

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

In the Matter of:

ABATEMENT OF WATER POLLUTION:

DFO-WRD22-001

Date Issued: 09/19/2022

Lockhart Chemical Company
4302 James P. Cole Boulevard
Flint, Michigan 48505

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DIRECTOR'S FINAL ORDER

THE DIRECTOR OF THE DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (EGLE), UNDER AUTHORITY OF PART 31, WATER RESOURCES PROTECTION, OF 1994 PA 451, AS AMENDED, MAKES THE FOLLOWING FINDINGS AND ORDER:

1. Section 3103 of Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act (NREPA), Act 451 of the Public Acts of 1994, as amended, MCL 324.3101 *et seq.*, authorizes EGLE to “protect and conserve the water resources of the state” and have “control of the pollution of surface or underground water of the state.”
2. Section 3109(1) of Part 31 states: “A person shall not directly or indirectly discharge into the waters of the state a substance that is or may become injurious to any of the following:
 - (a) To the public health, safety, or welfare.
 - (b) To domestic, commercial, industrial, agricultural, recreational, or other uses that are being or may be made of such waters.
 - (c) To the value or utility of riparian lands.
 - (d) To livestock, wild animals, birds, fish, aquatic life, or plants or the growth or propagation thereof be prevented or injuriously affected; or whereby the value of fish and game is or may be destroyed or impaired.”
3. Section 3106 of Part 31 states, in part: “The department shall take all appropriate steps to prevent any pollution the department considers to be unreasonable and against public interest in view of the existing conditions in any lake, river, stream, or other waters of the state.”
4. Section 3106 of Part 31 states, in part: “The department may promulgate rules and issue orders restricting the polluting content of any waste material or polluting substance discharged or sought to be discharged into any lake, river, stream, or other waters of the state.”
5. Section 3112(1) of Part 31 states: “A person shall not discharge any waste or waste effluent into the waters of this state unless that person is in possession of a valid permit from the department.”
6. Section 3112(4) of Part 31 states, in part: “If the department determines that a person is causing or is about to cause unlawful pollution of the waters of this state, the department may notify the alleged offender of its determination and enter an order requiring the person to abate the pollution or refer the matter to the attorney general for legal action, or both.”

FINDINGS

7. The Lockhart Chemical Company (Lockhart), owns and operates a manufacturing plant located at 4302 James P. Cole Boulevard, Flint, Genesee County, Michigan

(Facility), that manufactures performance additives for better surface protection including sulfonates, emulsifiers, rust prevention additives, corrosion inhibitors, and additives for metalworking fluids and greases.

8. Lockhart's business operations require storing process materials in bulk at the Facility. Several tanks and barrels containing chemicals and hazardous materials are stored throughout the Facility. Among other regulations, storage of chemicals and hazardous materials is regulated by Part 5, Spillage of Oil and Polluting Materials, and the administrative rules promulgated pursuant to Part 31, Mich Admin Code, R 324.2001 *et seq.* (Part 5 Rules).
9. Lockhart's operations result in the creation of wastewater, which is formed by the collection of storm water, rinse water, material leakage, and condensation water, all of which come into contact with the chemicals and hazardous materials and/or containers and any other spilled materials in and around the Facility. The wastewater is directed, due to the sloping of the floor, to the open concrete trench as well as through underground tunnels at the Facility.
10. Lockhart's intended water collection design provides for process water and stormwater that contacts process waste to gravity drain into collection manholes and then route through a series of underground tunnels and an open trench system. Attached **Figure A** depicts these underground tunnels highlighted in green and the open trench highlighted in pink. Hereinafter, the underground tunnels and open trench will collectively be referred to as "the System."
11. The System is gravity fed to the main sump house, which is highlighted in orange in **Figure A**. The sump house then pumps the wastewater into oil/water separators (OWS). The OWS are highlighted in purple in **Figure A**. Residual oil in the process water is collected in the OWS tanks before the process water is discharged to the sanitary sewer under a sewer use permit from the City of Flint.
12. Due to the layout of the Facility, including the System, a spill at the Facility can follow the slope of the paved surfaces that divert all wastewater to the System, then to the OWS, and ultimately to the City of Flint's Wastewater Treatment Plant. However, the System does not comply with regulations (including the Part 5 Rules), may allow unpermitted chemicals to be discharged to the City of Flint's Wastewater Treatment Plant, and has been shown to leak wastewater.
13. Televising, water integrity testing, and sampling analysis confirmed that the System is structurally unsound. Breaches in the System are resulting in wastewater leaks into the soil and surrounding groundwater, which eventually infiltrate the City of Flint's storm sewer and ultimately discharge polluting materials and substances into the Flint River.
14. The Lockhart Facility has a long-running history of problems with operations and maintaining compliance with environmental protection laws. The Facility's air emissions are regulated under Part 55 (Air Pollution Control), and it is subject to the requirements of Part 201 (Environmental Remediation) due to the presence of contaminants in groundwater that exceed state criteria. Lockhart's use of

chemicals in its operations requires compliance with Part 121 (Liquid Industrial By-Products) to ensure safe handling of hazardous substances. Lockhart must also characterize – or evaluate – its wastes under Part 111 (Hazardous Waste Management) to ensure that if its waste streams have the characteristics of regulated hazardous waste, that those wastes are handled and disposed of in compliance with Hazardous Wastes requirements. This Order only addresses Lockhart's ongoing violations of requirements to manage wastewater and stormwater properly and seeks to stop the unlawful discharges of oil and polluting materials to the Flint River. But EGLE has documented violations in every other regulatory program listed in this Paragraph 14 and is pursuing enforcement of those issues separately through the processes set forth for those programs.

15. On April 2, 2019, EGLE sampled at the Lockhart facility after receiving a complaint about the Facility from the community. EGLE verified the odor and confirmed unnatural colors and sheen in the Flint River near the Facility alleged by the complainant, and analytical results of the samples confirmed the presence of several chemicals that could cause violations of Rule 57 of Part 4, Water Quality Standards, administrative rules promulgated pursuant to Part 31, Mich Admin Code, R 323.1041 *et seq.* The conditions prompted a Violation Notice dated May 20, 2019, which included requests for corrective action to stop the unauthorized discharges. Lockhart failed to address the violations and concerns identified in the Violation Notice.
16. On April 5, 2021, EGLE conducted an inspection at the Facility and reviewed records at the Facility to evaluate whether Lockhart was maintaining required inventories, inspection plans, and schedules. The inspection and record review, which was attended by representatives from Lockhart, raised concern about Lockhart's compliance with Part 31 and the Part 31 rules with respect to its wastewater and storm water management.
17. On April 15, 2021, EGLE conducted a follow-up inspection and confirmed violations of Part 31, including the Part 5 Rules that regulate proper storage and containment of oil and other polluting materials. During the following months, EGLE communicated extensively with Lockhart about how to come into compliance. Lockhart did not correct the vast majority of the violations.
18. On September 21, 2021, EGLE issued a Violation Notice to Lockhart. Among other things, the Violation Notice indicated that the System was not a secondary containment system that would identify or prevent the release of oil and regulated polluting materials, and as such it did not comply with Michigan's Part 5 Rules. The Violation Notice also documented violations of Lockhart's Industrial Storm Water permit, NPDES COC No. MIS MIS510265. The Violation Notice required several action items, including that Lockhart provide a detailed design for all parts of the Facility's secondary containment structure, submittal of a plan detailing how it would come into compliance with the Part 5 Rules, and submittal of details regarding the current materials onsite and details of the System. Again, EGLE requested specific updates, schedules, and corrective actions to address the violations and offered assistance to Lockhart.

19. Lockhart submitted responses to the Violation Notice on November 19, 2021 and January 20, 2022. On February 24, 2022, EGLE sent Lockhart a follow-up letter to request additional items and clarification from Lockhart, because the responses were inadequate and would not address the problems at the Facility. A response from Lockhart to EGLE's follow-up letter was received on March 24, 2022. On May 26, 2022, EGLE sent another follow-up letter to request additional information and clarification. A response was due June 27, 2022. To date, Lockhart has not addressed or resolved the violations cited in the September 21, 2021 notice in spite of repeated, detailed requests that Lockhart take specific actions including improvements to its recordkeeping, undertaking self-inspections, and fixes to the faulty and leaking wastewater conveyances in and under the Facility.
20. On June 15, 2022, EGLE received a complaint of oil in the Flint River. In response, EGLE investigated the area of the discharge to determine the source and deployed soft boom at Outfall 001 which discharges to the Flint River to aid in containing the discharge. EGLE's investigation identified Lockhart's Facility as the likely source. As part of the investigation, staff inspected the storm sewer under the Lockhart facility. Staff observed oil and other substances in Manhole 7 of the storm sewer downgradient of the Lockhart Facility. The oil and other substances were not observed in Manhole 1 upgradient of Lockhart's Facility. Because the oil and other substances were present just downgradient but not upgradient of the Lockhart Facility, EGLE was able to determine that the source of the oil and other substances was likely originating from the Lockhart Facility.
21. Lockhart disputed that it was responsible for the discharge of oil and other substances to the Flint River. But based on the evidence already collected, EGLE continued to be concerned that the System was leaking, and that contamination continued to seep into the groundwater, soil, storm sewer, and the Flint River.
22. The repeated failures of Lockhart to take specific, requested actions to keep its Facility from leaking oil and polluting substances into the environment, and failures to maintain basic safety practices, followed by a denial of responsibility for the violations at its Facility, led EGLE to utilize state resources to establish Lockhart's responsibility and take steps to immediately contain the pollution discharging from the Lockhart Facility into the Flint River.
23. On June 17, 2022, the City of Flint began televising the storm sewer under the Lockhart Facility. Due to the need for a smaller and more mobile camera, on June 19, 2022, EGLE procured a contractor to televise the storm sewer under the Lockhart Facility. EGLE observed oil and other substances entering the storm sewer underneath Lockhart's Facility in the area of the System. On June 28, 2022, televising identified the primary area where wastewater was entering the storm sewer, which was directly under Lockhart's System.
24. EGLE conducted sampling of the oil and other substances and submitted the samples for a laboratory chemical ("fingerprinting") analysis. On June 17, 2022, EGLE received the results, which confirmed that the material at Outfall 001 into the Flint River matched samples taken from within Lockhart's Facility, including

(1) manhole 18, which opens into Lockhart's faulty System; and (2) used oil tank #104.

25. On June 28, 2022, Lockhart conducted water integrity testing of the System. The testing confirmed that there was a breach in the System that resulted in wastewater leaking into the ground directly above the storm sewer. From there, the wastewater infiltrated into the storm sewer that leads to the Flint River.
26. After several communications between EGLE and Lockhart, on August 16, 2022, EGLE issued Lockhart a second Violation Notice. The second Violation Notice stated that Lockhart had an unauthorized discharge of oil and other substances to the Flint River in violation of Part 31 and its industrial stormwater permit. The Second Violation Notice also incorporated the violations included in the September 21, 2021 Violation Notice.
27. The second Violation Notice required Lockhart to submit a response by August 26, 2022, which was extended to September 9, 2022, to do the following:
 - Minimize the amount of boiler condensate released to the System;
 - Document actions taken to-date to prevent spills/releases on-site;
 - Verify that the drain under Tank 510 has been capped, pursuant to EGLE's conversation with Lockhart and NTH on August 15, 2022;
 - Notify EGLE of Lockhart's intent to install containment curbing around the pumps on-site to address leaks, or whether plastic containers will be put in place to capture all leaks, along with a date by when this was to be implemented;
 - Identify the on-site staff responsible for daily inspections and spill responses;
 - Certify that all appropriate staff have received adequate spill response training;
 - Submit a plan, with a schedule, to retrofit the pumping system so that the wastewater and stormwater is continuously pumped out of the open trench into frac tanks, to prevent improper use of the System for wastewater and storm water storage;
 - Submit photographs documenting that areas where spills have occurred have been adequately cleaned; and
 - Submit a topographic survey of the site as part of the Pollution Incident Prevention Plan.
28. On September 9, 2022, Lockhart submitted its initial response to the Violation Notice. Instead of providing plans and other information to address the problems, Lockhart claimed that the System was structurally sound. EGLE reviewed Lockhart's response and disagrees with Lockhart's conclusion that the System is structurally sound.
29. The second Violation Notice also required Lockhart to submit a response by September 16, 2022, to include the following:

- A plan, with a schedule of dates, for the bulkheading and permanent bypass of the storm sewer or relining of the storm sewer underneath the site.
- A plan, with a schedule of dates, to reline/repair compromised pipes from the OWS to the sanitary sewer.
- A short-term plan, with a schedule of dates, for managing storm water on-site, including actions that will be taken to minimize the amount of exposure of storm water to industrial materials.
- A short-term plan, with a schedule of dates, for minimizing the amount of boiler condensate, and its exposure to industrial materials, entering the system.
- A long-term plan, with a schedule of dates, for managing storm water and wastewater, including alternatives for relining, replacing, and/or abandoning portions of the tunnel system and improving the storage of industrial materials.
- A schedule for implementing approvable secondary containment pursuant to the Part 5 Rules. The schedule would include submission of the design for EGLE's review and approval.
- A revised Stormwater Pollution Prevention Plan that includes a list of significant spills and significant leaks of polluting materials that occurred at areas exposed to precipitation or that otherwise discharge to a point source at the Facility over the three years prior to issuance of NPDES Certificate of Coverage No. MIS510265. The list would include the date, volume, exact location of the release, and actions taken to clean up the material and/or prevent exposure to storm water runoff or contamination of surface waters of the state.
- A schedule for maintenance and cleaning activities at the site to minimize the exposure of storm water to industrial materials to the maximum extent practicable.
- A list of all owners and lessees of the Facility and associated parcels, including contact names, addresses, and parcel numbers.

The response due on September 16 was received on that day and has been deemed deficient by EGLE.

30. On September 12, 2022, EGLE staff inspected the Lockhart Facility the day after a rain event. EGLE staff discovered that Lockhart had resumed use of a portion of the System, without properly notifying EGLE, and EGLE staff observed an oily substance, sheens, and significant solvent-like odors in the System, specifically at Manhole 18. EGLE also observed similar black oily substances on the soft booms and the buildup of brown stringy waxy material in the Flint River at Outfall 001. In addition, EGLE staff observed that the hard boom had been displaced which was allowing water at Outfall 001 to enter the Flint River without contacting containment measures. EGLE notified Lockhart of the discharge and directed Lockhart to replace the boom and remove accumulated substances from the Flint River as appropriate. On September 14, EGLE collected samples at Manhole 18 at the Facility and at Outfall 001 and submitted them for a laboratory chemical fingerprinting and library analysis. EGLE is awaiting those analyses.

31. Lockhart has refused to take the necessary actions to stop the discharges of pollutants from its Facility, despite multiple opportunities. The September 2022 release due to a rainstorm demonstrated that oil and polluting materials reaching the Flint River from the breaches in the Lockhart System are likely to continue. This was confirmed by inspections of the System and other conditions at the Facility showing that the Facility is not capable of controlling its pollution with its existing infrastructure. Accordingly, Lockhart's failure to address the conditions at the Facility poses an unreasonable risk to public health and the environment due to foreseeable future releases to the Flint River.
32. This Order is necessary to "protect and conserve the water resources of the state" and to "control the pollution of surface [and] underground water of the state."
33. This Order is necessary because Lockhart's use of the System has resulted in direct and indirect discharges into the waters of the state of substances that are injurious or may become injurious to the public's health, safety, and welfare and the environment.
34. This Order is necessary to prevent pollution that EGLE considers "unreasonable and against public interest in view of the existing conditions in underground water and the Flint River."
35. This Order is necessary to "restrict[] the polluting content of any waste material or polluting substance discharged or sought to be discharged into any lake, river, stream, or other waters of the state."
36. This Order is necessary because EGLE has determined that Lockhart "is causing or is about to cause unlawful pollution of the waters of this state," and despite EGLE's repeated notifications and instructions to Lockhart, it has not resolved the pollution or polluting conditions at the Facility. This Order is necessary to require Lockhart to "abate the pollution."

ORDER

IT IS THEREFORE ORDERED THAT Lockhart take the following actions to prevent violations of Part 31 of the NREPA, and to abate pollution of the waters of the state of Michigan:

37. Immediately bring frac tanks onto site and pump all wastewater and stormwater out of the System for waste characterization and transport to the Flint's Wastewater Treatment Plant or other approved disposal option for treatment and disposal. Characterization and transport of all wastewater and stormwater from the frac tanks must comply with state and federal law, including Parts 111 and 121 and the Resource Conservation and Recovery Act. Lockhart must comply with all terms of its sewer use permit with the City of Flint, which includes requirements that only boiler blowdown, condensate, and rain runoff may be discharged to the wastewater treatment plant from Lockhart. Lockhart must

dispose of all waste streams using licensed, lawful disposal options. Lockhart must continuously pump wastewater from the open trench using an automatic pumping system with a backup, to the OWS so that no wastewater or stormwater is stored in the entirety of the trench.

38. Immediately cease all use of the underground tunnels that convey wastewater and other materials to Flint's Wastewater Treatment Plant, which are highlighted in green in attached **Figure A**.
39. Immediately and continuously maintain boom in place in the Flint River at Outfall 001, including monitoring boom on a daily basis, replacing boom as necessary, and ensuring proper disposal of used boom.
40. Immediately grant access to EGLE and contractors hired by EGLE to the Lockhart Facility for the purpose of protecting the public health, safety, welfare, and the environment, including but not limited to the purpose of taking samples, conducting inspections, and overseeing any actions required under this Order or actions required to comply with applicable law.
41. Within 10 days of the Effective Date of this Order, submit a plan for EGLE's review to repair or replace the entire open trench (depicted in pink on **Figure A**), which means to either re-line or otherwise fix the breaches in the open trench. The plan can include limited use of the open trench pending completion of the repair or replacement plan for the entirety of the open trench, in accordance with the pumping requirements in paragraph 37 of this Order. If Lockhart intends to utilize the open trench for the conveyance of storm water and wastewater, the plan submitted to EGLE must be stamped by a certified professional engineer and the plan must include a construction completion date no later than December 16. The plan must also include a method to transport the wastewater from the OWS to the WWTP outside of the System.
42. Within 10 days of the Effective Date of this Order, submit a plan for EGLE's review to repair, replace, or seal off the underground tunnels (depicted in green on **Figure A**), which means to either re-line the tunnels or otherwise fix the breaches in the tunnels or seal off and permanently end use of the underground tunnels.
43. Within 10 days of the Effective Date of this Order, permanently seal the open trench sump (labeled as tunnel sump in **Figure A**) and seal and repair all leaks and breaches in manhole 10A. Documentation, including photographic evidence, of work completed shall be submitted to EGLE immediately after completion.
44. The terms of this Order shall remain in effect until further notice, in the form of written authorization from EGLE.

PENALTIES AND COSTS

45. Lockhart is hereby notified that EGLE reserves its rights to seek recovery of all costs and expenses, associated with bringing Lockhart into compliance with Part 31 of the NREPA, including attorney fees and damages to the natural resources of the state, and to seek penalties provided by law for all violations of Part 31 of the NREPA.

PENALTIES FOR FAILURE TO COMPLY

46. Section 3115(10) of Part 31 of the NREPA, allows for EGLE to request the Attorney General to commence a civil action for appropriate relief, including the imposition of a civil fine of up to \$25,000 per day per violation of this Order. Failure to comply with this Order may result in further enforcement actions being taken against Lockhart. EGLE reserves its rights to pursue all enforcement actions provided by statutory and common law.

GENERAL CONDITIONS

47. EGLE retains jurisdiction to enter further Orders and to take such other enforcement actions as the Department deems necessary or as the facts and circumstances warrant. Compliance with the terms of this Order shall not constitute a waiver or release of liability for violations of Part 31 of the NREPA noted to date or for any subsequent violations. EGLE retains its rights to pursue enforcement activities for all violations of statutes, permits, rules, or orders.
48. In the event any act required of Lockhart by this Order is delayed due to Force Majeure, Lockhart's performance may be delayed until such conditions abate. Force Majeure shall mean an occurrence or non-occurrence arising from causes beyond the control of, and without fault of Lockhart, including, by way of example, an Act of God, labor strikes, untimely review of submissions by EGLE, and acts or omissions of third parties that could not have been avoided or overcome by the Lockhart's due diligence and which delay the performance of an obligation under this Order. Force Majeure does not include unanticipated or increased costs, changed financial considerations, or failure to obtain a permit or license in a timely fashion as a result of Lockhart's actions or omissions. Lockhart shall notify the Water Resources Division, Director at EGLE by telephone within five business days of discovering any event which constitutes a Force Majeure. Verbal notice shall be followed by written notice within ten business days describing the anticipated length of delay, cause of delay, measures to be taken to address the delay, and the anticipated timetable for implementing those measures.

IT IS SO ORDERED.

DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

A handwritten signature in blue ink, appearing to read "Liesl Eichler Clark", is positioned above a horizontal line.

Liesl Eichler Clark

EGLE Director

September 19, 2022

LOCKHART CHEMICAL COLLECTION SYSTEM SITE MAP

LEGEND

- Lockhart Wastewater Collection Piping
- Lockhart Wastewater Collection Structure Identification Number
- Flow Direction
- RD Roof Drain
- FD Floor Drain
- OVERHEAD PIPE, PUMPS WASTEWATER COLLECTION FROM SUMP BUILDING TO OIL WATER SEPARATOR
- Sanitary Sewer**
- **City of Flint sanitary sewer alignment data is incomplete and not yet been verified.
- Discharge Valve, from Oil Water Separator to City Sanitary Sewer
- City of Flint 60" Storm Sewer***
- ***City of Flint 60" storm sewer alignment has been approximated based on comparison of historical documents provided by the City of Flint DPW and CCTV measurements from 6/17/2022.

Facility Sump Building

Underground tunnel

Open concrete trench

OWS location

Concrete Surface

Gravel Surface

Asphalt Surface

Topographic Grade Line

DISCLAIMER: COLLECTION PIPING AND CITY SEWER ALIGNMENTS ARE BASED ON CURRENT BEST KNOWN INFORMATION (6/17/2022). THIS SITE MAP IS CONSIDERED A WORKING DRAWING.