

Michigan Department of Environmental Quality Air Quality Division RENEWABLE OPERATING PERMIT STAFF REPORT

ROP Number MI-ROP-B4364-2015

# EDW C LEVY CO PLANT 3

SRN: B4364

Located at

100 Westfield, Ecorse, Michigan 48229

Permit Number: MI-ROP-B4364-2015

Staff Report Date: August 10, 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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#### Michigan Department of Environmental Quality Air Quality Division **RENEWABLE OPERATING PERMIT**

**ROP Number** 

B4364

AUGUST 10, 2015 STAFF REPORT

MI-ROP-B4364-2015

### <u>Purpose</u>

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.

Stationary Source Mailing Address:	EDW. C. LEVY CO., PLANT 3 100 Westfield
	Ecorse, Michigan 48229
Source Registration Number (SRN):	B4364
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:	201400052
Responsible Official:	Tom Smith, General Operations Manager 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:	March 25, 2014
Is Application Shield In Effect?	Yes
Date Public Comment Begins:	August 10, 2015
Deadline for Public Comment:	September 9, 2015

#### **General Information**

# Source Description

Edw. C. Levy Co. Plant 3 is located at 100 Westfield, Ecorse, Michigan. All of the plant's operations are entirely dependent on United States Steel Great Lakes Works (USSGLW) slag for their raw material. All of the extracted metals from the slag are returned to USSGLW for reuse. The nonmetallic portion of the slag is crushed and screened to produce different sizes of finished product.

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

A 350 ton per hour slag processing operation (EUSLAGPLANT) consisting of one grizzly feeder, four screens, two crushers and up to twenty conveyors and stackers. Equipped with water spray systems for air pollution control.

A 150 ton per hour scrap benefication operation (EUFEBENEFICATION) where metallics that are separated from the slag are screened into various sizes. Processing equipment includes one grizzly feeder, three screens, and up to eleven conveyors and stackers. Equipped with water spray systems for air pollution control.

A kish wetting station (EUKISHDUMP) which was issued a permit to install to USSGLW but is installed, operated, and maintained by Levy at Plant 3. USSGLW claims that compliance responsibility of this station with all the applicable air quality regulations lies with Levy Plant No. 3. Kish pots are transferred from USSGLW's No.2 BOP desulf slag 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.

The basic oxygen furnace slag pits (EUBOFSLAGPIT) which are equipped with water spray systems for air pollution control.

The following processes are sources of air emissions that meet the R336.1290 exemption criteria and are exempt from the permit to install requirements:

The drop ball crane (EUDROPBALLCRANE) process consists of dropping a large steel ball from a crane onto scrap steel to break it into smaller pieces to be reused at the USSGLW steel mill.

The debris plant (EUDEBRISPLANT) is made up of one 200 tons per hour hopper, one 200 tons per hour grizzly feeder, and one 200 tons 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.

The recycle material operation (EURECYCLEMATOPERATION) is made up of one 100 tons per hour hopper, and one 100 tons per hour conveyor with 2 transfer points.

The material transfer conveyor system (EUMATRANSFERCONVEYOR) is made up of one 200 tons per hour conveyor with 2 transfer points.

The portable process (EUPORTBIV) has a maximum daily throughput of 1500 tons and consists of one grizzly feeder, up to four conveyors, and one screen. This process produces agricultural products of varying particle diameter. It is equipped with water sprays to be used as needed.

A 44 hp diesel-fired generator (EUDEUTZGEN) that provides support power to portable process equipment. It is exempt per Rule 285 (g) but subject to the RICE MACT provisions for an existing unit at a major source.

A leased portable diesel-fired generator (EULIGHTGEN) up to 25 hp that provides power to a portable light tower. It is exempt per Rule 285 (g) but subject to the RICE MACT provisions for a new unit at major source.

A leased portable diesel-fired generator (EUPROCESSGEN) up to 300 hp that will provide support power to facility processes. It is exempt per Rule 285 (g) but subject to the RICE MACT provisions for a new unit at a major source.

There are also cold cleaners that are installed that meet the applicable requirements of R336.1281(h).

The following table lists Edw. C. Levy Plant 3 emission information as reported to the Michigan Air Emissions Reporting System in the **2015** submittal.

Pollutant	Tons per Year
Carbon Monoxide (CO)	0
Lead (Pb)	0
Nitrogen Oxides (NO <sub>x</sub> )	0
Particulate Matter (PM)	5
Sulfur Dioxide (SO <sub>2</sub> )	0
Volatile Organic Compounds (VOCs)	0
Individual Hazardous Air Pollutants (HAPs) **	0
Total Hazardous Air Pollutants (HAPs)	0

# TOTAL EMISSIONS (Edw. C. Levy Plant 3)

\*\*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 nonapplicability for this source are explained below in the Non-Applicable Requirements 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 3 (Plant 3) 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 United States Steel Great Lakes Works (USSGLW). Plant 3 is located on contiguous and adjacent properties of United States Steel Great Lakes Works (USSGLW). Plant 3 is wholly dependent upon USSGLW'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 Plant 3 is considered a support facility for USSGLW. 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." Plant 3 is the sole recipient of USSGLW's BOF steel slag. Since removal of slag is essential to USSGLW's lawful production process, Plant 3 assists in the production of steel at USSGLW. Therefore, Edw. C. Levy Co., Plant 3 is a support facility and together with USSGLW and supporting facilities 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 3 and the USSGLW separately. Edw. C, Levy Co., Plant 3 was originally intended to be aggregated in the USSGLW's Title V permit as a separate 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 Dearborn, LLC (now AK Steel, Dearborn Works), Edward C. Levy Company agreed to submit a separate ROP application for Plant 3 and was issued an ROP of its own.

There is an outstanding fugitive dust Consent Order entered into by Edw. C. Levy Plant 3 and the MDEQ which is SIP CO No. 17-1993 revised September 9, 1994.

The stationary source (USSGLW and Edw. C. Levy Plant 3) 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 emissions units at Edw. C. Levy Plant 3 are currently subject to the Prevention of Significant Deterioration (PSD) regulations of Part 18, Prevention of Significant Deterioration of Air Quality of Act 451.

EUDEUTZGEN, EULIGHTGEN, EUPROCESSGEN at Edw. C. Levy Plant 3 are subject to the National Emission Standard for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines promulgated in 40 CFR, Part 63, Subparts A and ZZZZ.

Edw. C. Levy Plant 3 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 nonmetallic mineral.

No emission units at Edw. C. Levy Plant 3 are subject to the federal Compliance Assurance Monitoring rule under 40 CFR, Part 64, because all emission units at Plant 3 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.

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. year.

### 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-B4364-20XX are identified in Appendix 6 of the ROP.

PTI Number				
100-03				

## 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
Source-wide Conditions	SC III.A.1, III.A.3, III.B.1, III.C.1&2	Applicant would like to modify these conditions through the ROP renewal process or would like to wait until SIP Consent Order 17-1993 (Revised 9/9/1994) 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** 

B4364

OCTOBER 8, 2015 STAFF REPORT ADDENDUM

ROP-MI-B4364-2015

#### Purpose

A Staff Report dated August 10, 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

No pertinent comments were received during the 30-day public comment period.

#### Changes to the August 10, 2015 Draft ROP

No changes were made to the draft ROP.