



GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
WARREN DISTRICT OFFICE



LIESL EICHLER CLARK
DIRECTOR

January 31, 2020

CERTIFIED MAIL – 7019 1120 0001 7762 4822
RETURN RECEIPT REQUESTED

Revere Dock, LLC
Resident Agent: Mr. Steven Erickson
2217 Lake Avenue
North Muskegon, Michigan 49445

Dear Mr. Erickson:

SUBJECT: Compliance Communication: Notice of Section 20107a of Part 201 Obligations
Former Revere Copper and Brass
5851 West Jefferson, Detroit, Wayne County, Michigan 48209
EGLE Site ID No. 82000136

The Department of Environment, Great Lakes, and Energy (EGLE) has received your Interim Response Plan (Plan) dated January 24, 2020, submitted on your behalf from PM Environmental in response to EGLE's Compliance Communication dated December 11, 2019, for property located at 5851 West Jefferson, Detroit, Wayne County, Michigan (Property). The Compliance Communication requested documentation that demonstrated Revere Dock, LLC is in compliance with their obligations with respect to the hazardous substances and the environmental conditions present at the Property that are regulated under Section 20107a of Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451 (NREPA), as amended.

Pursuant to Section 20107a of Part 201 and Part 10 of the Part 201 Administrative Rules (collectively, commonly referred to as "due care"), a person who owns or operates property that he or she has knowledge is contaminated is required to undertake measures to protect the public health, safety, and welfare (i.e., due care) with respect to hazardous substances present in groundwater, soil, and vapor at the Property. This includes having gathered sufficient information to evaluate and determine the exposure pathways that may pose an unacceptable risk at the Property, as well as, sufficient information that demonstrates and documents that necessary response activities have been undertaken to prevent or mitigate all unacceptable exposures. In accordance with 20107a (1) persons who are owners or operators of contaminated property are required to comply with the requirements of 20107a(1)(a-f). EGLE records indicate Revere Dock, LLC has been the owner of the Property since October 23, 2015.

Revere Dock, LLC was requested to undertake response activities as necessary to mitigate off property risks resulting from erosion of surface soils at the property as required in the Part 201 Administrative Rules, Rule 1013(1)(b). In addition, due to the exposed soils at the river's edge, the potential direct contact risk resulting from the erosion of contaminated soils into the Detroit River was requested to be evaluated and addressed on an expedited basis.

The Plan stated that access to the Property is restricted and that the soils above direct contact are not accessible in the areas where adequate cover is not present due to a six-foot high chain link fence that has been installed. It was stated the fence will be inspected on a weekly basis, repairs made within one day and records of inspections maintained. This is an adequate proposal and EGLE does not have comments at this time to provide.

The Plan stated that in the area of the bank failure that gravel cannot be placed as a cover in all areas due to geotechnical concerns with the added weight of the gravel. It stated that 300-lineal feet of a five-foot curtain had been placed which surround the bank failure area and that up to 400-lineal feet of a 20-foot curtain would be placed. As discussed on our January 29, 2020, conference call and as documented in emails and photos dated January 30, 2020, the 20-foot curtain is not performing satisfactorily, and additional measures are needed to prevent further erosion of contaminated soils into the Detroit River. The bank collapse area is not protected adequately from erosion or for direct contact from river users and Revere Dock, LLC is not in compliance with their due care obligations. Additional measures should be implemented immediately to satisfy Revere Dock, LLC's due care obligations and a written update describing the additional measures taken to prevent erosion should be provided to EGLE by Friday, February 7, 2020. The written update should also include contingency measures for all erosion control measures and expedited timeframes the proposed contingency actions could be implemented. If silt curtains remain part of the erosion control measures, silt curtains should be inspected daily to ensure they are intact and operating as intended.

Previous EGLE correspondence, dated January 16, 2020, stated that staff have noted the presence of a potential sinkhole adjacent to the area of the collapse that was developing rapidly in size. EGLE expressed concerns that the sinkhole is allowing additional materials from the Property, including aggregate and contaminated soils, to enter the Detroit River and that the sinkhole may ultimately collapse and allow for additional aggregate and contaminated soils to enter the Detroit River. The Plan states "the area where the aggregate pile was removed extends several feet below the surface grade of the surrounding area and subsequently filled with water forming a pond". The current depth of the sinkhole ("pond") is 12 feet deep; indicating that settling is occurring. EGLE had recommended Revere Dock, LLC conduct an expedited evaluation of the sinkhole and develop a plan to prevent further discharges of contaminated soils and aggregate into the Detroit River both currently and in the future. The Plan did not include a technical assessment of the sinkhole or provide a plan to prevent further discharges of contaminated soils and aggregate into the Detroit River.

The Plan proposed geotechnical assessment of the Property starting February 5, 2020, that includes four geotechnical borings. EGLE recommends moving proposed boring location SB-11 closer to the shoreline, in the area where the fence is located southwest of the collapse area. The borings should be conducted with extreme caution to not cause additional erosion or settling. It has been noted that artesian conditions may exist in this area and contingency actions should be available if artesian conditions are encountered. Proposed actions also included installing inclinometers and evaluating surface monitors that were installed mid-January 2020. Geotechnical assessment work should also include assessment of the Property shortly before the collapse and the progression of the sinkhole until present time as well. The geotechnical assessment should also determine the status of the existing tieback system at the edge of the collapse area and whether the tiebacks and deadman are subject to further failure. The Plan should also determine the construction and long-term integrity of the tie backs.

The Plan proposed characterization of the aggregate, contaminated soils and sediments within the Detroit River using incremental sampling methodology. EGLE does not concur that this is an appropriate sampling methodology and has the following comments:

The aggregate and contaminated site soils likely cannot be distinguished from contaminated sediments due to the collapse of the area into the Detroit River and the disturbance and mixing of the sediments during the collapse. A more focused effort that identifies sediments via discrete physical characterization and analytical data would be more effective in identifying sediments if they can be determined to be limited to a certain area or depth. Discrete sampling would also take into account the known variability of the upland materials and the high levels of specific metals in the soils on the Property. Discrete sampling is also more appropriate given the variability often seen in contaminated sediments within the Detroit River.

Incremental sampling tends to average or "wash out" any discrete elevated locations and results in inaccurate representations of discrete contaminant levels. The data may end up showing that "average" levels are below relevant criteria or screening levels since the collapse material is heterogeneous and the contaminated material may only be a small part of the overall collapse material. This conclusion would not represent site conditions.

Sample locations to characterize aggregate and contaminated soils within the river should be shifted to address material on the downstream portion of the property since the bank collapse material would have been transported downstream when the bank failed. This may extend beyond the Property boundary line.

The Plan discussed removal of contaminated sediments. The extent to which contaminated sediments remain under the aggregate and contaminated site soils is unknown since the sediments may have dispersed or been distributed to adjacent areas. Any proposal that will specifically remove or disturb these contaminated sediments must be proposed and carefully reviewed by EGLE-Water Resources Division (WRD) staff in the future and a permit required for this activity. If sediment removal is proposed in the future, WRD would need to ensure that the dredging operation did not expose any contamination greater than what was previously at the surface. Based on historical data from the area, there may be higher concentrations of contaminants at depth.

If aggregate, contaminated soils, and contaminated sediments are to be dredged and placed on the Property, then the procedures outlined under the EGLE Sediment testing for Dredging Projects Policy (WRD-048) must be followed. The placement of the dredged material will be subject to Parts 31, 301, 303 and 325 of NREPA along with any due care requirements under Part 201. Placement of contaminated sediment upland on site will likely require a cover and a restrictive covenant. Policy WRD-048 also includes requirements for testing and analysis. The plan needs to include this testing and analysis as appropriate to determine the options for disposition of any dredged materials. This will include a review by WRD staff prior to any placement of dredge material.

NOTE: Any comments regarding a seawall, dredging, or placement of riprap will require a permit and additional review beyond this letter. No comments within this letter limit EGLE's ability to provide comments on future permit applications.

The Plan proposes to complete a feasibility assessment once contaminant data are collected and does not identify possible response actions that may be conducted in the future. Therefore,

EGLE cannot provide adequate comments in many areas since the ultimate fate of contaminated sediments or contaminated soils and aggregate in this area is not known and EGLE cannot predict what additional data may be needed to achieve those response actions. For example, if a seawall is planned then geotechnical borings along the riverfront may be needed. Alternatively, characterization of aggregate, contaminated soils and sediments in the Detroit River may be less rigorous if all materials will be dredged and contained at the Property. If placement of riprap is a potential option, habitat assessment may be required, etc.

It is requested that polychlorinated biphenyl analysis be included in surface water and groundwater sampling.

Under Section 1.2, Geology and Hydrogeology of the Plan, the Johnson Drain and Tonquish Drain are discussed. These drains are not in proximity to the Property and it is believed this is an error. Please correct this paragraph and ensure the additional information in the paragraph, such as information on groundwater depths between 5-35 feet are correct.

It is proposed that a Restoration Plan Report be submitted March 30, 2020. A progress report detailing activities conducted and including the geotechnical investigation results should be submitted to EGLE by February 29, 2020.

The files containing the information used to prepare this Compliance Communication are located in EGLE's Warren District Office. All correspondence and reports regarding this matter should be sent to my attention at the EGLE-RRD Warren District Office at 27700 Donald Court, Warren, Michigan 48092-2793. If you have any questions regarding this Compliance Communication, please contact me.

Sincerely,



Paul Owens, District Supervisor
Warren District Office
Remediation and Redevelopment Division
586-235-6990
owensp@michigan.gov

cc: Mr. Don Reinke, US Army Corps of Engineers
Ms. Rose Ellison, USEPA
Mr. Sam Noffke, EGLE
Mr. Andrew Hartz, EGLE
Ms. Beth Vens, EGLE
Mr. Joshua Scheels, EGLE
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Ms. Krista Reed, EGLE