## Michigan Department of Environmental Quality Air Quality Division

State Registration Number B4243

# RENEWABLE OPERATING PERMIT STAFF REPORT

ROP Number
MI-ROP-B4243-2016

#### **EDW C LEVY CO PLANT 6**

SRN: B4243

Located at

13800 Mellon Street, Detroit, Wayne, Michigan 48209

Permit Number: MI-ROP-B4243-2016

Staff Report Date: July 13, 2015

This Staff Report is published in accordance with Sections 5506 and 5511 of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Specifically, Rule 214(1) requires that the Michigan Department of Environmental Quality (MDEQ), Air Quality Division (AQD), prepare a report that sets forth the factual basis for the terms and conditions of the Renewable Operating Permit (ROP).

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### RENEWABLE OPERATING PERMIT

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**ROP Number** 

**JULY 13, 2015 STAFF REPORT** 

#### **Purpose**

Major stationary sources of air pollutants, and some non-major sources, are required to obtain and operate in compliance with a ROP pursuant to Title V of the federal Clean Air Act of 1990 and Michigan's Administrative Rules for air pollution control pursuant to Section 5506(1) of Act 451. Sources subject to the ROP program are defined by criteria in Rule 211(1). The ROP is intended to simplify and clarify a stationary source's applicable requirements and compliance with them by consolidating all state and federal air quality requirements into one document.

This report, as required by Rule 214(1), sets forth the applicable requirements and factual basis for the draft permit terms and conditions including citations of the underlying applicable requirements, an explanation of any equivalent requirements included in the draft permit pursuant to Rule 212(5), and any determination made pursuant to Rule 213(6)(a)(ii) regarding requirements that are not applicable to the stationary source.

#### **General Information**

Stationary Source Mailing Address:	EDW. C. LEVY CO., PLANT 6 13800 Mellon Street
	Detroit, Michigan 48209
Source Registration Number (SRN):	B4243
North American Industry Classification System (NAICS) Code:	327992
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	201400053
Responsible Official:	Tom Smith, General Operations Manager 8800 Dix Ave., Detroit, Michigan 48209 313-439-2878
AQD Contact:	Katherine Koster, Senior Environmental Engineer 313-456-4678
Date Permit Application Received:	March 25, 2014
Date Application Was Administratively Complete:	April 9, 2014
Is Application Shield In Effect?	Yes
Date Public Comment Begins:	July 13, 2015
Deadline for Public Comment:	August 12, 2015

#### **Source Description**

Edw. C. Levy Company's iron and steel slag handling operations for AK Steel Dearborn Works (formerly Severstal Dearborn LLC) are comprised of three distinct operations. The first operation consists of the blast furnace slag pit area with water quenching and storage piles at the corner of Miller and Dix Streets. The quenched iron slag is dug and trucked about a mile away for processing at Edw. C. Levy Co., Plant 1 located at 8800 Dix. The second operation is the desulfurization by-product material "desulf" pot watering station. The third operation is Edw. C. Levy Co., Plant 6 consisting of the steel slag pit area, pot knocking station, and a slag processing operation and equipment located on AK Steel property (named by Levy as the Dearborn site) and Edw. C. Levy Co. property across the Rouge River (named by Levy as the Detroit site). The Edw. C. Levy Co., Plant 6 has a business address of 13800 Mellon Street, Detroit, Michigan (Wayne County). All of the operations are entirely dependent on AK Steel's slag and byproduct material. The Plant 6 operation handles all of the steel slag from the BOF. The slag processing plant extracts the metals from the slag which are returned to AK Steel for reuse. The non-metallic portion of the slag is crushed and screened to produce different sizes of finished product.

The following table lists Edw. C. Levy Co. Plant 6 emission information as reported to the Michigan Air Emissions Reporting System in the **2015** submittal.

#### TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	0
Lead (Pb)	0
Nitrogen Oxides (NO <sub>x</sub> )	0
Particulate Matter (PM)	6
Sulfur Dioxide (SO <sub>2</sub> )	0
Volatile Organic Compounds (VOCs)	0
Individual Hazardous Air Pollutants (HAPs) **	NA
Total Hazardous Air Pollutants (HAPs)	0

<sup>\*\*</sup>As listed pursuant to Section 112(b) of the federal Clean Air Act.

In addition to the pollutants listed above that have been reported in MAERS, the potential to emit of Greenhouse Gases in tons per year of  $CO_2e$  is less than 100,000.  $CO_2e$  is a calculation of the combined global warming potentials of six Greenhouse Gases (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride).

See Parts C and D in the draft ROP for summary tables of all processes at the stationary source that are subject to process-specific emission limits or standards.

#### **Regulatory Analysis**

The following is a general description and history of the source. Any determinations of regulatory non-applicability for this source are explained below in the Non-Applicable Requirement part of the Staff Report and identified in Part E of the ROP.

The stationary source is located in Wayne County, which is currently designated by the U.S. Environmental Protection Agency (USEPA) as attainment/unclassified for all criteria pollutants except for a portion of Wayne County that is designated as non-attainment for SO<sub>2</sub>.

For the purpose of applicability to the Title V Renewable Operating Program (ROP), Edw. C. Levy Co., Plant 6 (Plant 6) was determined by the AQD to meet the criteria under Rule 336.1119(r) of a facility to be aggregated into a single stationary source with AK Steel Dearborn Works. Levy's Plant 6 is located on contiguous and adjacent properties of AK Steel. Levy's Plant 6 is wholly dependent upon AK Steel's slag for its raw material. The AQD believes that the two facilities should be considered in the same industrial grouping regardless of whether the first two digits of the SIC codes for the two entities are the same because Levy's Plant 6 is considered a support facility for AK Steel. As indicated in the August 7, 1980, Federal Register (45 FR 52695), "one source classification encompasses both primary and support facilities, even when the latter includes units with a different two-digit SIC code. Support facilities are typically those which convey, store, or otherwise assist in the production of the principal product." Levy's Plant 6 is the sole recipient of AK Steel's BOF steel slag. Since removal of slag is essential to AK Steel's lawful production process, Levy's Plant 6 assists in the production of steel at AK Steel. Therefore, Edw. C. Levy Co., Plant 6 is a support facility and together with AK Steel constitutes a single source.

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 6 and AK Steel. Edw. C. Levy Co. Plant 6 was originally aggregated in the AK Steel's Title V permit as Section 2. 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's Plant 6 with AK Steel ROP, Edw. C. Levy Co. Plant 6 agreed to submit a separate ROP application. During the technical evaluation of the ROP application, it was determined that there are three other operations that Edw. C Levy Co. operates in support of AK Steel. These are the blast furnace slag pit area operations with quench system and storage piles, the BOF runway slag watering station, and the desulfurization by-product material "desulf" pot watering station. These operations were claimed by the company to be independent of Plant 6 operations. Since they have underlying applicable requirements, the blast furnace slag pit area operations with quench system and storage piles and the BOF runway slag watering station were included as emission units in the AK Steel ROP as Section 2 with Levy being responsible for compliance. The desulfurization by-product material "desulf" operations were made as an emission unit in Section 1 of the AK Steel ROP. Levy claims that the operation is put on bid by AK Steel on an annual basis and that it is not sure what happens in the following years and therefore it should be included in Section 1 of AK Steel ROP.

There is an active Consent Order entered into by the company with the MDEQ, this is SIP No. 18-1993 revised September 9, 1994.

The stationary source (AK Steel Dearborn Works and Edw. C. Levy operations, including Plant 6) is subject to Title 40 of the Code of Federal Regulations (CFR), Part 70, because

- the potential to emit the potential to emit carbon monoxide, nitrogen oxide, sulfur dioxide, volatile organic compounds, and particulate matter exceeds 100 tons per year.
- the potential to emit of any single HAP regulated by the federal Clean Air Act, Section 112, is more than 10 tons per year and/or the potential to emit of all HAPs combined is more than 25 tons per year.

No emission units at Edw. C. Levy Plant 6 are currently subject to the Prevention of Significant Deterioration (PSD) regulations of Part 18, Prevention of Significant Deterioration of Air Quality of Act 451 or 40 CFR, Part 52.21.

No emission units at Edw. C. Levy Plant 6 are subject to the federal Compliance Assurance Monitoring rule under 40 CFR, Part 64, because all emission units at the stationary source either do not have a control device or those with a control device do not have potential pre-control emissions over the major source thresholds.

Edw. C. Levy Plant 6 is not subject to NSPS OOO, Standards for Non Metallic Mineral Processing Plants per a 1998 written determination from EPA. The EPA concluded that slag does not meet the definition of a non metallic mineral.

Please refer to Parts B, C and D in the draft ROP for detailed regulatory citations for the stationary source. Part A contains regulatory citations for general conditions.

#### Source-wide Permit to Install (PTI)

Rule 214a requires the issuance of a Source-wide PTI within the ROP for conditions established pursuant to Rule 201. All terms and conditions that were initially established in a PTI are identified with a footnote designation in the integrated ROP/PTI document.

The following table lists all individual PTIs that were incorporated into previous ROPs. PTIs issued after the effective date of ROP No. MI-ROP-B4243-2009 are identified in Appendix 6 of the ROP.

PTI Number				
C-10621 (Slag Processing Plant, Deister screen)	C-11606 (Conveyor System)	298-03	248-06	

#### **Streamlined/Subsumed Requirements**

This permit does not include any streamlined/subsumed requirements pursuant to Rules 213(2) and 213(6).

#### Non-applicable Requirements

Part E of the draft ROP lists requirements that are not applicable to this source as determined by the AQD, if any were proposed in the application. These determinations are incorporated into the permit shield provision set forth in Part A (General Conditions 26 through 29) of the draft ROP pursuant to Rule 213(6)(a)(ii).

#### **Processes in Application Not Identified in Draft ROP**

There were no processes listed in the ROP application as exempt devices under Rule 212(4). Exempt devices are not subject to any process-specific emission limits or standards in any applicable requirement.

#### **Draft ROP Terms/Conditions Not Agreed to by Applicant**

The following table lists terms and/or conditions of the draft ROP that the AQD and the applicant did not agree upon and outlines the applicant's objections pursuant to Rule 214(2). The terms and conditions that the AQD believes are necessary to comply with the requirements of Rule 213 shall be incorporated into the ROP.

Emission Unit/ Flexible Group ID	Permit Term(s) and/or Condition(s) in Dispute	Applicant's Objection
Sourcewide Conditions	III.A.1, III.A.3, III.B.1, III.C.2, III.D.2	Applicant would like to modify these conditions through the ROP renewal process or would like to wait until SIP Consent Order 18-1993 is modified to issue the ROP renewal.  AQD response: These conditions originated in a SIP consent order which contains specific provisions for modifying the language. The ROP renewal process is not the appropriate mechanism for making the changes. The ROP will be reopened and modified once the SIP changes are approved.

#### **Compliance Status**

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements as of the effective date of this ROP.

#### Action taken by the DEQ

The AQD proposes to approve this permit. A final decision on the ROP will not be made until the public and affected states have had an opportunity to comment on the AQD's proposed action and draft permit. In addition, the U.S. Environmental Protection Agency (USEPA) is allowed up to 45 days to review the draft permit and related material. The AQD is not required to accept recommendations that are not based on applicable requirements. The delegated decision maker for the AQD is Wilhemina McLemore, Detroit District Supervisor. The final determination for ROP approval/disapproval will be based on the contents of the permit application, a judgment that the stationary source will be able to comply with applicable emission limits and other terms and conditions, and resolution of any objections by the USEPA.

## Michigan Department of Environmental Quality Air Quality Division

**State Registration Number** 

#### RENEWABLE OPERATING PERMIT

**ROP Number** 

B4243

## NOVEMBER 30, 2015 STAFF REPORT ADDENDUM

MI-ROP-B4243-2016

#### <u>Purpose</u>

A Staff Report dated July 13, 2015, was developed in order to set forth the applicable requirements and factual basis for the draft Renewable Operating Permit (ROP) terms and conditions as required by R 336.1214(1). The purpose of this Staff Report Addendum is to summarize any significant comments received on the draft ROP during the 30-day public comment period as described in R 336.1214(3). In addition, this addendum describes any changes to the draft ROP resulting from these pertinent comments.

#### **General Information**

Responsible Official:	Tom Smith, General Operations Manager 313-439-2878
AQD Contact:	Katherine Koster, Senior Environmental Engineer 313-456-4678

#### **Summary of Pertinent Comments**

The Michigan Department of Environmental Quality (MDEQ), Air Quality Division (AQD), received the following comments from one commenter on August 11, 2015. Comments are summarized below:

Comment #1: The draft ROP only addresses some of Levy's operations. The remainder of the Levy operations are in the AK Steel ROP (formerly Severstal). DEQ does not have the authority to segment a single stationary source into separate ROP's.

AQD Response #1: As addressed in the staff report, the separation of Edw. C. Levy Company Plant 6 activities from AK Steel and from other Levy Company activities at the stationary source was the result of a court order due to a complaint Levy filed against the DEQ. No change will be made at this time.

Comment #2: A single Method 9D certified visible emissions (VE) observation conducted once every two weeks is insufficient monitoring for operations that generate fugitive emissions. Commenter refers to violation notices issued to Levy for fallout incidents in the "adjoining neighborhoods". In addition, comment states that Levy's slag operations at AK Steel have also been identified as the cause of fallout beyond the property line. The draft ROP should include daily certified visible emissions observations for all operations where fugitive dust emissions are likely. Additionally, the ROP should require that visible emissions observations are conducted during representative operations.

AQD Response #2: AQD agrees that visible emissions observations should be conducted during representative operations and will ensure this is a requirement for all certified readings in the ROP. Based on this comment, AQD has increased VE observations from every two weeks to every week at areas within Plant 6 operations that are the most likely sources of fallout, i.e. skull knocking and dumping and digging at the slag pits. AQD also increased water spray inspections from monthly to weekly as proper water spray operation will reduce fugitive emissions. Note, Plant 6 operations do not occur continuously and do not necessarily occur every day during daylight hours. The requirement to operate and maintain a partial enclosure with water sprays at the skull/pit knocking station and conduct

associated visible emission observations is a requirement that was added by AQD in the draft renewal to further reduce the potential for fallout.

Emissions from screening, crushing, conveying, and roadways have not historically resulted in fallout. These areas are already under a daily non certified visible emissions observation, and if <u>any</u> emissions are observed (as opposed to emissions exceeding an opacity limit), corrective action must be taken. Based on the comment, AQD has added the clarification that observations be made during representative operations.

Regarding the comment that Levy operations have caused fallout in adjoining neighborhoods, the most prevalent cause has been related to desulfurization slag handling which is not part of Plant 6 operations. For the commenter's general information, this slag material is now required to be quenched in a pot for 24 hours before dumping and has been permitted.

Comment #3: The provision related to tarping trucks is insufficient to contain fugitive emissions from trucks during transportation. The draft ROP should require all trucks on the property, including empty trucks that have not been cleaned of residue, to be tarped. South Dearborn residents frequently observe slag trucks traveling without tarps. The ROP should include monitoring and recordkeeping to ensure compliance with the tarping provision. Truck and wheel wash areas should be established on the property.

AQD Response #3: There are no slag trucks that enter or exit the facility related to Plant 6 operations. The commenter appears to be referring to blast furnace (BF) slag trucks that exit AK Steel Gate 1 onto Dix Road en route to Levy Plant 1. These trucks are not required to be tarped and are not part of Levy Plant 6 operations.

The only trucks involved in Plant 6 operations are empty trucks that enter the facility on Mellon Street and exit with water quenched non-metallic finished material. All of these trucks leaving the facility are required to be tarped. See B. Sourcewide Conditions, III.A.2.a and D.3 in the draft ROP. AQD will remove "with the potential to emit fugitive particulate" from III.A.2.a to conform with the Consent Order 18-1993, Revised 9/9/94, Exhibit A language. At this time, recordkeeping of tarping of every truck is overly burdensome. No complaints about the trucks have been received nor has AQD staff witnessed untarped trucks leaving the Mellon Street operations.

Commenter requested truck and wheel wash areas be installed on site. AQD does not have the authority to require installation of this type of equipment through the ROP process. Additionally, track out, if present, is already required to be cleaned daily, and has not historically been an issue. Please see Source Wide Condition III.C.1.b.

Comment #4: The ROP waives opacity limitations for fugitive dust when winds exceed 25 miles per hour. The ROP should instead prohibit fugitive dust generating operations when wind speeds exceed 25 m.p.h.

AQD Response #4: This language is directly from Act 451, Section 5524, Paragraph (2) and cannot be modified through the ROP process.

Comment #5: ROP should require periodic recording of precipitation, temperature, and wind direction, for all fugitive dust sources; especially when roads and piles are treated and visible emissions observations are made.

AQD Response #5: The facility does not have an onsite weather station; any recording of this information is either based on the observer's estimation of the weather conditions or from publicly available information on weather related websites (such as wunderground.com). This information is readily available to AQD and the public. Requiring Levy to record it is unnecessary and duplicative.

Please note that weather information is documented by the observer when visible emissions observations are conducted.

Comment #6: It is unclear what the Fugitive Dust Control Plan is and when it was last updated.

AQD Response #6: The fugitive dust control plan is memorialized in State Implementation Plan (SIP) Consent Order (CO) 18-1993 (Revised 9/9/94). The plan has been incorporated into the draft ROP and identified with the underlying applicable requirement (UAR) of SIP CO. 18-1993. Changes to the CO and associated fugitive dust plan cannot be made via the ROP process. The requirements for requesting a change are outlined in the order and duplicated in the ROP under B. Sourcewide Conditions, IX.1 for reference. Requested updates to the plan from Levy via the CO process are forthcoming.

#### Changes to the July 13, 2015 Draft ROP

Source Wide Conditions, III.A.2, deleted "with the potential to emit fugitive particulate."

Source Wide Conditions, VI.2, added "during representative operations."

EULEVYPLANY 6, VI.7, added "representative."

EUBOFSLAGPIT, VI.1 and VI.3, changed "once every two weeks" to "once every calendar week."