STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
OFFICE OF THE DIRECTOR

In the matter of administrative proceedings against **EDW. C. LEVY COMPANY**, a corporation organized under the laws of the State of Michigan and doing business at 8800 Dix Avenue, in the City of Detroit, County of Wayne, State of Michigan

AQD No. 2024-13

SRNs: A8640, B4243

_____/

STIPULATION FOR ENTRY OF FINAL ORDER
BY CONSENT

This proceeding resulted from allegations by the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD) against Edw. C. Levy Company (Company), a corporation organized under the laws of the State of Michigan with its principal office located at 8800 Dix Avenue, City of Detroit, County of Wayne, State of Michigan, and cited facilities at the following locations: 4001 Miller Road, City of Dearborn, County of Wayne, with State Registration Number (SRN) A8640 (Section 2 Facility), and 13800 Mellon Street, City of Detroit, County of Wayne, with SRN B4243 (Plant 6 Facility). EGLE alleges that the Company is in violation of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), MCL 324.5501 *et seq*.; Rule 901 of the Michigan Air Pollution Control Rules, Mich Admin Code, R 336.1901 (Rule 901); Section 2 of the Company's Renewable Operating Permit (ROP) No. MI-ROP-A8640-2016a, General Condition 12(b), and ROP No. MI-ROP-B4243-2016, General Condition 12(b). Specifically, EGLE alleges that the Company emitted air contaminants from each of these facilities that caused unreasonable interference with the comfortable enjoyment of life and property as follows:

Section 2 Facility

EGLE alleges that the Company emitted blast furnace slag pit and sulfur odors in violation of Rule 901 and ROP No. MI-ROP-A8640-2016a, General Condition 12(b) on November 25, 2019; February 21, 2020; February 22, 2020, February 23, 2020; March 26, 2021; May 1, 2021; and September 17, 2021, as cited herein and in the Violation Notices dated December 26, 2019; January 28, 2020; March 4, 2020; April 2, 2021; May 10, 2021; and September 22, 2021.

Plant 6 Facility

EGLE alleges that the Company emitted air contaminants that caused fallout beyond the facility's property line in violation of Rule 901 and ROP No. MI-ROP-B4243-2016, General Condition 12(b) on September 23, 2018; June 7, 2019; August 15, 2019; July 30, 2020; July 31, 2020; August 6, 2020; August 14, 2020; September 14, 2020; August 2, 2021; September 29, 2021; June 28, 2022; July 9, 2022; July 10, 2022; August 27, 2022; September 6, 2022; June 7, 2023; July 5, 2023; August 31, 2023; February 4, 2024; February 5, 2024; and May 2, 2024 as cited herein and in the Violation Notices dated November 21, 2018; July 16, 2019; September 12, 2019; December 21, 2020; November 18, 2021; August 12, 2022; October 13, 2022; July 28, 2023; July 31, 2023; October 6, 2023; April 2, 2024; and June 21, 2024.

The Company and EGLE stipulate to the termination of this proceeding by entry of a Stipulation for Entry of a Final Order by Consent (Consent Order).

The Company and EGLE stipulate as follows:

1. The Natural Resources and Environmental Protection Act (NREPA) MCL 324.101 *et seq.,* is an act that controls pollution to protect the environment and natural resources in this State.

2. Article II, Pollution Control, Part 55 of the NREPA (Part 55), MCL 324.5501 *et seq.,* provides for air pollution control regulations in this State.

3. Executive Order 2019-06 renamed the Michigan Department of Environmental Quality as EGLE, and EGLE has all statutory authority, powers, duties, functions, and responsibilities to administer and enforce all provisions of Part 55.

4. The EGLE Director has delegated authority to the Director of the AQD (AQD Director) to enter into this Consent Order.

5. The termination of this matter by a Consent Order pursuant to Section 5528 of Part 55, MCL 324.5528, is proper and acceptable.

6. The Company and EGLE agree that the signing of this Consent Order is for settlement purposes only and does not constitute an admission by the Company that the law has been violated.

7. This Consent Order becomes effective on the date of execution (Effective Date of this Consent Order) by the AQD Director.

8. The Company shall achieve compliance with the aforementioned regulations in accordance with the requirements contained in this Consent Order.

COMPLIANCE PROGRAM AND IMPLEMENTATION SCHEDULE

9. On and after the Effective Date of this Consent Order, the Company shall comply with Rule 901.

10. Plans

A. On and after the Effective Date of this Consent Order, the Company shall implement the approved Nuisance Minimization Plan for Odors (NMPO) attached as Exhibit A. The NMPO is incorporated by reference into and enforceable under this Consent Order. The Company shall maintain the records and procedures demonstrating that the NMPO is being implemented according to its terms and conditions.

B. On and after the Effective Date of this Consent Order, the Company shall implement the approved Fugitive Dust Control Plan (FDCP) attached as Exhibit B. The FDCP is incorporated by reference into and enforceable under this Consent Order. The Company shall maintain the records and procedures demonstrating that the FDCP is being implemented according to its terms and conditions.

C. Upon written request from the AQD Detroit District Supervisor to revise any plan described in paragraphs 10.A or 10.B, the Company shall submit a revised plan to the AQD Detroit District Supervisor within thirty (30) days of receipt of the request. In addition, the Company may submit a written notice of proposed changes to a plan to the AQD Detroit District Supervisor. Within thirty (30) days of receiving a revised plan from the Company, the AQD will in writing: (1) approve, in whole or in part, the submission; (2) approve, in whole or in part, the submission upon specified conditions; (3) disapprove, in whole or in part, the submission, requiring the Company to correct the deficiencies. The Company shall, within thirty (30) days or such longer time as specified by the AQD in such notice, address any requested changes or deficiencies and resubmit the plan for approval. Upon approval, the revised plan shall be incorporated into and enforceable under this Consent Order.

11. On and after the Effective Date of this Consent Order, the Company shall submit quarterly reports identifying each day in which a requirement of the NMPO and the FDCP was not met. This report shall, for each instance, explain the reason the requirement was not met, the duration of the event, the remedial action taken, and a description of the steps taken to prevent a recurrence. Each report shall be submitted within thirty (30) days following the end of the calendar quarter.

SUPPLEMENTAL ENVIRONMENTAL PROJECT

12. The agreed penalty to resolve the violations alleged in the Violation Notice(s) is $135,000.00. The Company agrees to undertake the Supplemental Environmental Project (SEP) described in Exhibit C and pay the settlement amount pursuant to paragraph 15. The SEP is incorporated by reference into, and enforceable under, this Consent Order. Performance of the SEP will benefit the environment or public health and the Company agrees to implement the SEP in accordance with the details specified in Exhibit C and in accordance with this Consent Order.

A. The total expenditure for the SEP shall not be less than $354,953.00. All costs of the SEP shall be the responsibility of the Company. The Company certifies that any economic benefit, including tax abatement(s), tax credit(s), or similar tax relief, that the Company will realize as a result of the SEP is detailed in Exhibit C. If the SEP is fully and completely implemented and the actual expenditures total less than $135,000.00, the Company shall pay to EGLE, within thirty (30) days after submission of the SEP certificate of completion required in subparagraph 12.F below, the difference between the actual expenditures and the agreed penalty of $135,000.00.

B. The SEP described in Exhibit C contains schedules, including specific dates for the implementation of the SEP. The Company shall fully implement all aspects of the SEP within the specified schedules.

C. The Company further certifies that the Company has not received and is not presently negotiating to receive a credit for the SEP as part of any other enforcement action or any grant from the state, United States Environmental Protection Agency, or any other entity. The Company also certifies that the Company will not seek tax benefits following completion of the SEP.

D. In the event the Company fails to fully and completely implement the SEP as provided herein to the reasonable satisfaction of EGLE, EGLE will provide written notice to the Company describing the nature of the deficiency. The Company shall have thirty (30) days from receipt of the

notice to submit documentation to EGLE demonstrating that the deficiency has been corrected. In the event the deficiency is not corrected to the satisfaction of EGLE, the Company will be notified, and the Company shall be in violation of this Consent Order and required to pay a stipulated penalty of up to $101,250.00 to EGLE within thirty (30) days after notification from EGLE. The amount of the stipulated penalty may be reduced or waived by EGLE if the Company made good faith and timely efforts to complete the project. Payment of stipulated penalties under the terms of this paragraph 12.D shall satisfy the Company's obligation to complete the SEP under this Consent Order.

E. The Company agrees that any public statement, oral or written, making reference to the SEP shall include the following language: "This project was undertaken in connection with the settlement of an enforcement action taken by EGLE for alleged violations of air quality law."

F. No later than thirty (30) days after the completion of the SEP, the Company shall submit written certification of completion of the SEP to the AQD District Office demonstrating that all SEP activities specified in Exhibit C have been completed in accordance with the terms and conditions of this Consent Order. The certification shall be accompanied by appropriate documentation (such as invoices, receipts, or tax statement) to verify the total expenditures made by the Company as a result of implementing the SEP, and to the extent possible, documentation supporting the quantification of benefits associated with the SEP and an explanation of how such benefits were measured or estimated. It shall be the sole determination of EGLE whether the Company has completely implemented the SEP in accordance with the terms and conditions of this Consent Order.

GENERAL PROVISIONS

13. This Consent Order in no way affects the Company's responsibility to comply with any other applicable state, federal, or local laws or regulations, including without limitation, any amendments to the federal Clean Air Act, 42 USC 7401 *et seq.*, Part 55, or their rules and regulations, or the State Implementation Plan.

14. This Consent Order constitutes a civil settlement and satisfaction as to the resolution of the alleged violations specifically addressed herein; however, it does not resolve any criminal action that may result from these same alleged violations.

15. Within thirty (30) days after the Effective Date of this Consent Order, the Company shall pay to the General Fund of the State of Michigan, in the form of a check made payable to the "State of Michigan" and mailed to the Michigan Department of Environment, Great Lakes, and Energy,

Accounting Services Division, Cashier's Office, P.O. Box 30657, Lansing, Michigan 48909-8157, a settlement amount of $33,750.00. This total settlement amount shall be paid within thirty (30) days after the Effective Date. To ensure proper credit, all payments made pursuant to this Consent Order shall include the "Payment Identification Number AQD40342" on the front of the check and/or in the cover letter with the payment. This settlement amount is in addition to any fees, taxes, or other fines that may be imposed on the Company by law.

16. On and after the Effective Date of this Consent Order, if the Company fails to comply with paragraph 9 of this Consent Order, the Company is subject to a stipulated fine of up to $5,000.00 per violation per day. On and after the Effective Date of this Consent Order, if the Company fails to comply with paragraph 10.A of this Consent Order, the Company is subject to a stipulated fine of up to $2,500.00 per violation per day. On and after the Effective Date of this Consent Order, if the Company fails to comply with paragraph 10.B of this Consent Order, the Company is subject to a stipulated fine of up to $3,500.00 per violation per day. On and after the Effective Date of this Consent Order, if the Company fails to comply with paragraph 10.C or 11 of this Consent Order, the Company is subject to a stipulated fine of up to $1,000.00 per violation per day. The amount of the stipulated fines imposed pursuant to this paragraph shall be within the discretion of EGLE. Stipulated fines submitted under this Consent Order shall be by check, payable to the State of Michigan within thirty (30) days after written demand and shall be mailed to the Michigan Department of Environment, Great Lakes, and Energy, Accounting Services Division, Cashier's Office, P.O. Box 30657, Lansing, Michigan 48909-8157. To ensure proper credit, all payments shall include the "Payment Identification Number AQD40342-S" on the front of the check and/or in the cover letter with the payment. Payment of stipulated fines shall not alter or modify in any way the Company's obligation to comply with the terms and conditions of this Consent Order.

17. The AQD, at its discretion, may seek stipulated fines or statutory fines for any violation of this Consent Order which is also a violation of any provision of applicable federal and state law, rule, regulation, permit, or EGLE administrative order. However, the AQD is precluded from seeking both a stipulated fine under this Consent Order and a statutory fine for the same violation.

18. To ensure timely payment of the settlement amount assessed in paragraph 15 and any stipulated fines assessed pursuant to paragraph 16 of this Consent Order, the Company shall pay an interest penalty to the State of Michigan each time it fails to make a complete or timely payment under this Consent Order. The interest payment shall be determined at a rate of interest that is equal to one percent (1%) plus the average interest rate paid at auctions of 5-year United States treasury

notes during the six (6) months immediately preceding July 1 and January 1, as certified by the state treasurer, compounded annually, and using the full increment of amount due as principal, calculated from the due date specified in this Consent Order until the date that delinquent payment is finally paid in full. Payment of an interest penalty by the Company shall be made to the State of Michigan in accordance with paragraph 15 of this Consent Order. Interest payments shall be applied first towards the most overdue amount or outstanding interest penalty owed by the Company before any remaining balance is applied to subsequent payment amount or interest penalty.

19. The Company agrees not to contest the legal basis for the settlement amount assessed pursuant to paragraph 15. The Company also agrees not to contest the legal basis for any stipulated fines assessed pursuant to paragraph 16 of this Consent Order but reserves the right to dispute in a court of competent jurisdiction the factual basis upon which a demand by EGLE of stipulated fines is made. In addition, the Company agrees that said fines have not been assessed by EGLE pursuant to Section 5529 of Part 55, MCL 324.5529, and therefore are not reviewable under Section 5529 of Part 55.

20. This compliance program is not a variance subject to the 12-month limitation specified in Section 5538 of Part 55, MCL 324.5538.

21. This Consent Order shall remain in full force and effect for a period of at least three (3) years. Thereafter, this Consent Order shall terminate only upon written notice of termination issued by the AQD Director. Prior to issuance of a written notice of termination, the Company shall submit a request to the AQD Director at the Michigan Department of Environment, Great Lakes, and Energy, Air Quality Division, P.O. Box 30260, Lansing, Michigan 48909-7760, consisting of a written certification that the Company has fully complied with all the requirements of this Consent Order and has made all payments including all stipulated fines required by this Consent Order. Specifically, this certification shall include: (i) the date of compliance with each provision of the compliance program and the date any payments or stipulated fines were paid; (ii) a statement that all required information has been reported to the AQD Detroit District Supervisor; (iii) confirmation that all records required to be maintained pursuant to this Consent Order are being maintained at the facility; and, (iv) such information as may be requested by the AQD Director. The AQD Director reserves the right to terminate this Consent Order in lieu of receiving a written request for termination from the Company and may independently determine that the terms and conditions of this Consent Order have been met.

22. In the event the Company sells or transfers the facility, with SRN A8640 or SRN B4243, it shall give notice to any purchaser or transferee of the existence of this Consent Order in connection with such sale or transfer. Within thirty (30) calendar days, the Company shall also notify the AQD Detroit District Supervisor, in writing, of such sale or transfer, the identity and address of any purchaser or transferee, confirm the fact that notice of this Consent Order has been given to the purchaser or transferee, and certify that the purchaser or transferee is contractually bound to assume any pending and continuing obligations of the Consent Order.

23. Prior to the Effective Date of this Consent Order and pursuant to the requirements of Sections 5511 and 5528(3) of Part 55, MCL 324.5511 and MCL 324.5528(3), the public was notified of a 30-day public comment period and was provided the opportunity for a public hearing.

24. Section 5530 of Part 55, MCL 324.5530, may serve as a source of authority but not a limitation under which this Consent Order may be enforced. Further, Part 17 of the NREPA, MCL 324.1701 *et seq.*, and all other applicable laws and any other legal basis or applicable statute may be used to enforce this Consent Order.

25. The Company hereby stipulates that entry of this Consent Order is a result of an action by EGLE to resolve alleged violations of its facility located 4001 Miller Road, City of Dearborn, County of Wayne, State of Michigan, and its facility located at 13800 Mellon Street, City of Detroit, County of Wayne, State of Michigan. No other locations, if any, are included in this Consent Order. The Company further stipulates that it will take all lawful actions necessary to fully comply with this Consent Order, even if the Company files for bankruptcy in the future and shall not discharge its compliance obligations under bankruptcy law.

The undersigned certifies that he/she is fully authorized by the Company to enter into this Consent Order and to execute and legally bind the Company to it.

EDW. C. LEVY COMPANY

Russell Burke

Print Name and Title

E-SIGNED by Russell Burke
on 2024-11-14 14:07:09 EST

Signature

2024-11-14 14:07:09 UTC

Date

Approved as to Content:

E-SIGNED by Annette Switzer
on 2024-11-14 15:00:37 EST

Annette Switzer, Director
AIR QUALITY DIVISION
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES,
AND ENERGY

Dated: 2024-11-14 15:00:37 UTC

Approved as to Form:

E-SIGNED by Margaret Bettenhausen
on 2024-11-14 14:16:37 EST

Margaret Bettenhausen, First Assistant
AIR AND WATER SECTION
ENVIRONMENT, NATURAL RESOURCES,
AND AGRICULTURE DIVISION
DEPARTMENT OF ATTORNEY GENERAL

Dated: 2024-11-14 14:16:37 UTC

FINAL ORDER

The Director of the Air Quality Division having had opportunity to review this Consent Order and having been delegated authority to enter into Consent Orders by the Director of the Michigan Department of Environment, Great Lakes, and Energy pursuant to the provisions of Part 55 of the NREPA and otherwise being fully advised on the premises,

HAS HEREBY ORDERED that this Consent Order is approved and shall be entered in the record of EGLE as a Final Order.

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

E-SIGNED by Annette Switzer
on 2024-11-14 15:00:40 EST

_____

Annette Switzer, Director
Air Quality Division

2024-11-14 15:00:40 UTC

Effective Date: _____

EXHIBIT A

NMPO
Attachments A-F

EXHIBIT B

FDCP
Attachments A-H

EXHIBIT C

SEP

NUISANCE MINIMIZATON PLAN - ODOR

Edw. C. Levy Company, Cleveland Cliffs Dearborn Works

Blast Furnace Slag & Kish Processing

May 30, 2024

INTRODUCTION

This Nuisance Minimization Plan - Odor (NMPO) presents procedures and protocols for preventing, detecting, and correcting odor events that may create a nuisance condition from the processing of blast furnace (BF) slag and desulfurization slag (kish) at 4001 Miller Road, Dearborn MI. BF slag is primarily processed at or near the BF slag pits, located south of Cleveland Cliffs' blast furnace. Kish is processed at or near the kish pot watering station, located south of Cleveland Cliffs' basic oxygen furnace (BOF).

The operation of the BF slag pits and kish pot watering station are regulated under Section 2 of the Cleveland Cliffs Dearborn Works Renewable Operation Permit (ROP) No. MI-ROP-A8640-2016a and subsequent revisions.

Blast Furnace Slag Pits

Process Description

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

Cleveland Cliffs Dearborn Works skims BF slag from the blast furnace and discharges it into slag pots. The Edw. C. Levy Company (Levy) transports the BF slag to the BF slag pits utilizing pot carriers, dumps the slag into the BF slag pits, quenches the BF slag with water, removes the BF slag from the pits with a wheel loader, loads outbound trucks with BF slag, and transports the BF slag offsite.

The chemistry of the BF slag is controlled by the raw materials used by Cleveland Cliffs Dearborn Works to make iron. These raw materials may include metallurgical coke and pulverized coal. Coke and coal contain sulfur compounds that are distributed between the iron, BF slag, and air emissions. Sulfur compounds present in the BF slag have the potential to react with quench water used at the BF slag pits to create odors.

The slag quenching process is automated to maximize slag quenching while minimizing the potential for odor generation. Slag pits receive slag for 24 hours, prior to being closed for quenching, digging, and rebuilding. Upon pit closure, the BF slag pit loader operator activates the water quenching program, which quenches the slag for 10 hours. The water quenching process is automated, including the addition of the odor control chemical, which is discussed in the later sections. After quenching, BF slag is removed from the slag pit via a wheel loader. If hot spots within the slag pit are discovered, an additional automated quenching cycle of 20 minutes to 2 hours is initiated.

Odor Controls – Blast Furnace Slag Pit

1. Levy shall quench the dumped slag by water sprays before digging. (Section 2, of ROP No. MI-ROP-A8640-2016a and subsequent revisions)

2. Levy shall reduce hydrogen sulfide emissions generated at the BF slag pits by installing and properly maintaining the potassium permanganate or equivalent agent quenching system. (Section 2, of ROP No. MI-ROP-A8640-2016a and subsequent revisions)

INSPECTIONS – Blast Furnace Slag Pit and Stockpile

Daily inspections of BF slag pit odor controls are performed by a Levy supervisor or a designee knowledgeable about BF Slag Pit operations.

The daily inspection includes the following:

1. Observe the BF slag pits and surrounding area for abnormal odors during slag quenching and non-quenching times.
2. Observe the BF slag pit water sprays, evaluate discharge volume, color, and distribution.
3. Observe the BF stockpile water sprays, evaluate discharge volume and distribution.
4. Inspect the odor control chemical injection system:
    a. Inspect the injector pump, observe pump sound and general operation. In addition, observe the color of ACBF slag pit water sprays.
    (The odor control chemical, potassium permanganate, creates a purple tint to the ACBF slag water sprays. Issues with poor pump performance, plugged lines and other upset conditions are identified by observing the color of the water sprays. A purple tint to the water indicates that the odor control system is operating properly. A light lavender tint to the water is an early sign of reduced performance of the odor control system. Clear water or water with a brown tint signals that the odor control system is operating poorly, and corrective actions are required.)
    b. Inspect the agitator in the chemical concentrate tank, observe general operation.
    (The odor control chemical, potassium permanganate, is added to the concentrate tank as a solid product that is mixed with water in the odor control chemical concentrate tank to create a saturated solution. The agitator facilitates the dissolving of the odor control chemical.)
    c. Inspect the odor control chemical concentrate tank for evidence of leaks or other failures.
    d. Inspect the potassium permanganate stock. A minimum of one week's supply shall be maintained.
    (At current production rates, one week's supply is 100 kg. Levy maintains four 25-kg full containers at the facility.)
5. Document the amount of potassium permanganate that was added to the odor control chemical concentrate tank.
    (When the mill is running, 220 pounds of potassium permanganate is added to the concentrate tank per week, or approximately 31 pounds per day).
6. Identify whether any corrective actions are required. Document the date and time that equipment failure was first observed.
7. Provide a description of equipment failure(s), cause of failure(s) and corrective actions required.
8. Provide a description of any corrective or preventative action(s) taken, include the date and time the corrective actions began and were completed.

The daily inspections are recorded on the *Daily Equipment Inspection Log – ACBF Slat Pit* (Attachment A, Form ENV-005-F003). Records are maintained for five years and are available for EGLE review upon request.

Kish (Desulfurization Slag) Pot Watering and Dumping

Process Description

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

Cleveland Cliffs Dearborn Works generates kish (desulfurization slag) during the steel making process and discharges it into slag pots. Levy transports the kish to the kish pot water station utilizing pot carriers, quenches the kish pots under water sprays for at least 24 hours, and dumps the kish pots into the kish knock station. Kish is removed from the kish knock station and loaded into trucks for off-site processing and recycling. Large pieces of kish may be reduced in size at the drop ball crane pit prior to loading into a truck.

The chemistry of the kish is controlled by the raw materials used by the Cleveland Cliffs Dearborn Works to make iron. Kish is generated at the basic oxygen furnace (BOF) during the process of desulfurization of iron. The desulfurization process reduces the concentration of sulfur in the iron prior to further processing to produce steel. During the desulfurization process, kish is generated and then skimmed off the top of the furnace into a slag pots. Sulfur compounds present in the kish have the potential to react with quench water to generate an odor at the kish pot watering station.

The kish pot watering station is used to quench kish prior to processing and recycling. It was designed and constructed to reduce potential nuisance issues associated with both odor and fugitive dust.

Kish pots are watered for a minimum of 24 hours prior to dumping. Kish pot watering times are recorded on the "Desulf Slag Pot Movement Form" in Attachment B (Form ENV-005-F005). Records are maintained for five years and available for EGLE review.

Odor Controls – Kish Pot Watering

1. Levy shall reduce hydrogen sulfide emissions generated at the kish pot watering station by installing and properly maintaining the potassium permanganate or equivalent agent quenching system. (Section 2, of ROP No. MI-ROP-A8640-2016a and subsequent revisions)
2. Levy shall not use untreated wastewater or process water in the kish watering station without prior written approval from the Air Quality Division of EGLE.
3. Levy shall not operate the Kish pot watering station unless the malfunction abatement plan described in Section 2 of MI-ROP-A8640-2016a, as amended, is properly implemented and maintained.
4. Kish pots shall be watered for a minimum of 24 hours prior to dumping.
5. A Malfunction Abatement Plan shall be developed, maintained, and implemented for the kish pot watering station.

INSPECTIONS – Kish Pot Watering

Daily inspections of the kish pot watering system are performed by a Levy supervisor or a designee knowledgeable in kish pot watering operations.

The daily inspection includes the following:

1. Observe the kish pot watering station and surrounding area for abnormal odors.
2. Observe the kish pot water sprays, evaluating discharge volume and distribution.
3. Inspect the odor control chemical injection system, including:
    a. Inspect the injector pump, observe pump sound and general operation.
    b. Inspect the agitator for the odor control chemical concentrate tank, observe general operation.
    c. Inspect the odor control chemical concentrate tank for evidence of leaks or other failures.
    d. Inspect the potassium permanganate stock. A minimum of one week's supply shall be maintained. (At current production rates, one week's supply is roughly 100 kg.)
4. Document the amount of potassium permanganate that was added to the odor control chemical concentrate tank.
5. Identify whether any corrective actions are required. Document the date and time that equipment failure was first observed.
6. Provide a description of equipment failure(s), excessive sulfur odor, cause of failure(s) and corrective action(s) required.
7. Provide a description of any corrective or preventative actions taken.

The daily inspections are recorded on the Daily Equipment Inspection Log – Kish Watering Station, in Attachment C (Form ENV-005-F004).

MAINTENANCE – Odor Control Systems

Preventive Maintenance

Levy shall clean the piping at the Kish Watering Station when water flow is obstructed, or at least annually, to remove any scale build-up that may restrict flow. Documentation of pipe cleaning and other emission control system maintenance shall be maintained.

Spare Parts

An inventory of critical spare parts for all emission control systems is maintained onsite. A critical spare part is any part that significantly threatens emission control operations when it fails due to the difficulty of obtaining a replacement. The critical spare parts inventory for emission control systems is included in Attachment F.

Hoses, fittings, spray nozzles, and valves used in the emission control systems shall be common industrial sizes, whenever possible, so that replacement parts may be readily obtained on the same day from industrial equipment suppliers. If a hose, fitting, spray nozzle, or valve used in the emission control system is not readily available, the part will be included in the critical spare parts inventory. If a hose, fitting, spray nozzle, or valve used in the emission control system fails, a replacement part will be obtained, installed, and in use within one calendar day of the failure.

In the event of a pump failure in a water supply system, rental pumps are available from the mill's on-site equipment rental vendor for immediate short-term rental while repairs are conducted.

EMPLOYEE TRAINING

Employees are trained in proper operation of their equipment and job tasks prior to being released to operate in a new position through Levy's safety and operational training processes. In addition to the equipment- and task-specific training, Levy employees shall be trained on the requirements of the Consent Order and this NMPO within 60 days of the effective date of the Order, and retrained annually. Employee training is documented on the Training Log Form (Attachment D) or similar document.

RESPONSE TO DETECTION/NOTIFICATION OF OFF-SITE ODOR

If Levy detects or is notified of off-site odors that may have originated from the Cleveland Cliffs Dearborn Works complex, the Levy site supervisors will begin an investigation within 60 minutes of notification using the *H2S Observation Log* in Attachment E (Form ENV-005-F021). In addition, Levy's Environmental Department and Cleveland Cliffs Environmental Department shall be immediately notified of the potential odor incident.

The investigation shall include the following:

1. Obtain as much information as possible from the person reporting the odor, including:
   a) Location where the odor was detected.
   b) Description of the odor (smoke, chemical, metallic, sulfur, rotten eggs, burning materials, etc.).
   c) Time odor was first observed.
   d) Variability of odor (is it relatively constant, or does it fade in and out?)
   e) Relative severity of odor:
      0 – Non-Detect
      1 – Just barely detectable
      2 – Distinct and definite odor
      3 – Distinct and definite objectionable odor
      4 – Odor strong enough to cause a person to attempt to avoid it completely
      5 – Odor so strong as to be overpowering and intolerable for any length of time
2. Determine potential odor sources using the following method:
   a) Determine wind direction during the time the odor was observed (on-site weather station at https://tempestwx.com/station/34503/).
   b) Using an aerial photograph or plan of the Cleveland Cliffs Dearborn Works complex, such as that included with the H2S Observation Log (ENV-005-F021), place a circle at the location where the odor was observed and draw lines in the direction of the wind.
   c) If the vector crosses the complex and the complex is upwind to the location where the odor is observed, identify potential operations and activities that lie along the vector.
   d) Compare the identified odor to any odors generated along the wind vector in an upwind position to determine the potential source(s) for the odor.
3. Use the AcruLog Meter to measure H2S concentrations in the area of the observed odor, upwind of the observed odor, around any potential upwind sources at the Cleveland Cliffs complex. Record H2S readings on the H2S Observation Response Log in Attachment E (ENV-005-F021).

4. Review site operation logs for all Levy operations with the potential to create odors, including BF slag pits and kish pot watering station.
5. Interview operators onsite during the time of the odor observation.
6. Implement and document corrective actions identified during the investigation.
7. Send the completed H2S Observation Log (ENV-005-F021) to Levy's Environmental Department and Cleveland Cliff's Environmental Department for review.

If off-site odors persist after actions are taken, the site operations team will immediately contact the Levy Environmental Department and the Cleveland Cliffs Environmental Department to identify additional potential odor sources or steps that may be necessary to resolve odor concerns.

PLAN MODIFICATION

This NMPO will be amended within 30 days of determining that additional measures are required, outside those outlined in this plan, to investigate or prevent nuisance odors. Whenever this NMPO is amended, it shall be submitted to EGLE for review and approval.

RECORDKEEPING

Records shall be retained for a period of five years, in accordance with the requirements of Section 2 of Cleveland Cliffs Renewable Operation Permit No. MI-ROP-A8640-2016a.

Records shall be made available to AQD staff upon request.

RELEVANT STAFF

Site Operations Manager: (Overall Responsible Person)

- Respond to complaints directly or by dedicating sufficient resources to conduct a thorough investigation and completing the H_2S Observation Response Log (See Attachment D).
- Communicating potential nuisance odor events with Levy's environmental staff and Cleveland Cliff's environmental staff.
- Ensuring daily inspections are performed and corrective actions taken when necessary.

BF Area Supervisor:

- Responsible for daily additions of potassium permanganate.
- Inspect the potassium permanganate and water systems daily and complete the daily inspection log (see Attachment A).
- Report any potential abnormal conditions to the Site Operations Manager, immediately.
- Report any system malfunctions to the Site Operations Manager and Levy environmental staff, immediately.

Desulf Area Supervisor:

- Responsible for daily additions of potassium permanganate.
- Inspect the permanganate and water systems daily and complete the daily inspection log (see Attachment C).

- Review the desulf slag pot movement form to ensure kish pots are watered for a minimum of 24 hours. Report any deviations to the Site Operations Manager and Levy environmental staff, immediately.

Weekend Duty Supervisor:

- Responsible for daily additions of potassium permanganate.
- Inspect the permanganate and water systems daily for both the BF slag pits and the kish pot watering station, and complete the daily inspection log (see Attachments A and C).
- Report any potential abnormal conditions to the Site Operations Manager, immediately.
- Report any system malfunctions to the Site Operations Manager and Levy environmental staff, immediately.

Night Shift Supervisor:

- Complete inspections, if assigned.
- Observe site for odors while driving throughout the site.
- Report any potential abnormal conditions to the Site Operations Manager, immediately.
- Report any system malfunctions to the Site Operations Manager and Levy environmental staff, immediately.

Loader Operators:

- BF Loader: In the course of regular duties at the BF slag pits, observe the pits and surrounding area for unusual odors. When activating the slag pit water sprays, observe the pit water sprays for volume, distribution, and color (purple tint is evidence of active permanganate). Alert site management if issues are observed.
- BOF Service Loader: In the course of regular duties that require driving through the kish area, observe the watering station area for unusual odors. Observe water sprays for proper flow conditions. Alert site management if issues are observed.

Pot Hauler Operators:

- BF Pot Hauler: During regular pot hauling duties, observe the BF slag pit area for unusual odors and water sprays volume, distribution, and color. Alert site management if issues are observed.
- BOF Pot Hauler: During regular pot hauling duties, when driving past the kish area, observe the pot watering area for unusual odors and the water sprays for volume. Alert site management if issues are observed. Complete the kish pot movement log for each kish pot movement event (see Attachment B).

Maintenance Employees:

- Perform repairs on the odor control equipment.
- May add permanganate and log inspections if assigned.

Corporate Environmental Staff:

- Assist in conducting odor investigations.
- Facilitate updates to the NMPO and associated documents as needed.

- Interface with regulatory agencies.

ATTACHMENTS

Attachment A:	Daily Equipment Inspection Log – ACBF Slag Pits (ENV-005-F003)
Attachment B:	Kish Slag Pot Movement Form (ENV-005-F005)
Attachment C:	Daily Equipment Inspection Log – Kish Watering Station (ENV-005-F004)
Attachment D:	Employee Training Log
Attachment E:	H_2S Observation Response Log (ENV-005-F021)
Attachment F:	Critical Parts Inventory of Emission Control Systems

	TITLE:	PROCEDURE NO.:
SOLUTIONS FOR YOUR ENVIRONMENT®	Edw. C. Levy Co. – Levy Plant 6 BF Slag Pits – Daily Environmental Inspection	ENV-005-F003

Date:_____ Day of week:_____ Time:_____ Inspector Name:_____ Inspector Signature:_____

ACBF Slag Pit Water Sprays Operating Properly?***		Are BF Slag Stockpile Sprinklers Operational?				Potassium Permanganate System													
		East		West		Pump Operational?		Agitator Operational?		Tank in good condition?		Permanganate Stock Adequate? (4 cans minimum)		Permanganate added?		Lbs. of Permanganate Added	Corrective Action Required?	
Y	N*	Y	N*	Y	N*	Y	N	Y	N	Y	N	Y	N	Y	N		Y	N

Is abnormal odor observed?**	**Y**	N		**If abnormal odor or visible emissions are observed, describe observation:**
Are visible emissions from truck loading normal?	**Y**	N	No Trucks	**Description of any equipment failure(s), cause of failure(s), time first observed and corrective actions required:**
Are visible emissions from stockpiles normal?	**Y**	N		**Description of corrective or preventative action(s) taken, include date & time corrective actions began and were completed:**
Are visible emissions from pit digging normal?	**Y**	N	Not Digging	

* Water Sprays are a REQUIREMENT under Cleveland Cliffs' Consent Decree. If either Pit Water Sprays or Stockpile Water Sprays are NOT operational, immediately notify Levy's Environmental Department (Gordon Elwell at 270-750-4206 or Tom Green at 313-690-0139).

** Abnormal odor is defined as sulfur odors observed beyond the immediate area surrounding the BF pits.

*** Properly operating ACBF Water Sprays have a purple tint to the water, and the volume and distribution of the water covers the ACBF pits.

Reviewed by: (Printed Name): _____ **(Signature):** _____

Attachment B

	TITLE:	PROCEDURE NO.:
SOLUTIONS FOR YOUR ENVIRONMENT®	**Desulf Slag Pot Movement Form**	**ENV-005-F005**

Operator Name: _____ Date: _____ Shift: _____

Operator Last Name	Pot Number	Watering Station # Pot Placed Under	Date Watering Started	Time Watering Started	Water Station Flow (normal/ abnormal)	Odor (N/A)	Operator Last Name	Watering Station # Pot Removed From	Date Watering Ended	Time Watering Ended	Pot Temperature At Removal	Pot Dump Visible Emission* (Abnormal/ Normal)

Description of equipment failure(s), cause of failure(s), corrective action(s) and other observations:

_____

_____

*If abnormal conditions are found:

Document who was notified, whether or not the unit was shut down, what corrective measures were taken or are to be taken and when the condition was corrected or expected to be corrected. For processes operated continuously, "normal" means visible emissions were not significant and did not leave the immediate area of the pot knocking station. Emissions observations are made at the point of operation that would normally be expected to cause the greatest emissions.

SOLUTIONS FOR YOUR ENVIRONMENT®	**TITLE:** **Edw. C. Levy Co. – Levy Plant 6** **Kish Watering Station – Daily Environmental Inspection**	**PROCEDURE NO.:** **ENV-005-F004**

Date:_____ Day of week:_____ Time:_____ Inspector Name:_____ Inspector Signature:_____

Pump	Reading (Time)	Meter Reading	Kish Water Sprays Operational?* (All 10 Stations)		Potassium Permanganate System									
					Pump Operational?		Agitator Operational?		Tank in good condition?		Permanganate Stock Adequate? (4 cans minimum)		Lbs. of Permanganate added	Corrective Action required?	
			Y	N	Y	N	Y	N	Y	N	Y	N		Y	N
#1		Hrs. Gallons (Hrs. X 27,000**)	Description of equipment failure(s), abnormal odor***, cause of failure(s), corrective action(s) and other observations:												
#2		Hrs. Gallons (Hrs. X 27,000**)	Description of corrective or preventative actions taken, include date & time corrective actions began and were completed:												
* Kish water sprays are operational if water is discharging at the normal rate and spray pattern. Water sprays with reduced volume are considered NOT operational. If water spray is not operational, document which station has the issue, what the issue is, date and time of first observed and corrective action required:															

**Pump capacity is 450 gal/minute, which is 27,000 gal/hour. Inspector will multiply hours by 27,000 gal/hour for entry into LEAP.
***Abnormal odor is defined as odors observed beyond the immediate area surrounding the kish watering station.

Reviewed by: (Printed Name): _____ **(Signature):** _____ **Date:** _____

Attachment D

Levy Plant 6
Consent Order: AQD No. 2024-13, NMPO
Training Record

Employees must successfully complete a program of classroom instruction and training that teaches them how to perform their duties in a way that ensures the facility's compliance with the requirements of Consent Order: AQD No. 2024-13 and the associated Fugitive Dust Control Plan (FDCP) and Nuisance Minimization Plan for Odor (NMPO). **This training covers the Consent Order and NMPO**.

Consent Order: AQD No. 2024-13
Nuisance Minimization Plan – Odor – May 30th, 2024

Employee Name _____Training Date ___/___/_____

TRAINING CHECKLIST

This program includes all the elements described below:

Consent Order: AQD No. 2024-13

- ☐ Bases for Consent Order
- ☐ Operations Covered by Consent Order
- ☐ Elements of the Consent Order

Nuisance Minimization Plan – Odor (NMPO)

- ☐ Operations Covered by NMPO
- ☐ Control Measures – Blast Furnace Slag Pits
- ☐ Control Measures – Desulfurization Slag Pot Watering Station
- ☐ Inspection Requirements
- ☐ Preventative Maintenance Requirements
- ☐ Monitoring Requirements
- ☐ Upset Condition - Management Notification Requirements
- ☐ Record Keeping Requirements
- ☐ H2S Monitor Use, Calibration and Maintenance
- ☐ Response to Detection/Notification of Alleged Odors

SOLUTIONS FOR YOUR ENVIRONMENT®	**TITLE: Levy Plant 6 H2S Observation Response Log**	**PROCEDURE NO.: ENV-005-F021**

PURPOSE: **To ensure a consistent response and investigation for odor observations made within the steel mill by Levy or mill employees.**

PROCESS: **Sensory (smell) survey for odor complaints, plus gas meter readings. When odor is identified, travel in a straight line (as much as safely possible) towards potential sources and look for increasing odor. Document on this log form.**

Complete the information in the form below and on the maps on the following pages

Observation Made By: _____ CIRCLE ONE: MILL STAFF LEVY STAFF COMMUNITY

Observation Date and Time:_____

Observation Location:_____

Time Odor Was First Observed:_____

Date and Time Levy Management Was Notified:_____

Observer Statement:_____

_____

_____

_____

Is Odor Consistent or Variable:_____

Relative severity of odor (rating scale as follows):_____

0 – Non-Detect
1 – Just barely detectable
2 – Distinct and definite odor
3 – Distinct and definite objectionable odor
4 – Odor strong enough to cause a person to attempt to avoid it completely
5 – Odor so strong as to be overpowering and intolerable for any length of time

Levy Investigator: _____ Date and Time Investigation Began:_____

Use Mellon St./6A Weather Station: https://tempestwx.com/station/34503/

Weather at Observation: Temp:_____Wind Direction:_____Speed:_____MPH Humidity:_____%

SOLUTIONS FOR YOUR ENVIRONMENT®	**TITLE: Levy Plant 6 H2S Observation Response Log**	**PROCEDURE NO.: ENV-005-F021**

BLAST FURNACE AREA ACTIVITIES:

LevyLite Pots Poured in Last Two Hours: (Start Times): _____

_____

Air-Cooled Pots Poured in Last Two Hours: (Dump Times): _____

_____

Is Truck Loading or Pit Digging Occurring: _____

Was Pit Watering Occurring? If YES, What Time Did it Start?_____

Is the Potassium Permanganate System Operating Properly?_____

If YES, Describe the Water Cycle (example: Initial spray start at 1:00 PM for 15 minutes, at 3:00 PM, 3-minute water cycles began):_____

_____

_____

KISH POT AREA ACTIVITIES:

Last 2 Kish Pot Dump Dates/Times:_____

_____

Last 2 Kish Pot Watering Start Dates/Times:_____

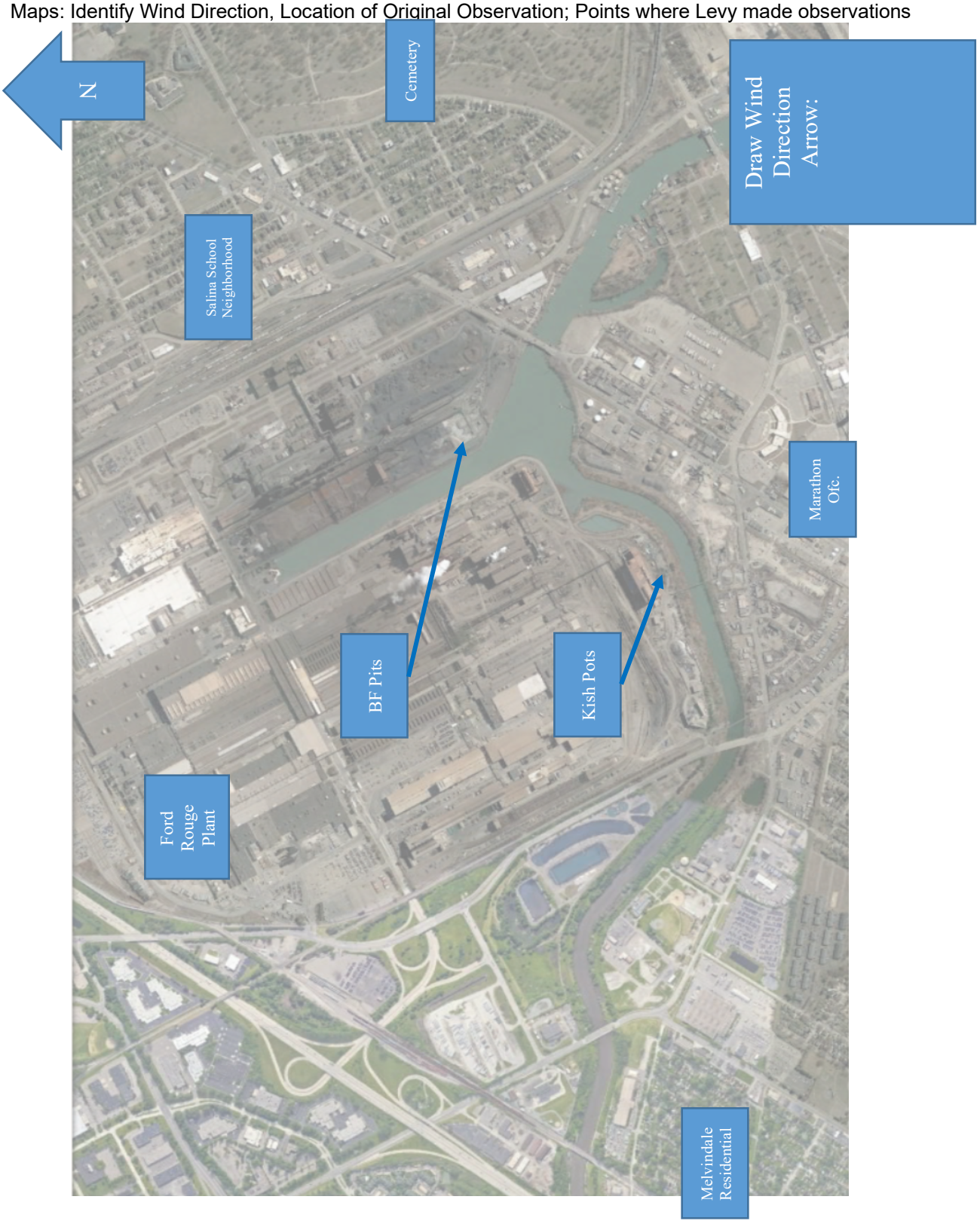
_____

Is the Kish Watering Potassium Permanganate System Operating Properly?_____

_____

SOLUTIONS FOR YOUR ENVIRONMENT®	**TITLE: Levy Plant 6** **H2S Observation Response Log**	**PROCEDURE NO.:** **ENV-005-F021**

Maps: Identify Wind Direction, Location of Original Observation; Points where Levy made observations



SOLUTIONS FOR YOUR ENVIRONMENT®	**TITLE: Levy Plant 6** **H2S Observation Response Log**	**PROCEDURE NO.:** **ENV-005-F021**

Draw Wind Direction Arrow:

Mark Locations observed on map with a letter. Observe up and downwind of potential odor sources. Note if odor is observed by nose, **and** record gas meter parts per billion (PPB) readings

A:_____ B:_____

C:_____ D:_____

E:_____ F:_____

Use additonal sheets for notes if necessary.

SOLUTIONS FOR YOUR ENVIRONMENT®	**TITLE: Levy Plant 6** **H2S Observation Response Log**	**PROCEDURE NO.:** **ENV-005-F021**

Mark Locations observed on map with a letter. Observe up and downwind of potential odor sources. Note if odor is observed by nose, and record gas meter parts per billion (PPB) readings.

A:_____ B:_____

C:_____ D:_____

E:_____ F:_____

Use additonal sheets for notes if necessary

SOLUTIONS FOR YOUR ENVIRONMENT®	**TITLE: Levy Plant 6 H2S Observation Response Log**	**PROCEDURE NO.: ENV-005-F021**

Describe Any Corrective Actions Made:_____

DATE/TIME SENT TO MILL AND LEVY ENVIRO:_____

Sent By:_____ Sent To:_____

Are Updates to the Plan Required?_____

If Updates Were Required, Document Submittal to EGLE Within 30 Days:_____

Levy Plant 6 - Critical Parts Inventory for Emission Control Systems

No. Stored	Part Description	Storage Location
	BOF Slag Pit Area	
2	2 rings for DB30-Knock station	millwrights toolroom/conex box
2	2 rings for DB60-Knock station	millwrights toolroom/conex box
1	10 hp pump-Knock station	Connex by C-99
1	rain bird-stock pile	BF Connex box
1	7.5 hp pump-Water pile	Connex by C-99
3	remotes for dust boss	BF Trailer Office
	Kish Pot Watering Station	
1	15 hp pump-Kish watering	Connex by C-99
4	5-gal buckets of potassium permanganate	Kish Pot Watering Station Building
1	55-gal drum of nalco Oasis	Kish Pot Watering Station Building
2	Kish water spray nozzles	Kish Pot Watering Station Building
4	ipad controllers	BF Trailer Office
	Pallet Box Watering Station	
1	7.5 hp Pump -Debris watering	Connex by C-99
	Blast Furnace Slag Pits	
2	2500 gpm pump	Connex by C-99/ BF Connex
3	75 hp motors	BF Connex Box
4	5-gal buckets of potassium permanganate	BF Connex Box
1	55-gal drum of Nalco Oasis	BF Connex Box
1	rain birds-stock pile	BF Connex Box
2	radar level sensor	BF Connex Box
	Runway Slag / BOF Bldg	
6	Pallet boxes-Runway Digging	Staged by Runway/Plant 6

Revision Date: 5-30-2024

FUGITIVE DUST CONTROL PLAN (FDCP) – ACO No. 2024-13

Edw. C. Levy Co., Plant 6

13800 Mellon Street, Detroit MI

Date: May 30, 2024

INTRODUCTION

This Fugitive Dust Control Plan (FDCP) details the controls and procedures for preventing, detecting, and correcting particulate matter (PM) fallout events that may create a nuisance to neighbors under Rule 901 (R 336.1901).

This FDCP covers the operations included in Renewable Operating Permit (ROP) MI-ROP-B4243-2016 and subsequent revisions.

The Edw. C. Levy Co. (Levy) performs the following operations under MI-ROP-B4243-2016 and any subsequent revisions:

- Basic Oxygen Furnace (BOF) slag processing,
- Caster slag processing, and
- Material stockpiling and transport.

Process Descriptions

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

Basic Oxygen Furnace (BOF) Slag Processing

Cleveland Cliffs Dearborn Works skims BOF slag from the furnace into slag pots within the BOF building, which is under the control of an industrial ventilation system. Levy transports the BOF slag pots, utilizing pot carriers, and dumps the slag into the BOF slag pits. Once a slag pit is full, it is quenched with water to solidify and cool the slag. A wheel loader is used to remove solidified slag from the pits, creating stockpiles of the unprocessed BOF slag. The BOF slag stockpiles are watered prior to being loaded into trucks or conveyed to a slag processing plant.

After molten slag is dumped out of a slag pot, a layer of solidified slag (the "skull"), adheres to the inside walls of the pot. This skull is removed by lowering the pot quickly and knocking it against a block to loosen and remove the skull. This process is completed within the pot knocking enclosure. The enclosure is equipped with a water misting system that is activated remotely prior to commencing pot knocking or digging activities within the enclosure.

"Pot slagging," the process of adding a slag cushion to empty slag pots prior to returning the slag pots to the BOF, occurs within the pot knocking enclosure with the misting system operating.

An aggregate processing plant is used to size and convey slag products.

Caster Slag Processing

Cleveland Cliffs Dearborn Works discharges caster slag into slag pots within the BOF building, under the control of the building's industrial ventilation system. Under current operations, the caster slag pots are

transported to the BOF slag pot knocking enclosure and dumped under the control of enclosure's water misting system. After dumping, the caster slag is removed from the enclosure by a loader and stockpiled along the connect box wall, where it is watered prior to loading into trucks for transport offsite. Levy is currently working with Cleveland Cliffs to modify the material handling process for caster slag. Under the new process, the caster slag pots will be transported from the northern end of the BOF building to the southern end of the BOF building, where the slag pots will be dumped by Levy into a new slag pit located inside the BOF building, under the control of the BOF building's ventilation system. After dumping, the caster slag will be removed from the new pit by a loader and placed into a pallet box, all within the BOF building. The caster slag within the pallet box will be transported to the pallet box watering station, where it will be saturated with water prior to further processing and handling.

Process/Operational Restrictions - Fugitive Dust Controls

Basic Oxygen Furnace (BOF) Slag Processing

1. Levy shall quench the dumped slag in the BOF slag pits with water sprays before digging.
2. Levy shall properly operate and maintain water sprays for further quenching slag after removal from the BOF pits (e.g., CONEX box water sprays).
3. Levy shall properly operate and maintain a partial enclosure for pot knocking that is equipped with water misting capabilities. The misting system shall include two mounted Dust Bosses, or similar control systems, within the enclosure. Additional Dust Bosses or similar systems shall be used in the case of a failure of a mounted unit to control fugitive emissions from the operations in the enclosure.
4. Pot slagging with hot slag shall occur within the pot knock station enclosure.
5. The misting devices installed at the pot knock station enclosure shall be used during pot knocking, pot slagging, and pit digging within the pot knock station.
6. Levy shall properly operate and maintain a water spray system to minimize fugitive dust emissions from crushers, screens, and conveyors.
7. The ground surface within the BOF slag pit area shall be graded to minimize the pooling of water that could react with hot slag.

Caster Slag Processing

Current Operation

1. Caster slag shall be discharged by Cleveland Cliffs into slag pots within the northern end of the BOF building, under the control of the building's industrial ventilation system.
2. Levy shall dump the caster slag pots into a new slag pit located in the southern end of the BOF building, under the control of the building's industrial ventilation system.
3. The process of digging the caster slag pit and loading pallet boxes or haul trucks shall occur within the BOF Building, under the control of the industrial ventilation system.
4. Levy shall properly operate and maintain a system for adding water to pallet boxes and haul trucks.
5. Caster slag shall be watered in the pallet boxes or haul trucks prior to further processing or handling.

Material Stockpiling and Transport

1. Load-out emissions shall be minimized by limiting drop height of the loader bucket to a maximum of two (2) feet above the sideboard of the truck or the stockpile face.

2. Levy shall properly operate and maintain a water truck with a water cannon capable of adding water to stockpiled material.
3. All trucks transporting finished products shall be tarped before leaving the property.

Roadway and Vehicle Movement Areas

The *Onsite Road Maps* (Attachment A) show the paved and unpaved roads that are maintained by Levy.

Paved Roads:

1. Track out onto public roads shall be cleaned daily. See Attachment B.
2. Levy cleans public roads that may be utilized for trucking slag products as a public service. This road cleaning is not regulated under this consent agreement. The public road cleaning program is provided for reference in Appendix B. The company contracted to clean public roads provides daily records of all services provided, which are maintained by Levy's Trucking Division.
3. The onsite paved road speed limit shall be 15 miles per hour.

Unpaved Roads, Parking Lots and Processing Areas:

1. Levy shall apply a solution of chemical dust suppressant (lignosulfonate, calcium chloride, or equivalent) at least monthly, weather permitting. (Purchase records of chemical suppressant application shall be maintained.)
2. A water truck shall be used to apply additional dust control when visible emissions are observed, weather permitting. Records of water truck usage shall be maintained on the Water Truck Log, Form ENV-005-F020, in Appendix C.
3. The unpaved road speed limit shall be 5 miles per hour.

Material Spillage:

1. Material spilled on public roadways shall be removed promptly upon being identified.
2. Truck operators shall be notified promptly if they spill material on a roadway to prevent future incidences.

MONITORING, INSPECTIONS & RECORD KEEPING

Source-wide Fugitive Dust & Sediment Track out Inspections:

Daily source-wide fugitive dust inspections shall be completed and documented on the *Daily Source-wide Fugitive Dust & Sediment Control Log*, Form ENV-005-F027, in Attachment D. These inspections include:

1. Documenting weather conditions, including current weather (sun, rain, cloudy), forecasted precipitation, forecasted low temperature, wind direction, and wind speed.
2. Observing visible emissions from stockpiles, roadways, and other operations.
3. Observing sediment track out onto public roads.
4. Observing the BOF slag pit area for evidence of pooling water that may react with hot slag. The site grade shall be maintained to minimize pooling water.
5. Documenting corrective actions taken if abnormal conditions are observed.

Water Truck Log and Chemical Dust Suppressant Records

A water truck operating log shall be kept to document application of water to control fugitive dust, using Attachment C (Form ENV-005-F020). The water truck is not driven on rainy days, snow days, days after application of chemical suppressants, non-dusty days, and days when the plant is not operating.

Records of chemical dust suppressant application on unpaved roads shall be maintained.

Environmental Emission Control Inspections:

Daily inspection of fugitive dust emission controls shall be documented in Attachment E, *Daily BOF FD Emission Controls Inspection*, Form ENV-005-F028.

These inspections include:

1. Verifying proper operation of all emission control devices.
2. Describing equipment failure(s) and the cause(s).
3. Describing preventative and/or corrective actions taken.
4. Identifying corrective actions required.

The time and date when emission controls fail shall be recorded. In addition, the time and date when corrective actions began and were completed shall be documented.

Weekly Method 9D Certified Visible Emission Observations:

1. Method 9D certified visible emission observations shall be completed every week on BOF slag pot dumping or digging, and on pot knocking (the site has the option to read dumping or digging each week, but in each month dumping and digging must be read at least once). Records of each observation and corrective actions taken shall be maintained.
2. A Method 9D certified visible emission observation shall be completed on a representative operating grizzly feeder or conveyor at least once every two calendar weeks. Records of each observation and corrective actions taken shall be maintained.
3. A Method 9D certified visible emission observation of loading activities from a finished product storage pile into a truck shall be completed at least once every two calendar weeks. Records of each observation and corrective actions taken shall be maintained.

MAINTENANCE – Fugitive Dust Control Systems

Preventive Maintenance

Dust boss mister rings shall be replaced with clean rings at the following times:

- At least once per quarter.
- Whenever the dust boss is observed to have greater than 10% of its nozzles plugged or low flow conditions.

Spare Parts

An inventory of critical spare parts for all emission control systems is maintained onsite. A critical spare part is any part that significantly threatens emission control operations when it fails due to the difficulty of obtaining a replacement. The critical spare parts inventory for emission control systems is included in Attachment H.

Hoses, fittings, spray nozzles, and valves used in the emission control systems shall be common industrial sizes, whenever possible, so that replacement parts may be readily obtained on the same day from industrial equipment suppliers. If a hose, fitting, spray nozzle, or valve used in the emission control system is not readily available, the part will be included in the critical spare parts inventory. If a hose, fitting, spray nozzle, or valve used in the emission control system fails, a replacement part will be obtained, installed, and in use within one calendar day of the failure.

In the event of a pump failure in a water supply system, rental pumps are available from the mill's on-site equipment rental vendor for immediate short-term rental while repairs are conducted.

EMPLOYEE TRAINING

Employees shall be trained on the Consent Order and this FDCP within 60 days of the effective date of this Consent Order and retrained annually. The training shall be documented and included in the plant training records. (*Employee Training Log* -Attachment F).

RESPONSE TO DETECTION/NOTIFICATION OF ALLEGED OFF-SITE FALLOUT

If Levy detects or is notified of off-site fallout that may have originated from Levy operations, a Levy site supervisor shall begin an investigation following the *Fallout Observation Response Log* (Attachment G, Form ENV-005-F025). In addition, Levy's Environmental Department and Cleveland Cliffs Environmental Department shall be notified of the potential incident within 24 hours.

If Levy detects or is notified of off-site fallout that may have originated from Levy operations, the following response procedures shall be implemented by site supervision within 60 minutes of notification:

1. Obtain as much information as possible about the alleged fallout event, including:
   a) Location where the fallout was detected.
   b) Description of the fallout (color, grain size, deposition pattern, etc.).
   c) Time fallout was first observed.
   d) Last time area of fallout was observed to be free of fallout.
2. If the site is known and can safety be visited, visit the location of the alleged fallout. Document the fallout through photographs, interviews, and other available means (such as material sampling when feasible).
   a) Observe the immediate area (vehicle, porch, deck, roof, etc.).
   b) As can be observed from public right-of-way, view surrounding areas for additional potential fallout.
3. Determine potential particulate sources using the following method:
   a) Using available weather data determine the wind direction and speed during the timeframe when the fallout occurred.
   b) Using an aerial photograph or plan of the Dearborn Works, such as that included with the *Fallout Observation Response Log* (Attachment G, Form ENV-005-F025), place a

circle at the location where the fallout was observed and draw lines in the direction of the wind.

c) If the vector crosses the facility and the facility is in an upwind position compared to the location where the fallout is observed, then determine the facility features and activities that lie along the vector.

d) Compare the identified fallout to any fallout sources that exist along the wind vector upwind of the fallout location to determine the potential source(s) for the fallout.

4. Review site operation logs for all Levy operations with the potential to create fallout, including BOF slag pits, knock station, and slag conveyor system.
5. Interview operators onsite during the time of the fallout event.
6. Review video footage during the time frame of alleged fallout.
7. Implement and document corrective actions identified during the investigation.
8. Send the completed *Fallout Observation Response Log* (Attachment G, Form ENV-005-F025) to Levy's and Cleveland Cliff's Environmental Department for review.

If off-site fallout persists after actions are taken, the site operations team shall contact the Levy Environmental Department and the Cleveland Cliffs Environmental Department to identify additional potential fallout sources or steps that may be necessary to resolve fallout concerns.

PLAN MODIFICATION

This FDCP shall be amended within 30 days of determining that additional measures are required, outside those outlined in this plan, to investigate or prevent nuisance fugitive dust. Whenever this FDCP is amended, it shall be submitted to EGLE for review and approval.

RECORDKEEPING

Records required by ROP No. MI-ROP-B4243-2016, SIP 19-1993 and this FDCP shall be retained for a period of five years. Records shall be made available to AQD staff upon request.

RELEVANT STAFF

Site Operations Manager: (Overall Responsible Person)

- Responding to complaints directly or by designating a specific person to conduct a thorough investigation and completing the Fallout Incident Response Log (See Attachment G).
- Alerting water truck driver(s) to primary and secondary areas needing dust control.
- Ensuring daily and weekly inspections are performed and corrective actions taken when necessary.
- Communicating potential nuisance events with Levy's environmental staff and Cleveland Cliff's environmental staff.

BOF Area Supervisor:

- Inspecting the water systems weekly and completing the daily fugitive dust inspections (see Attachments B-F).
- Alert water truck driver(s) to primary and secondary areas needing dust control.

- Report any potential abnormal conditions to the Site Operations Manager, immediately.
- Report any system malfunctions to the Site Operations Manager and Levy environmental staff, immediately.

Weekend Duty Supervisor:

- Complete the daily inspections (see Attachment B).
- Alert water truck driver(s) to primary and secondary areas needing dust control.
- Report any potential abnormal conditions to the Site Operations Manager, immediately.
- Report any system malfunctions to the Site Operations Manager and Levy environmental staff, immediately.

Night Shift Supervisor:

- Complete inspections, if assigned.
- Alert water truck driver(s) to primary and secondary areas needing dust control.
- Report any potential abnormal conditions to the Site Operations Manager, immediately.
- Report any system malfunctions to the Site Operations Manager and Levy environmental staff, immediately.

Loader Operators:

- In the course of regular duties at the BOF, observe pits and roads for unusual dust conditions.
- Activate water sprays on closed pits and observe the pit sprays for sufficient flow.
- Activate dust bosses during skull station digging.
- Alert site management if issues are observed.

Pot Hauler Operators:

- In the course of regular duties at the BOF, observe pits and roads for unusual dust conditions.
- Activate water sprays on closed pits and observe the pit sprays for sufficient flow.
- Activate dust bosses during skull station dumping activities.
- Alert site management if issues are observed.

Water Truck Operators:

- Maintain daily water truck log (Attachment C).
- Water roads as directed by site supervisors.

Maintenance Employees:

- Perform repairs and preventive maintenance on dust suppression equipment.

Corporate Environmental Staff:

- Assist in conducting particulate fallout investigations.
- Facilitate updates to the FDCP and associated documents as needed.
- Interface with regulatory agencies.

ATTACHMENTS

Attachment A:	FDCP Onsite Road Maps
Attachment B:	Public Road Cleaning Record
Attachment C:	Water Truck Log (Form ENV-005-F020)
Attachment D:	Daily Source-wide Fugitive Dust Log (ENV-005-F027)
Attachment E:	Daily BOF FD Emission Controls Inspection (ENV-005-F028)
Attachment F:	Employee Training Log
Attachment G:	Fallout Observation Response Log (Form ENV-005-F025)
Attachment H:	Critical Spare Parts Inventory for Emission Control Systems

LEVY PLANT 6
FDCP - Revision Date: 5-30-2024

BLAST FURNACE ROADWAYS
AREA 1 OF 4

ARCADIS Design & Consultancy for natural and built assets

FIGURE

7/9/2020 12:33:48 PM

PAVED ROADS

-- UNPAVED ROADS

LEVY PLANT 6
FDCP - Revision Date: 5-30-2024

DETROIT SIDE ROADWAYS
AREA 2 OF 4

ARCADIS Design & Consultancy for natural and built assets

FIGURE

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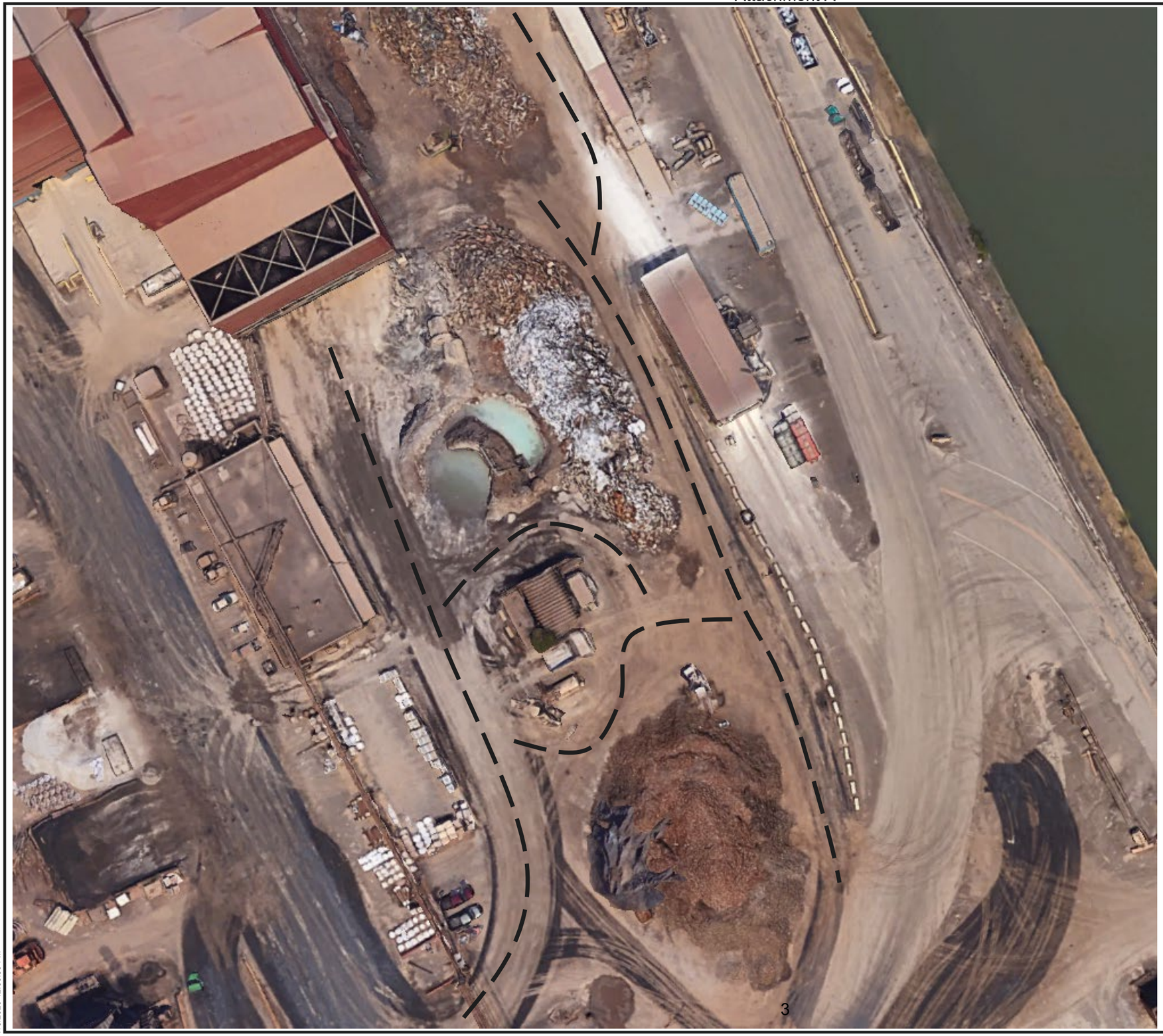


N

-- *UNPAVED ROADS*

LEVY PLANT 6
FDCP - Revision Date: 5-30-2024

BASIC OXYGEN FURNACE (BOF)
ROADWAYS
SOUTH END OF BOF AREA 3 OF 4

ARCADIS Design & Consultancy for natural and built assets

FIGURE

7/9/2020 12:33:53 PM

LEVY PLANT 6
FDCP - Revision Date: 5-30-2024

AK STEEL SIDE ROADWAYS
STEEL MILL SIDE AREA 4 OF 4

ARCADIS Design & Consultancy for natural and built assets

FIGURE

7/9/2020 12:33:53 PM

Levy Sweeper Truck Routes

Wet sweeping shall take place during non-freezing temperatures at the locations and minimum frequencies listed below. The Levy Trucking Manager is responsible for directing sweeper drivers of any changes to the locations or sweeping schedule.

If an area is not clean after it is swept, continue sweeping until the surface is clean. **Pay close attention along curbs and to any visible track out while sweeping.** Contact the Levy Trucking Manager if there are any questions or issues cleaning an area.

Water for sweeper trucks is available at Levy Plant 1 (8800 Dix Ave). Sweeper trucks shall empty out in the Debris Pile at Levy Plant 2 (8950 Dix Ave). **Document all areas swept and the time spent at each location daily on the Sweeper Truck Operating Log.**

Sweep 2X / Day

- **Levy Plant 1 (8800 Dix)** driveway and truck yard
- **Dix Ave** from turnaround east of Levy Plant 1 to Amazon Street
- **Mercier Street** between Robert Street and Wyoming Ave
- **Plant 2 driveway apron** and **inbound and outbound scales** off Robert Street
- **Brennan Street Dock (from approx. April – October)** paved parking areas and driveways
- **Brennan Street (from approx. April – October)** and extending onto W Jefferson Ave as needed

Sweep 1X Daily

- **AK Steel Gate 1** – Sweep both sides of the AK Steel driveway from Dix Ave to the stop sign. Sweep the both sides of Dix Ave, paying close attention to curb lanes and where trucks turn onto and off Dix Ave, and visible signs of track out. Sweep as needed until track out is removed.
- **AK Steel Gate 12** – Sweep both sides of the driveway from the entrance up to the scale. Sweep both sides of Schaefer Hwy, paying close attention to curb lanes and where trucks turn onto and off Schaefer Hwy, and visible signs of track out. Sweep as needed until track out is removed. Going north on Schaefer, sweep the entire turn lane (to the end of the cut out). Going south sweep from the wastewater treatment plant turnout to Mellon (including the turnout as needed).
- **Brennan Street Dock (from November – March)** paved parking areas and driveways
- **Brennan Street (from November – March)** and extending onto W Jefferson Ave as needed
- **Mellon Street** between Dix Street and the railroad tracks (both sides)
- **Lowdell Street** from Mellon St to the end of pavement before the curve in the road
- **Levy Plant 6** paved driveways and scales
- **Levy Drive (9300 Dix)** to **Eagle Street** to **Robert Street**

Sweep 2X / Week

- **Dix Avenue** from Vernor Hwy to Amazon Street

Sweep 1X / Week

- **Robert Street** between Eagle Street and Mercier Street

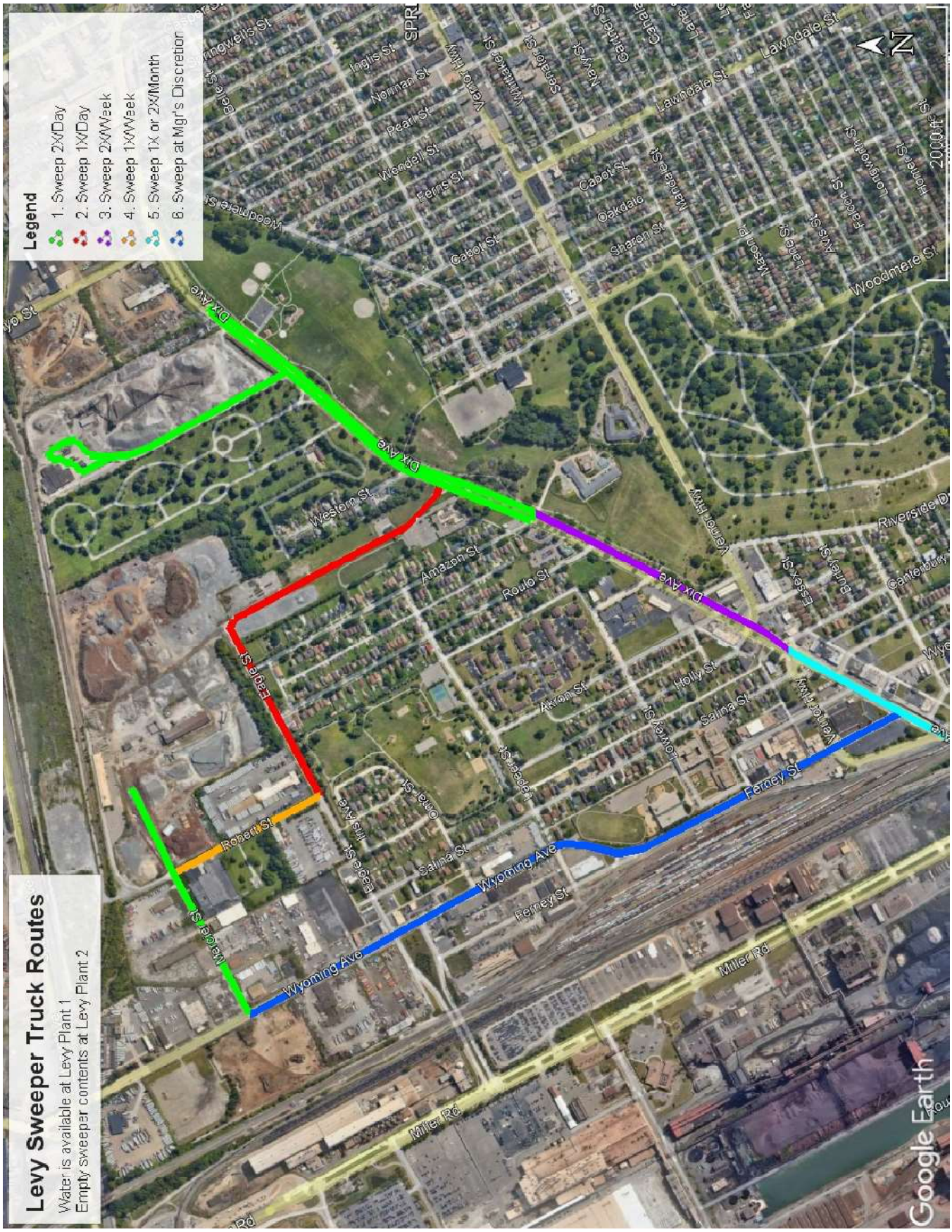
Sweep 1X-2X / Month

- **Dix Avenue** from Miller Road to Vernor Hwy

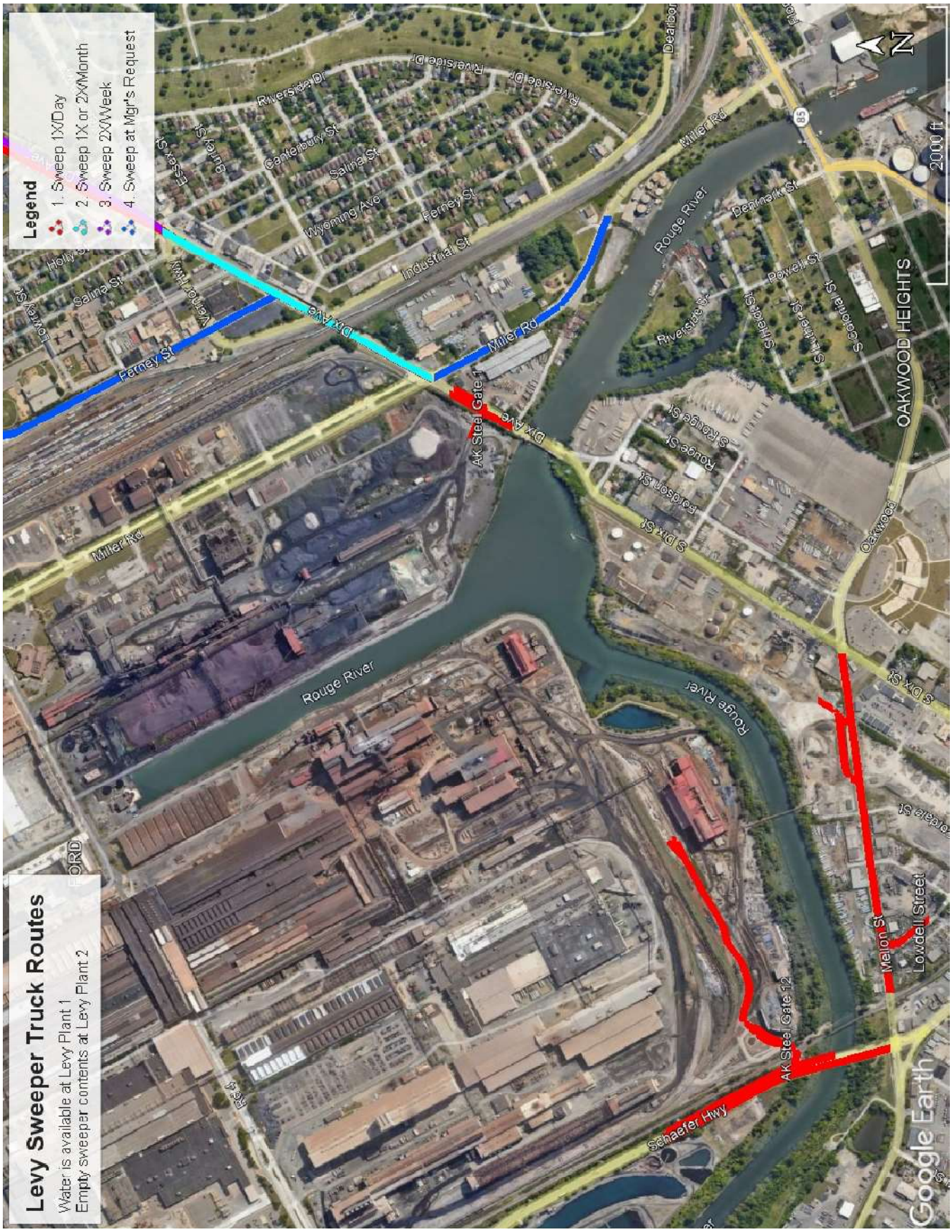
Other Routes Swept as Needed at Levy Trucking Manager's Request

- **Miller Road** between Dix Ave and Fort Street
- **W Jefferson Ave** between S Summit Street and S Campbell Street
- **Ferney/Wyoming** – Sweep **Ferney Street** between Dix Ave and Wyoming Ave, and **Wyoming Ave** between Ferney Street and Mercier Street

Levy Sweeper Truck Routes

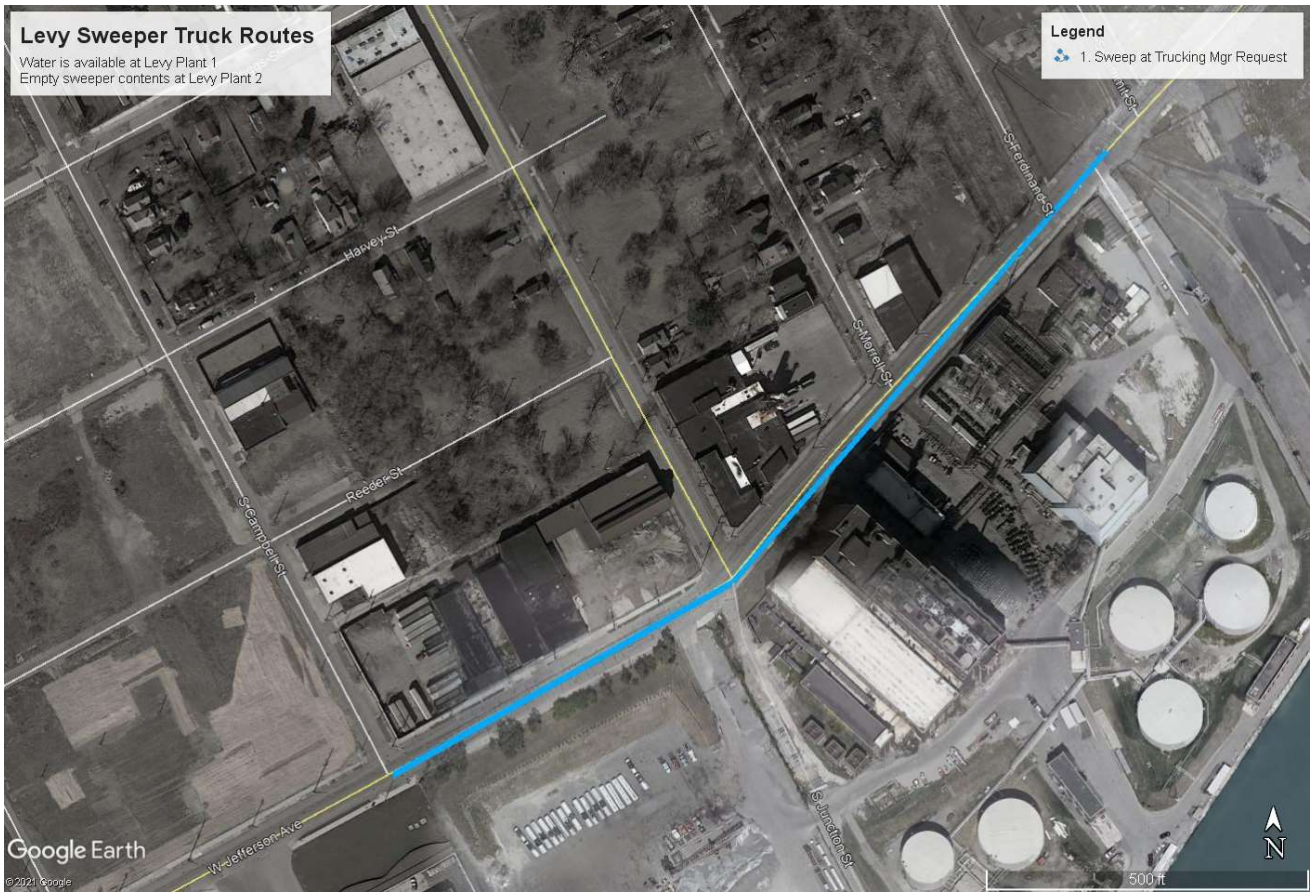


Levy Sweeper Truck Routes



Levy Sweeper Truck Routes

Levy Sweeper Truck Routes



SOLUTIONS FOR YOUR ENVIRONMENT®	**TITLE: Levy Plant 6 Water Truck Operating Log**	**PROCEDURE NO.: ENV-005-F020**

Driver: _____ Date:_____ Shift: _____ Time:_____

Truck #: _____Weather (circle one): Rain Cloudy Sunny Temperature: _____

LOCATION	***# OF WATER LOADS***	***# OF GALLONS APPLIED***	***Visible Emission Present***
Blast Furnace Pot Haul Area			
Blast Furnace Pit/Trailer Area			
Scrap Yard			
Coil – B Court			
Garage Area			
BOF Pot Haul Area			
Desulf/Plant Roads			
BOF Pit Area/C099			
BOF Material Loading Area			

LIST OTHER AREAS WHERE WATER WAS APPLIED:

_____

_____

Truck WTR69R = 4000 gallons per load

INSPECTION OF WATER TRUCK FILLING LOCATIONS:

GARAGE NE ☐ Inspected ☐ Trip Hazards ☐ Uneven Surface ☐ Other Hazard ☐ Requires Grading

BF PERM BUILDING ☐ Inspected ☐ Trip Hazards ☐ Uneven Surface ☐ Other Hazard ☐ Requires Grading

MILL FILLING AREA ☐ Inspected ☐ Trip Hazards ☐ Uneven Surface ☐ Other Hazard ☐ Requires Grading

Equipment or Filling Station Issues:

_____

_____

Submit with Daily Timecard!!

SOLUTIONS FOR YOUR ENVIRONMENT®	**TITLE:** **Edw. C. Levy Co. – Levy Plant 6** **Daily Source-Wide Fugitive Dust and Sediment Control Log**	**PROCEDURE NO.:** **ENV-005-F027**

Date:_____ Day of week:_____ Time:_____ Inspector Name:_____ Inspector Signature:_____

Plant 6A						
Fugitive Dust Conditions (1)				If abnormal conditions exist, list corrective actions taken. (Include time and date when corrective actions were initiated and completed)	Levy Trucking Contacted to Sweep Public Roads(3)	High Wind Controls Implemented? (4)
Stockpiles	Roads	Processing Plant(2)	Track out Mellon Street			
Normal [ ] Abnormal [ ]	Normal [ ] Abnormal [ ]	Normal [ ] Abnormal [ ] Did Not Operate [ ]	Normal [ ] Abnormal [ ] Did Not Operate [ ]		Yes [ ] No [ ]	Yes [ ] No [ ]

Plant 6									
Fugitive Dust Conditions (1)							If abnormal conditions exist, list corrective actions taken.	Levy Trucking Contacted to Sweep Public Roads(3)	High Wind Controls Implemented?
Main Plant, Office & Garage	Blast Furnace Slag Pits & Haul Road	BOF Slag Pits & Yard	Desulf Slag Watering Station	Gate 1 (Trackout)	Gate 12 (Trackout)	Other Areas			
Normal [ ] Abnormal [ ] Did Not Operate [ ]	Normal [ ] Abnormal [ ] Did Not Operate [ ]	Normal [ ] Abnormal [ ] Did Not Operate [ ]	Normal [ ] Abnormal [ ] Did Not Operate [ ]	Normal [ ] Abnormal [ ] Did Not Operate [ ]	Normal [ ] Abnormal [ ] Did Not Operate [ ]	Normal [ ] Abnormal [ ] Did Not Operate [ ]		Yes [ ] No [ ]	Yes [ ] No [ ]

Weather				
Wind Direction	Wind Speed	Weather (e.g., Rain, Sunny, Cloudy)	Forecasted Low Temp(°F)	Forecasted Precipitation (inches)

BOF Slag Pit Area		
Pooling Water Present?	Yes [ ] No [ ]	Contact Operations Manager if there is pooling water to arrange site grading.

Notes:

(1) If abnormal fugitive dust conditions are observed, corrective action must be initiated immediately. On days the facility did not operate, no inspection is required, but please check the box for "Facility Did Not Operate". For process operated continuously, "normal" means opacity from roads and stockpiles is less than 5%. For batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(2) Plant 6 Operation includes an observation of the Bridge Conveyor, and all other related conveyors and drop points, for visible emissions.

(3) Contact Jeni Miller (313-550-8634) in the Levy Trucking Group to request additional water truck or sweeper support.

(4) Check "Yes" for this field when notified by manager, Levy Environmental or Wind Alert that high wind conditions are present and additional controls are implemented. High Wind Conditions, as defined in Detroit City Code Sec. 22-5-5, are when average wind speeds exceed 20 MPH of two consecutive 5-minute intervals. When high wind conditions occur during Facility operating hours, the following controls will be implemented as appropriate, at the discretion of Facility management, to limit fugitive dust emissions:

- Additional inspections of stockpiles, paved roads and unpaved roads shall be conducted to evaluate the need for additional sweeping and/or water treatment.
- Traffic and material handling and processing operations shall be limited to essential activities.

	TITLE:	PROCEDURE NO.:
SOLUTIONS FOR YOUR ENVIRONMENT®	Edw. C. Levy Co. – Levy Plant 6 Daily BOF FD Emission Controls Inspection	ENV-005-F028

Date:_____ Day of week:_____ Time:_____ Inspector Name:_____ Inspector Signature:_____

Emission Control	Operating Normal (Check One)		Corrective Action Required? (Y or N)	Description of Equipment Failure(s), Cause of Failure(s) Corrective Actions Taken and/or Required (Include date and time when failure was observed and corrective actions began and were completed)
BOF Slag Pits Water Sprays *	Pass ☐	Fail ☐		
BOF Skull Station Dust Bosses (4) **	Pass ☐	Fail ☐		
BOF Raw Slag Stockpiles Connex Box Water Sprays *	Pass ☐	Fail ☐		
BOF Slag Pit Yard Maintain Drainage ****	Pass ☐	Fail ☐		
Bridge Conveyor & Slag Plant Belt Scrapers ***	Pass ☐	Fail ☐		
Bridge Conveyor & Slag Plant Water Sprays *	Pass ☐	Fail ☐		
Runway Slag/BOF Dust Bosses (2) **	Pass ☐	Fail ☐		

* Water sprays pass if water comes out of the nozzle with a pressure and volume consistent with normal operation. If the pressure or volume of water is lower than normal, the water sprays fail. If no water comes out, the water sprays fail.

** Dust Boss Sprays pass if water comes out of the nozzles with a pressure and volume consistent with normal operation. If the pressure or volume of water is lower than normal, the dust boss sprays fail. If >20% of nozzles are plugged, the water sprays fail.

*** Belt scrappers pass if the belt scrapper is in contact with the belt and is not falling off the return side of the belt (Observe shoreline under bridge conveyor)

**** BOF Slag Pit Yard shall maintain a grade that minimizes ponding water. If water is ponding in the BOF Slag Pit Yard check "Fail" and note in corrective actions that the site needs to be graded.

Levy Plant 6
Consent Order: AQD No. 2024-13
Annual Training Record

Employees must successfully complete training on the requirements of Consent Order AQD No. 2024-13, including the requirements of the associated fugitive dust control plan (FDCP) and Nuisance Minimization Plan for Odor (NMP-O). Instruction shall include training on conducting inspections, documenting observations and inspections, identifying abnormal conditions, and implementing corrective actions.

I certify that I have been trained on Consent Order: AQD No. 2024-13, including the requirements of the associated FDCP and NMP-O.

Employee Name _____ **Training Date** ___/___/_____

Employee Signature _____

Plant Manager's Signature _____

TRAINING CHECKLIST

This program includes all the elements described below:

Consent Order: AQD No. 2024-13

- ☐ Basis for Consent Order
- ☐ Operations Covered by Consent Order
- ☐ Elements of the Consent Order

Fugitive Dust Control Plan (FDCP) & Nuisance Minimization Plan – Odor (NMP-O)

- ☐ Operations Covered
  - ☐ Control Measures – BF Slag Handling
  - ☐ Control Measures – Kish Handling
  - ☐ Control Measures – BOF Slag Handling
  - ☐ Control Measures – Caster Slag Handling
  - ☐ Control Measures – Pot Slagging
  - ☐ Control Measures – Roads and Stockpiles
- ☐ Inspection & Monitoring Requirements
- ☐ Preventative Maintenance Requirements
- ☐ Abnormal Conditions – Corrective Actions & Management Notification Requirements
- ☐ Record Keeping Requirements
- ☐ Response to Detection/Notification of Alleged Off-Site Fallout or Odor Procedure

SOLUTIONS FOR YOUR ENVIRONMENT®	**TITLE: Levy Plant 6** **Fallout Observation Response Log**	**PROCEDURE NO.:** **ENV-005-F025**

PURPOSE: **To ensure a consistent response and investigation for fallout observations made within the steel mill by Levy or mill employees, or from off-site locations.**

PROCESS: **Visual observations of fallout (when possible) and potential fallout sources. When fallout is identified, identify the wind conditions during the timeframe of alleged fallout and investigate potential upwind sources.**

Complete the information in the form below and on the maps on the following pages

Observation Made By: _____ CIRCLE ONE: MILL STAFF LEVY STAFF COMMUNITY

Observation Date and Time:_____

Observation Location:_____

Time Fallout Was First Observed:_____

Last Known Time Without Fallout:_____

Description of Fallout: (color, grain size, deposition pattern, etc:_____

_____

Date and Time Levy Management Was Notified:_____

Observer or Regulator Statement:_____

_____

_____

Were Photos Obtained? _____

Were Samples Collected? (Describe and attach chain of custody) _____

_____

Could Site Be Visited? (if no, why not? Otherwise list locations visited and observations made)_____

_____

_____

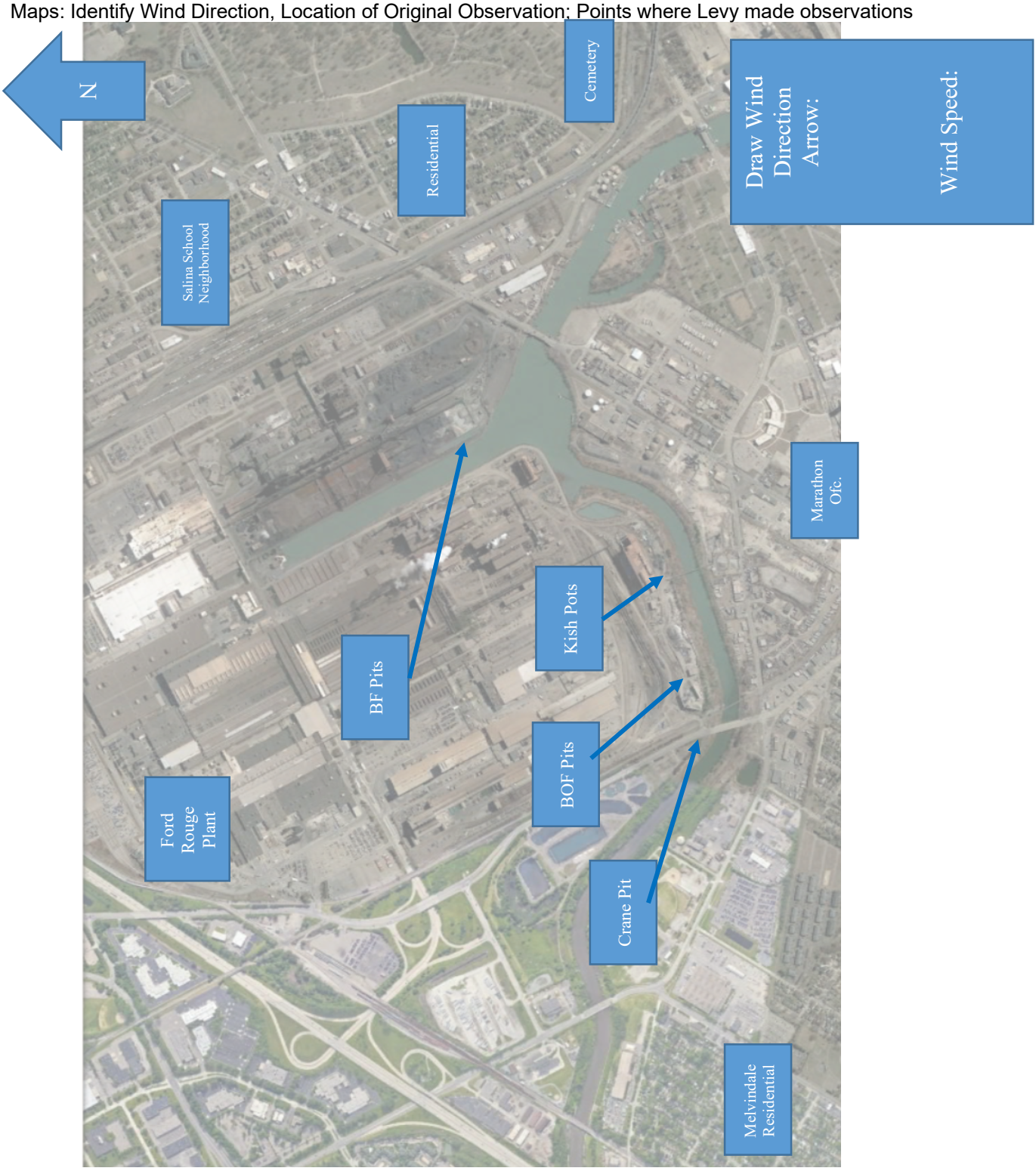
Levy Investigator: _____ Date and Time Investigation Began:_____

Use Mellon St./6A Weather Station: https://tempestwx.com/station/34503/

Weather at Observation: Temp:_____Wind Direction:_____Speed:_____MPH Humidity:_____%

SOLUTIONS FOR YOUR ENVIRONMENT®	**TITLE: Levy Plant 6** **Fallout Observation Response Log**	**PROCEDURE NO.:** **ENV-005-F025**

Maps: Identify Wind Direction, Location of Original Observation; Points where Levy made observations



SOLUTIONS FOR YOUR ENVIRONMENT®	**TITLE: Levy Plant 6** **Fallout Observation Response Log**	**PROCEDURE NO.:** **ENV-005-F025**

Interview relevant operators for any fallout events during their shift. Document interviews and attach to this Response Log.

BLAST FURNACE AREA ACTIVITIES - DURING THE FALLOUT TIMEFRAME

Number of Pots Poured: _____ Were Any Iron-Heavy Pots Poured?_____

Time/Date of Iron-Heavy Pots:_____Iron-Heavy Pot Communicated to Levy by Mill? _____

For Iron-Heavy Pots, What Procedures Were Used to Control Dust?_____

_____

Was Truck Loading or Pit Digging Occurring? If so, when?:_____

_____

Were Any Unusual Fallout Situations Observed? If so, describe._____

_____

RUNWAY SLAG ACTIVITIES - DURING THE FALLOUT TIMEFRAME

Number of Times Runways were Dug: _____

Was any runway slag placed outside in a temporary stockpile: _____

Time/Date of runway slag placed in temporary stockpile:_____

_____

Were dust bosses operating at BOF: _____

Was the pallet box watering station operational: _____

Were Any Unusual Fallout Situations Observed? If so, describe._____

_____

SOLUTIONS FOR YOUR ENVIRONMENT®	**TITLE: Levy Plant 6** **Fallout Observation Response Log**	**PROCEDURE NO.:** **ENV-005-F025**

Interview relevant operators for any fallout events during their shift. Document interviews and attach to this Response Log.

KISH POT AREA ACTIVITIES - DURING THE FALLOUT TIMEFRAME

Number of Pots Dumped: _____

Date and Time: Station No. Watering Time: Dump Temperature: Dumping Operator:

Pot 1) : _____

Pot 2) : _____

Pot 3) : _____
(Use additional sheets if necessary)

Were Watering Stations Operating Correctly?_____

Did Kish Knock Station Digging Occur?_____

Did Kish Truck Loading Occur?_____

What Size Material Was Loaded?

Small to Trucks for Off-Site Transport:_____

Large Kish Taken to Drop-Ball Crane Pit:_____

Were Any Unusual Fallout Situations Observed? If so, describe._____

_____

SOLUTIONS FOR YOUR ENVIRONMENT®	**TITLE: Levy Plant 6** **Fallout Observation Response Log**	**PROCEDURE NO.:** **ENV-005-F025**

Interview relevant operators for any fallout events during their shift. Document interviews and attach to this Response Log.

BOF PIT AREA ACTIVITIES - DURING THE FALLOUT TIMEFRAME

Number of Pots Poured: _____ Were Any Steel-Heavy Pots Poured?_____

Time/Date of Steel-Heavy Pots:_____Steel-Heavy Pot Communicated to Levy by Mill? _____

For Steel-Heavy Pots, What Procedures Were Used to Control Dust?_____

_____

Were Water Sprays on Pits Operating Properly?:_____

_____

Was Truck Loading or Pit Digging Occurring? If so, when?:_____

_____

Was Material Being Moved Between Stockpiles or Watering Areas? If so, when and where?_____

_____

_____

Were Any Unusual Fallout Situations Observed? If so, describe._____

_____

SOLUTIONS FOR YOUR ENVIRONMENT®	**TITLE: Levy Plant 6** **Fallout Observation Response Log**	**PROCEDURE NO.:** **ENV-005-F025**

Interview relevant operators for any fallout events during their shift. Document interviews and attach to this Response Log.

BOF KNOCK STATION AREA ACTIVITIES - DURING THE FALLOUT TIMEFRAME

Number of Pots Dumped in Knock Station:_____

Were Dust Bosses Operating Properly and Used During Dumping and Digging?:_____

_____

Was Material Being Moved Between Stockpiles or Watering Areas? If so, when and where?_____

_____

_____

Were Any Unusual Fallout Situations Observed? If so, describe._____

_____

CRANE PIT AREA ACTIVITIES - DURING THE FALLOUT TIMEFRAME

Operating Hours of Crane:_____

Tons Processed in Crane Pit:_____

Tons Loaded out of Crane Pit:_____

Were Any Unusual Fallout Situations Observed? If so, describe._____

_____

SOLUTIONS FOR YOUR ENVIRONMENT®	**TITLE: Levy Plant 6** **Fallout Observation Response Log**	**PROCEDURE NO.:** **ENV-005-F025**

Interview relevant operators for any fallout events during their shift. Document interviews and attach to this Response Log.

SLAG CONVEYOR SYSTEM ACTIVITIES - DURING THE FALLOUT TIMEFRAME

Operating Hours:_____

Material(s) Being Conveyed:_____

Tons Fed Into Conveyor System:_____

Were Water Sprays on Conveyors Operational?:_____

Describe use of Were Water Sprays:_____

Were Any Unusual Fallout Situations Observed? If so, describe._____

_____

SOLUTIONS FOR YOUR ENVIRONMENT®	**TITLE: Levy Plant 6** **Fallout Observation Response Log**	**PROCEDURE NO.:** **ENV-005-F025**

Review Camera Footage and Record Observations on the Fallout Observation Response Log (next page)

Were Any Potential Fallout Events Observed on Camera?_____

_____

_____

Describe Any Corrective Actions Made: _____

_____

_____

_____

_____

Date/Time Sent to Mill and Levy Environmental:

Sent By:_____ Sent To:_____

Are Updates to the Fugitive Dust Plan (FDP) Required?_____

_____

_____

If Updates Were Required, Document Submittal to EGLE Within 30 Days:_____

_____

Appendix A: Camera Review Log

Camera Number	Area Viewed	Start Time	End Time	Observation	Footage Saved?

Levy Plant 6 - Critical Parts Inventory for Emission Control Systems

No. Stored	Part Description	Storage Location
	BOF Slag Pit Area	
2	2 rings for DB30-Knock station	millwrights toolroom/conex box
2	2 rings for DB60-Knock station	millwrights toolroom/conex box
1	10 hp pump-Knock station	Connex by C-99
1	rain bird-stock pile	BF Connex box
1	7.5 hp pump-Water pile	Connex by C-99
3	remotes for dust boss	BF Trailer Office
	Kish Pot Watering Station	
1	15 hp pump-Kish watering	Connex by C-99
4	5-gal buckets of potassium permanganate	Kish Pot Watering Station Building
1	55-gal drum of nalco Oasis	Kish Pot Watering Station Building
2	Kish water spray nozzles	Kish Pot Watering Station Building
4	ipad controllers	BF Trailer Office
	Pallet Box Watering Station	
1	7.5 hp Pump -Debris watering	Connex by C-99
	Blast Furnace Slag Pits	
2	2500 gpm pump	Connex by C-99/ BF Connex
3	75 hp motors	BF Connex Box
4	5-gal buckets of potassium permanganate	BF Connex Box
1	55-gal drum of Nalco Oasis	BF Connex Box
1	rain birds-stock pile	BF Connex Box
2	radar level sensor	BF Connex Box
	Runway Slag / BOF Bldg	
6	Pallet boxes-Runway Digging	Staged by Runway/Plant 6

Revision Date: 5-30-2024

Levy SEP Proposal

1. Name and Location of Entity Subject to the Enforcement Action

The Edw. C. Levy Co. ("Levy"), Levy Plant 6 in Detroit (SRN B4243) and Levy's operations at the Dearborn Works in Dearborn (SRN A8640: ROP § 2)

2. Regulatory Information

The SEP in conjunction with the proposed fine will resolve the following violation notices pertaining to Levy's Plant 6 and Levy's operations at the Dearborn Works:

EGLE alleges that the Company emitted air contaminants that caused fallout beyond the facility's property line in violation notices dated: November 21, 2018; July 16, 2019; September 12, 2019; December 21, 2020; November 18, 2021; August 12, 2022; October 13, 2022; July 28, 2023; July 31, 2023; October 6, 2023; and April 2, 2024.

EGLE alleges that the Company emitted odors from the blast furnace slag pits above nuisance thresholds in the violation notices dated: December 26, 2019; January 28, 2020; March 4, 2020; April 2, 2021; May 10, 2021; and September 22, 2021.

3. Project Name

Haul Truck Replacement Project

4. Project Manager:

Tom Green
Edw. C. Levy Co.
9300 Dix Avenue
Dearborn, MI 48120
313-690-0139
tgreen@edwclevy.net

5. Geographical Area to Benefit from the Project

Portions of Wayne County around Levy's Plant 6 and the Dearborn Works, including Dearborn and Southwest Detroit, will directly benefit from the reduced emissions associated with Levy's material hauling process at these Levy operations.

6. SEP Categories

The Haul Truck Replacement Project meets the requirements for the following SEP categories under EGLE's SEP Policy (#04-002): Pollution Prevention and Climate Change Mitigation and Preparedness.

7. Project Description

Levy proposes to purchase a 2024 Terberg RORO Yard Tractor (truck), with Tier 4 Final Emission Controls, to replace a 1965 Euclid R50-12LD haul truck, with Tier 0 emission controls, that is currently in use at Levy Plant 6. Specific details on the 2024 Terberg truck are listed below:

Type of Equipment:	Terberg RORO Yard Tractor

Make and Model:	Terberg RT403 4X4
Year Built:	2024
Emission Tier:	Tier 4 Final
Engine Size:	Volvo TAD1172VE
Cost:	$354,950 (Quote on January 30, 2024)

The new 2024 Terberg truck will be used to perform the same jobs that are currently performed by the existing 1965 Euclid truck. These jobs include moving bulk materials between multiple locations within the Dearborn Works, including transport of caster slag from the Basic Oxygen Furnace to Levy Plant 6.

The 1965 Euclid haul truck will be decommissioned and sold as scrap metal.

8. Expected Environmental Benefits

The Environmental Protection Agency (EPA) has implemented a series of emissions standards to regulate pollutants emitted by various types of engines, including those used in vehicles, construction equipment, and industrial machinery. The Tier standards, ranging from Tier 0 to Tier 4, represent successive stages of regulations aimed at reducing harmful emissions.

Here are the key differences between EPA Tier 0 and Tier 4 emissions standards:

Introduction:

- Tier 0:
  Introduced in 1996, Tier 0 represents the baseline emissions standard. It imposed no specific restrictions on emissions and mainly served as a starting point for subsequent, more stringent regulations.
- Tier 4:
  Represents the most stringent emissions standards to date, reflecting advancements in emission control technology and a stronger regulatory focus on environmental protection.

Pollutant Reduction:

- Tier 0:
  Had no specific targets for reducing pollutants such as nitrogen oxides (NOx), particulate matter (PM), hydrocarbons (HC), or carbon monoxide (CO).
- Tier 4:
  Imposes stringent limits on NOx, PM, HC, and CO emissions, typically requiring reductions of up to 90% or more compared to Tier 0 levels.

Technology Requirements:

- Tier 0:
  Did not mandate the use of advanced emissions control technologies. Engines compliant with Tier 0 standards typically employed simple mechanical designs with minimal emission control systems.
- Tier 4:

Requires the integration of advanced emissions control technologies such as:

- Diesel Particulate Filters (DPF): Traps and removes particulate matter from the exhaust stream.
- Selective Catalytic Reduction (SCR): Uses a catalyst and a reducing agent (usually urea) to convert NOx into nitrogen and water.
- Exhaust Gas Recirculation (EGR): Reduces NOx emissions by recirculating a portion of exhaust gases back into the engine cylinders.
- Advanced Fuel Injection Systems: Employs precise control of fuel delivery to optimize combustion and minimize emissions.

Fuel Quality:

- Tier 0:
  Did not have specific fuel requirements.
- Tier 4:
  Often mandates the use of Ultra-Low Sulfur Diesel (ULSD) fuel to enable the proper functioning of emissions control systems like SCR and DPF. Low sulfur content in fuel is essential for preventing catalyst poisoning and maintaining the effectiveness of emission control devices.

In essence, the transition from Tier 0 to Tier 4 represents a paradigm shift in emissions regulation, with Tier 4 standards driving the adoption of advanced emission control technologies that significantly reduce the environmental impact of diesel engines.

The estimated annual air emission reductions from this project are shown below in Table 1, which compares the annual emissions from the existing 1965 Euclid truck to the new 2024 Terberg truck.

Table 1: Annual Emissions Reduction Estimate

Pollutant	Existing Truck Euclid R50-12LD	Replacement Truck 2024 Terberg	**Annual Reduction**	**Percent Reduction**
	(tons)	(tons)	(tons)	(%)
NOx	62.2	0.09	62.11	99.9
PM	6.32	0.006	6.29	99.9
THC	9.28	0.03	9.25	99.6

9. Project Budget

a. Edw. C. Levy Co. is a Michigan S-corporation.

b. Capital costs of project: $354,953.00 to acquire the new haul truck.

c. Useful life of capital equipment in years: Estimated 25 years.

d. The one-time, non-depreciable costs and whether they are tax deductible: Not applicable.

e. Annual operation costs of the project: Not applicable.

f. Any savings generated as a result of the project: Estimated $3,500 “scrap value” for the decommissioned truck.

10. Project Schedule

A purchase order for the 2024 Terberg replacement haul truck shall be issued within 30 days of the effective date of the Consent Order of which this SEP is part.

The 2024 Terberg Replacement haul truck will be delivered and placed into service within 16 months after the effective date of the Consent Order.

The existing Tier 0 haul truck, Euclid R50-12LD, will be decommissioned and scrapped no later than 30 days after the replacement haul truck is placed in service.

11. Accounting

Not applicable.

12. Reporting

Levy will provide the following written reports to AQD:

(1) Purchase Order Notification – Levy shall provide written notice to EGLE of the issuance of a purchase order for the new truck. Notice will be sent within 15 days of issuing the purchase order and it will include a copy of the purchase order and an estimated delivery schedule.

(2) Quarterly Updates – Within the first 15 days of the end of each calendar quarter, Levy shall provide a written update to EGLE on the projected delivery status of the new truck. This update will include justification for any schedule changes.

(3) New Truck Commissioning – Levy shall provide written notice to EGLE within 15 days of when the new truck is placed into service.

(4) Existing Truck Decommissioning – Levy shall provide notice to EGLE within 15 days of decommissioning the existing truck and receiving documentation of the final sale price as scrap. The notice shall include documentation of the sale, including final sale price.

13. Prior Commitments and/or Regulatory Requirements:

a. Identify any applicable local, state, or federal regulations that would require implementation of this project or any part of this project: Not applicable.

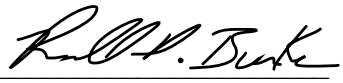
b. Identify any binding private commitments to implement this project or any part of this project: Not applicable.

c. Identify any other requirement to implement this project or any part of this project: Not applicable.

d. Indicate the time frame for implementation of the project under any commitments: Not applicable.

14. Certification of Expenditures by the Alleged Violator

With my signature below, I certify that the proposed SEP is solely attributable to the settlement of the current enforcement action and that no funding has been budgeted to the project prior to the approval of the project, nor is the proposed project funded by grants, donations, low interest loans, or other sources of funding not attributable to the alleged violator's normal budgetary process. Also, certify that the proposed project is not being done, nor will receive credit, as part of an environmental incentive or awards program offered by local, state, or federal government, industry, etc.



Signature

Russell Burke

Name

Vice President Operations

Title

Edw. C. Levy Company