## MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

March 12, 2019

PERMIT TO INSTALL 5-19

> ISSUED TO Edw. C. Levy Co.

LOCATED AT 13800 Mellon Street Detroit, Michigan

IN THE COUNTY OF Wayne

# STATE REGISTRATION NUMBER B4243

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203:

# March 5, 2019

DATE PERMIT TO INSTALL APPROVED: March 12, 2019	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

# PERMIT TO INSTALL

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### **COMMON ACRONYMS**

AQD BACT CAA CAM CEMS CFR COMS Department/department EU FG GACS GC GHGS HVLP ID IRSL ITSL LAER MACT MAERS MAP MDEQ MSDS NA NAAQS NESHAP NSPS NSR PS PSD PTE PTI RACT ROP SC SCR SCR SCR SRN TBD TEQ USEPA/EPA VE	Air Quality Division Best Available Control Technology Clean Air Act Compliance Assurance Monitoring Continuous Emission Monitoring System Code of Federal Regulations Continuous Opacity Monitoring System Michigan Department of Environmental Quality Emission Unit Flexible Group Gallons of Applied Coating Solids General Condition Greenhouse Gases High Volume Low Pressure* Identification Initial Risk Screening Level Lowest Achievable Emission Rate Maximum Achievable Control Technology Michigan Air Emissions Reporting System Malfunction Abatement Plan Michigan Department of Environmental Quality Material Safety Data Sheet Not Applicable National Ambient Air Quality Standards National Ambient Air Quality Standards National Emission Standard for Hazardous Air Pollutants New Source Performance Standards New Source Review Performance Specification Prevention of Significant Deterioration Permanent Total Enclosure Permit to Install Reasonable Available Control Technology Renewable Operating Permit Special Condition Selective Catalytic Reduction State Registration Number To Be Determined Toxicity Equivalence Quotient United States Environmental Protection Agency Visible Emissions
VE	VISIBLE EMISSIONS

# POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm BTU °C CO CO₂e	Actual cubic feet per minute British Thermal Unit Degrees Celsius Carbon Monoxide Carbon Dioxide Equivalent
dscf dscm °F	Dry standard cubic foot Dry standard cubic meter Degrees Fahrenheit
gr	Grains
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H <sub>2</sub> S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NOx	Oxides of Nitrogen
ng PM	Nanogram Particulate Matter
PM10	Particulate Matter equal to or less than 10 microns in diameter
PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
pph	Pounds per hour
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
psia	Pounds per square inch absolute
psig	Pounds per square inch gauge
scf	Standard cubic feet
sec	Seconds
SO <sub>2</sub>	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
μg	Microgram
μm	Micrometer or Micron
VOC	Volatile Organic Compounds
yr	Year

### **GENERAL CONDITIONS**

- 1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. (R 336.1201(1))
- 2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. (R 336.1201(4))
- 3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. (R 336.1201(6)(b))
- 4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. (R 336.1201(8), Section 5510 of Act 451, PA 1994)
- 5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. (R 336.1219)
- 6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901)
- 7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). (R 336.1912)
- 8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
- 9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
- 10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

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- 11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). (R 336.1301)
  - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
  - b) A visible emission limit specified by an applicable federal new source performance standard.
  - c) A visible emission limit specified as a condition of this Permit to Install.
- 12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). (**R 336.1370**)
- The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. (R 336.2001)

#### **EMISSION UNIT SPECIAL CONDITIONS**

### EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EULEVYPLANT6	Processing equipment associated with Levy Plant 6, including a plant feeder/magnetic separator, twelve conveyors including the bridge conveyor, a screen, and a crusher. Equipped with water spray system for air pollution control. It does not include equipment associated with EUCONVEYORSYSTEM and EUDEISTERSCREEN.	01/01/1971 9/19/2006 TBD	

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1291.

# EULEVYPLANT6 EMISSION UNIT CONDITIONS

#### DESCRIPTION

Processing equipment associated with Levy Plant 6, including a plant feeder/magnetic separator, twelve conveyors including the bridge conveyor, a screen and a crusher. It does not include equipment associated with EUCONVEYORSYSTEM and EUDEISTERSCREEN.

#### Flexible Group ID: NA

#### POLLUTION CONTROL EQUIPMENT

Water spray system

#### I. EMISSION LIMIT(S)

Dellatert		Time Period /	<b>F</b> '	Monitoring /	Underlying Applicable
Pollutant	Limit	Operating Scenario		Testing Method	Requirements
1. PM10	0.73 pounds	Calendar day	EULEVYPLANT6	SC VI.1,2&4	40 CFR
	per hour	average			52.21(c)&(d)
2. PM10	0.64 tons per	Based on a 12	EULEVYPLANT6	SC VI.3&5	40 CFR
	year	month rolling time			52.21(c)&(d)
		period as determined			
		at the end of each			
		calendar month			
3. Particulate	2.03 pounds	Calendar day	EULEVYPLANT6	SC VI.1,2&4	40 CFR
Matter	per hour	average			52.21(c)&(d)
4. Particulate	1.79 tons per	Based on a 12	EULEVYPLANT6	SC VI.3&5	40 CFR
Matter	year	month rolling time			52.21(c)&(d)
	-	period as determined			
		at the end of each			
		calendar month			
5. Visible	10% opacity	6-Minute Average	Slag screening	SC VI.7,9&10	R 336.1301(1)(c)
Emissions			operations, conveyors		
			or transfer points on		
			conveyors		
6. Fugitive dust	5% opacity	3-Minute Average	Roadways, parking lots,	SC VI.8,9&10	Act 451, Section
Ŭ	. ,	J J	or storage piles,		5524, Paragraph (2)
			including any material		and Section 5525,
			handling activity at a		Paragraph (j)
			storage pile		0 1 0/

#### II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
	400 tons per		EULEVYPLANT6	SC VI.1&2	40 CFR 52.21(c)&(d)
throughput	nour				52.21(C)&(C)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
2. Slag processing plant raw material	704,000 tons	• •	EULEVYPLANT6	SC VI.3	40 CFR 52.21(c)&(d)
throughput		determined at the end of each calendar month			
<ol> <li>Hexavalent chromium content of raw materials (slag) processed</li> </ol>	Not more than 11 ppmw	Average of all samples taken, not to exceed three samples per month <sup>a</sup>	EULEVYPLANT6	SC V.1	R 336.1225
a. The permittee is not required to sample more than one time, as required by SC V.1. However, in the event the					

permittee takes more than one sample, only three samples may be taken in any month.

### III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall maintain a minimum moisture content of 1.5 percent by weight in the raw materials less than three quarters of an inch in diameter and finished product less than three quarters of an inch in diameter. (40 CFR 52.21(c)&(d))
- 2. The permittee shall not operate the slag processing plant unless the adjustable stacker height mechanisms and water spray systems are installed, operated, and maintained to minimize fugitive dust emissions on crushers, screen, conveyors, and at all exit points in order to meet the visible emission and fugitive dust limits in SC.1. (40 CFR 52.21(c)&(d))
- 3. The permittee shall not crush and screen asbestos tailings or asbestos containing materials, as defined by the National Emission Standards for Hazardous Air Pollutants (40 CFR, 61.143) regulations, in the crushing plant. (40 CFR 52.21(c)&(d))
- The permittee shall not operate the slag processing plant unless the program for continuous fugitive dust emissions control for the plant has been implemented and maintained. (40 CFR 52.21(c)&(d), R 336.1372, R 336.1901, Consent Order SIP 18-1993 (Revised 9/9/94))

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. Within 60 days after permit issuance, the permittee shall verify the hexavalent chromium content of the raw materials (slag) used in EULEVYPLANT6 using method SW-846 7199 or another method acceptable to the AQD District Supervisor that is capable of accurately determining the hexavalent chromium content of the material being tested. The permittee must submit the test results to the AQD District Supervisor within 45 days of sample collection. (R 336.1225)

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall monitor and record the daily tonnage of material throughput. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (40 CFR 52.21(c)&((d))
- The permittee shall monitor and record the daily hours of operation of the slag processing plant. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (40 CFR 52.21(c)&(d), R 336.1901)

- 3. The permittee shall monitor and record the total material throughput of the slag processing plant on a monthly and 12-month rolling time period, as determined at the end of each calendar month. (40 CFR 52.21(c)&(d))
- 4. The permittee shall calculate and maintain records of the PM and PM10 hourly emissions based on the daily operating hours and daily throughput and appropriate AP-42 emission factors or other factors agreed upon by the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (40 CFR 52.21(c)&(d))
- 5. The permittee shall keep, in a satisfactory manner, calculations determining the monthly and 12-month rolling time period mass emissions of PM and PM<sub>10</sub> as determined at the end of each calendar month. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(40 CFR 52.21(c)&(d))**
- The permittee shall keep records as specified in the fugitive dust control program and as required under Consent Order SIP 18-1993, (Revised 9/9/94), Exhibit A, Addendum and Appendix A of this permit. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (40 CFR 52.21(c)&(d))
- 7. The permittee shall perform a Method 9 certified visible emission observation of the plant feeder/magnetic separator, screen, crusher, or of the conveyor system at least once every two calendar weeks for a minimum of 15 minutes during representative operations. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written or electronic record of each required observation and corrective action taken. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (40 CFR 52.21(c)&(d))
- 8. The permittee shall perform a Method 9D certified visible emission observation of loading activities from a finished product storage pile into a truck at least once every two calendar weeks for a minimum of 15 minutes when the loading process is operating. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable fugitive dust emission limitation and shall keep a written or electronic record of each required observation and corrective action taken. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (40 CFR 52.21(c)&(d))
- 9. The permittee shall conduct periodic inspections for the purpose of determining the operational condition of the adjustable stacker height mechanisms, water spray systems, crushers, screen, conveyors and the bridge conveyor side shields (from both sides of the river), and if necessary, identify the reasons for malfunction or failure. These inspections shall be conducted immediately after observing visible emissions in excess of the visible emission limit, but not less frequently than at least once a month and the permittee shall keep a written or electronic record of each inspection and corrective action taken if any. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (40 CFR 52.21(c)&(d))
- 10. Permittee shall sample each finished product storage pile to determine the minimum moisture content by weight on a weekly basis. The sampling procedure, averaging period for determining the moisture content of each finished product, and corrective actions that will be taken if the moisture content is below the required minimum, shall be submitted to the AQD District Supervisor for review and approval. Records of minimum moisture content sampling and corrective actions taken, if applicable, shall be maintained. After six weekly samples, the permittee may petition to the Department to reduce the sampling frequency to monthly. This petition must be submitted in writing and approved by the AQD District Supervisor. (40 CFR 52.21(c)&(d))
- 11. The permittee shall keep, in a satisfactory manner, records of the hexavalent chromium content of each raw material sample used in EULEVYPLANT6. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (**R 336.1225**)

### VII. <u>REPORTING</u>

 Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of the crusher. (R 336.1201(7)(a))

### VIII. STACK/VENT RESTRICTION(S)

NA

### IX. OTHER REQUIREMENT(S)

- Within 30 days of issuance of this permit, the permittee shall label the EULEVYPLANT6 equipment according to a method acceptable to the AQD District Supervisor. Within seven days of completing the labeling, the permittee shall notify the AQD District Supervisor, in writing, as to the date the labeling was completed. (R 336.1201)
- 2. This permit shall be terminated on and after March 12, 2021. (R 336.1201(3))

#### Footnotes:

<sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

### **APPENDIX A**

The permittee shall use the following approved formats and procedures for the recordkeeping requirements referenced in Special Condition VI.6. Alternative formats must be approved by the AQD District Supervisor.

#### 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
  - 7. Equipment Used

#### D. Optional Records

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