by and under the plant's eastern most stacker conveyor. Since that time, this conveyor has not conveyed finished product and the stockpile under the conveyor had been removed. As the plant is designed, this conveyor must continue to operate and it may receive an occasional very small amount of fine material.

To address this potential fugitive emission source, Levy Plant 6 has installed an improved water spray on the eastern most conveyor that will spray a fine mist on the empty conveyor to ensure no fine particulates are emitted to the air. The previous water spray dispersed a much greater volume of water intended to saturate the finished product that was formerly conveyed. Continuous Operation of the previous water spray without finished product on the conveyor would result in flooding the plant. As requested in the Second Violation Notice, I have attached a copy of Levy Plant 6's updated fugitive dust control plan. As required by the Renewable Operating Permit (ROP), the adjustable stacker height mechanisms, and water sprays are periodically inspected (weekly).

All required emission control equipment is functional.

If you need additional information, please call Tom Green at (313) 690-0139, Ben Kroeger at (313) 409-5617 or me at (313) 779-1189.

Sincerely,

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Thomas A. Smith General Operations Manager Edw. C. Levy Co.

cc: B. Michalik, Edw. C. Levy Co. E. Patino, Edw. C. Levy Co. T. Green, Edw. C. Levy Co.

# (Official FDCP is generic and was established by Consent Agreement 18-1993, dated Sept 9, 1994) (Official FDCP requires MDEQ and EPA approval to modify)

# 1. Facility Name and Address

Edw. C. Levy Co. Plant #6 13800 Mellon Detroit, Michigan 48127

## 2. Name and Address of Responsible Person

Tom Smith or Brian Lasley Edw. C. Levy Co. 8800 Dix Avenue Detroit, Michigan 48209

## 3. Facility Process Summary and Controls

## A. Source Process Description

Edw. C. Levy Co. (Levy) operates a slag processing facility located at 13800 Mellon, Detroit, Michigan, known as Plant #6. The Plant #6 operation processes the steel furnace slag generated by AK Steel - Dearborn's Basic Oxygen Furnace (BOF).

Plant #6 operations consist of the BOF slag pits, slag processing operations (known as Levy Plant #6) located on AK Steel property adjacent to the Rouge River, and additional slag processing operations on the opposite side of the Rouge River (known as the Detroit Side) on Levy property. The operations on opposite sides of the Rouge River are connected by a bridge conveyor system. Key operations on the Detroit Side include the Deister Screen and Conveyor System. The attached Figures illustrate the general layout of Levy Plant #6.

Levy Plant #6 - Pot carriers transport molten steel furnace slag from AK Steel – Dearborn to the BOF slag dump station at Levy Plant #6. At the dump station, the molten slag is dumped, and then quenched by water sprays. The quenched slag is removed from the pits by front end loaders and stockpiled prior to processing. This stockpiled slag is the primary raw feed for the slag processing plant. Caster and runway slags are brought to Levy Plant #6 in Euclid trucks. These slags are watered in the trucks prior to dumping at the BOF slag pits. Front end loaders transfer slag from the raw feed stockpile to the grizzly feeder, the first processing step of the slag plant. The slag plant operates at a maximum rate of 400 tph.

Skulls, the steel/slag crust that forms inside a slag pot, are removed from the slag pots at the slag pot knock station. The slag pot knock station is equipped with a partial enclosure that was designed to control particulate emissions. After cooling, the skulls are transferred to the drop ball crane area to separate the large pieces of steel from the slag. The steel is recycled by the steel mill and the slag is processed through the slag plant.

Processing equipment associated with the slag plant includes a grizzly feeder, two screens, a crusher, and seven conveyors and stackers. The processing plant extracts the metals from the slag, which are returned to the steel mill for reuse. The slag is crushed and screened to produce different sizes of finished product. The slag plant also includes a bridge conveyor that transports the material to the Detroit side for additional processing at the Deister Screen and Conveyor System processes.

<u>Deister Screen and Conveyor System Processes</u> - Non-metallic slag is crushed and screened to produce various finished construction products. Finished products are loaded by front end loaders and transported by customer-owned or operated trucks. Processing equipment associated with the Deister Screen operation includes thirteen conveyors/knuckle conveyors, and the screen. Processing equipment associated with the Conveyor system includes five additional conveyors.

#### **B.** Fugitive Dust Control Measures

Fugitive dust control measures are implemented to minimize emissions from both primary process activities and supporting activities. Control measures include the following:

## I. Levy Plant #6, Deister Screen, and Conveyor System Processes:

Fugitive emissions are minimized during processing of steel furnace slag by the following control measures:

- Raw slag is watered in the slag pits prior to excavation and delivery to the slag plant for screening and crushing activities.
- A partial enclosure with a water mist system is maintained at the pot knocking station to reduce fugitive emissions. (Water misting system is inspected weekly and inspections are documented on "BOF Skull Station Dust Boss System – Weekly Equipment Inspection Log")
- Water sprays are located at the slag raw feed stockpile, and prior to all screens and crushers on the slag plant. These water sprays are used as necessary to minimize fugitive emissions. (Water sprays are inspected weekly and inspections are documented on "BOF Slag Pits Water Spray System - Weekly Equipment Inspection Log" and "Desulf Watering Station, Adjustable Stackers, Plant Water Sprays – Weekly Inspection Log")
- Conveyors are equipped to minimize fugitive emissions by using methods such as conveyor covers, water sprays, side shields, etc., as necessary.
- Water sprays are installed on the 30X Product stacker for use as needed to minimize fugitive emissions. (Water sprays are inspected weekly and inspections are documented on "Desulf Watering Station, Adjustable Stackers, Plant Water Sprays – Weekly Inspection Log")

#### II. Material Stockpiling and Transport:

Materials are stockpiled at various stages of processing and as finished products. Fugitive emissions are minimized for materials during stockpiling, storage, loading and transport by performing the following:

- Material spilled beneath conveyors is managed on an ongoing basis.
- All trucks transporting finished product that has the potential to emit fugitive emissions are tarped before leaving the property.
- Drop heights of the front end loader bucket are no more than two feet above the sideboard of the trucks.
- Additional water is added to the finished product stockpiles, if emissions from load-out exceed 5% opacity.
- Adjustable Stacking Conveyors are adjusted to minimize the drop distance between the conveyor head pulley and stockpile. (Water sprays are inspected weekly and inspections are documented on "Desulf Watering Station, Adjustable Stackers, Plant Water Sprays – Weekly Inspection Log")

#### III. <u>Roadway and Vehicle Movement Areas:</u>

The attached Figures show the unpaved and paved road areas that are maintained as detailed below.

Paved:

- Paved roads are inspected and cleaned as necessary during operating hours, weather permitting with a power flush truck or wet/vacuum truck. (Roads are inspected daily (M-F) and inspections are documented on "Source-wide Fugitive Dust Log")
- Track out on paved roads is cleaned daily as it occurs.
- The paved road speed limit is limited to 15 miles per hour.

Unpaved:

- Fugitive emissions on unpaved areas are controlled by applying a solution of calcium chloride, water, or equivalent, as necessary. Roads are treated with Calcium Chloride a minimum of once per month between the months of March through October (Roads are inspected daily (M-F) and inspections are documented on "Source-wide Fugitive Dust Log")
- A water truck is used, as necessary and weather permitting, between calcium chloride or equivalent treatments.
- The unpaved road speed limit is restricted to 5 miles per hour.
- Fugitive emissions generated by vehicle traffic in unpaved areas around the stockpiles are controlled by applying a solution of calcium chloride, water, or equivalent, as necessary.

General:

- Material spilled on roadways is removed daily.
- Truck operators are notified promptly if they spill material on a roadway to prevent future incidences.

## 4. MDEQ Required Recordkeeping Requirements - Fugitive Dust Sources

- A. Unpaved Roads/Lots
  - Date of Treatment
  - Control Measure Used
  - Name of Employee
  - Name of product Applied
  - Amount of Solution/Water Applied
  - Dilution Ratio (if applicable)
  - Road Segment/Lot Identification
- B. Paved Roads/Lots
  - Date of Treatment
  - Control Measure Used
  - Name of Employee
  - Road Segment/Lot Identification
- C. Storage Piles/ Material Handling
  - Date of Treatment
  - Control Measure Used
  - Name of Employee
  - Dilution Ratio (if applicable)
  - Amount of Dust Suppressant/Water Applied
  - Identification of Pile/Material Handling Operation Treated
  - Equipment Used
- D. Optional Records
  - Precipitation
  - Temperature