Mike DeWine, Governor Jim Tressel, Lt. Governor John Logue, Director

July 29, 2025

TRANSMITTED ELECTRONICALLY

Mr. Mike Cocanig Chief Operations Officer Material Sciences Corporation 460 W Main Street Canfield, Ohio 44406 RE: Material Sciences Corporation -

Canfield Assessment Correspondence

Workplan

RCRA C - Hazardous Waste

Mahoning County
OHD000810283

Subject: Ohio EPA Review of the June 19, 2025, Preliminary Ditch Interim Measure

Operation & Maintenance Plan

Dear Mr. Cocanig:

On June 19, 2025, the Ohio Environmental Protection Agency (EPA) Division of Environmental Response and Revitalization received the *Preliminary Ditch Interim Measure Operation & Maintenance Plan* (O&M Plan)¹submitted by August Mack Environmental, Inc. (AME), on behalf of Material Sciences Corporation (MSC), for MSC's Canfield, Ohio facility located at 460 W. Main Street, Canfield, Ohio 44406. Ohio EPA is providing the following comments to assist in the completion of an approvable document.

Please provide a written response to these comments and a revised O&M Plan to this office **within the 14-day** timeframe established in Section XII of the December 2024 Directors Final Findings and Orders². If you have any questions or would like to meet to discuss the comments, please contact me at (330) 963.1141 or christopher.biro@epa.ohio.gov.

Sincerely,

Christopher J. Biro
Chris Biro, Environmental Specialist 2

Site Coordinator, Northeast District Office

Division of Environmental Response and Revitalization

¹ http://edocpub.epa.ohio.gov/publicportal/ViewDocument.aspx?docid=3693050

² http://edocpub.epa.ohio.gov/publicportal/ViewDocument.aspx?docid=3361597

Material Sciences Corporation – Canfield July 29, 2025 Page 2 of 2

CB/cm

Attachment

ec: Brandon Lewis, August Mack Environmental, Inc.
Charlie Gomez, August Mack Environmental, Inc.
Bryant Hoffer, August Mack Environmental, Inc.
Will Bedel, August Mack Environmental, Inc.
Natalie Oryshkewych, Environmental Manager, NEDO, DERR
Adriana Cooper, Environmental Specialist 2, NEDO, DERR
Bill Zawiski, Environmental Supervisor, NEDO, DSW
Melissa Witherspoon, Environmental Administrator, CO, DERR
Melissa Storch, Assistant Environmental Administrator, CO, DERR
Eric Sainey, Environmental Manager, CO, DERR-ERAS
Melissa Langton, Environmental Supervisor, CO, DERR-ERAS
Kamalpreet Kawatra, Risk Assessor, CO, DERR-ERAS

Material Science Corporation - Canfield

Preliminary Ditch Interim Measure Operation & Maintenance Plan Comments

Page 1 of 4

Opening Paragraphs

- The opening paragraph does not adequately describe Ohio EPA's approvals to discharge stormwater from the ditch to Sawmill Creek and the subsequent date of implementation of the April 2025 revised Ditch Interim Measure Monitoring Plan¹ (2025 DIMMP). It is Ohio EPA's understanding that MSC began discharging stormwater from the ditch to Sawmill Creek on June 10, 2025.
 - **Action Item:** Revise the opening paragraph of the O&M Plan to discuss the timing and details of Ohio EPA's June 2025 approval letters to discharge stormwater from the ditch to Sawmill Creek, the date the 2025 DIMMP became effective, and any pertinent details regarding subsequent storm event ("any precipitation of 0.1-inch or greater of accumulation") sampling in accordance with the 2025 DIMMP.
- 2) The second paragraph lacks details concerning the established timeline of "connecting the liner and final dam construction."
 - **Action Item:** Provide the schedule of completing the liner connection and final dam construction. It is Ohio EPA's understanding that final dam construction activities began the week of July 7, 2025, but liner completion activities are contingent upon a successful "bump test" of the newly constructed pump house shed equipment and underground, double walled piping trench.

Section 2 - O&M Plan Objectives

The five proposed O&M Plan Objectives are sufficient for maintaining the integrity and function of the ditch interim measure (IM) liner system. However, AME's routine water collection and treatment efforts, MSC's facility operations, and site-wide stormwater runoff pose risks for releases into the ditch which could contaminate isolated stormwater and the liner system components. For example, wastewater could be released from the piping runs above the surface of the liner that connects the T-090 and T-265 access point sumps to their designated 1,500-gallon poly storage tank. MSC also stages up to ten 275-gallon poly totes of wastewater (in secondary containment) upgradient of transect T-0. Once the dam at transect T-0 is removed, the entirety of the ditch IM downstream of T-0 is potentially susceptible to contamination from an upgradient release.

Action Item: Add a sixth O&M Plan Objective with the purpose of monitoring and preventing contaminants from entering the ditch from ancillary sources. Add a corresponding section to the *Ditch IM Weekly Inspection Log* in Attachment B that will document any occurrences of

¹ http://edocpub.epa.ohio.gov/publicportal/ViewDocument.aspx?docid=3516638

Material Science Corporation - Canfield

Preliminary Ditch Interim Measure Operation & Maintenance Plan Comments

Page 2 of 4

ancillary contamination, contamination sources, notification requirements, and corrective action protocols.

Section 4 - Inspection Schedule and Documentation

4) Recording the ditch IM liner system inspection results on the form in Attachment B on a weekly basis is an adequate frequency for producing written documentation but monitoring of conditions in the ditch should still continue at the established frequency necessary to generate ongoing Weekly Field Reports.

It is also unclear whether MSC proposes to perform weekly inspections only in conjunction with the storm sampling events described in the 2025 DIMMP. The weekly inspections of the ditch IM liner system should be done regardless of the need for weekly storm event sampling per the 2025 DIMMP.

Action Item: Clarify within the O&M Plan that weekly liner inspections must occur regardless of the need for storm event sampling per the 2025 DIMMP.

Section 5.2 - Liner Integrity Inspection and Repair

5) Should the liner sustain rips or punctures causing brown liquid to surface on top of the liner, temporary relocation of the cover stone may be required to make the necessary repairs to the underlying liner. If the cover stone needs to be relocated to any area outside of the main ditch channel, it should be managed and stored with caution as contaminated media.

Action Item: Revise the O&M Plan to include details on how any contaminated cover stone will be managed once it is removed from the ditch during liner repairs. At a minimum, the cover stone should be placed in secondary containment and covered with an impermeable material to prevent direct contact and contaminated runoff during precipitation events.

<u>Section 5.5 – Downstream Drainage Inspection and Corrective Action</u>

- The O&M Plan states that additional personnel and equipment may be needed if a clog occurs in the two 18" conveyance pipes that cannot be easily removed on site. Preventing and responding to obstructions to surface water flow leaving the wetland through the bulkhead/sluice gate should also be considered. The plan should contemplate the type of equipment and response personnel that may be needed at various points in the conveyance piping as well as the bulkhead/sluice gate should a clog occur in either area.
 - **Action Item:** Identify and list the types of equipment that may be needed to remove clogs at different locations within the conveyance piping system and the bulkhead/sluice gate.
- 7) The two 18-inch conveyance pipes at the final dam are currently susceptible to clogging and potential displacement during flooding/high flow events in the wetland. The piles of cover

stone that stabilize the pipes may also be displaced during floods which could worsen pipe displacement or create clogs at the bulkhead/sluice gate from the deposition of entrained stone eroded from the pipes. While removing flow obstructions and re-stabilizing displaced convenance pipes are necessary response actions, the plan should include preventative measures for potential IM component failures during high flow events.

Action Item: In addition to the existing stone piles stabilizing the conveyance piping, incorporate additional protective measures to secure the pipes for high water events. The plan should also evaluate and describe backup strategies in case the primary measures fail.

<u>Section 6 - Emergency Response Procedures</u>

- 8) Procedure #3 states that once dark brown liquids are identified on the liner pH will be measured and only after a pH reading of 12 will field free cyanide be measured. A pH reading of 12 should not be the threshold for measuring field free cyanide if dark brown liquids are observed on the liner.
 - **Action Item:** Revise procedure #3 to include a field free cyanide measurement with pH readings any time brown liquid is identified on the liner.
- Procedure #4.a states that if dark brown liquid is identified on the liner when there is precipitation and flowing water in the conveyance pipes, samples will be collected from the five Sawmill Creek locations defined in the 2025 DIMMP. However, the O&M Plan does not clearly define the time frame between the observation of brown liquid on the liner and the onset of sample collection. To ensure timely and consistent sampling, the plan should specify that samples are to be collected as soon as possible after brown liquid is observed on the liner.
 - **Action Item:** Establish a time frame for when samples will be collected at the five Sawmill Creek locations following the observance of brown liquid on the liner.
- 10) Procedure #5 states that within 48 hours of identifying free cyanide impacts greater than 0.4 mg/L on the liner, AME will notify Ohio EPA of the incident and detail the next steps. Ohio EPA should be notified as soon as possible if free cyanide exceeds 0.4 mg/L on the liner, even if next steps are still being determined.
 - **Action Item:** Revise procedure #5 so that Ohio EPA will be notified within 24 hours if free cyanide exceeds 0.4 mg/L on the liner.
- 11) Part of procedure #7 and procedure #8 state that after free cyanide concentrations in stormwater in the ditch are below 0.4 mg/L, the deployed equipment will be removed to resume stormwater flow through the conveyance pipes. However, the O&M Plan does not describe what measures will be taken to restore free cyanide concentrations in the ditch to

Material Science Corporation - Canfield

Preliminary Ditch Interim Measure Operation & Maintenance Plan Comments

Page 4 of 4

levels below 0.4 mg/L (i.e., decontamination) nor does the plan describe the sampling methodology that will demonstrate free cyanide in stormwater is protective of human health. Including these details will help clarify how the ditch IM system will return to baseline conditions following a wastewater release.

Action Item: Include a description of how stormwater concentrations of free cyanide in the ditch will return to levels below 0.4 mg/L and what sampling methodology will be used to make that determination. If ditch decontamination procedures will (e.g., use of water trucks, rinsing the liner with clean water from totes) will be implemented, provide a description.

Coordination with the Sanitary Sewer Operator(s)

12) An existing sanitary sewer main runs directly beneath the adjacent ditch and is marked by several vertical manhole vaults protruding above the surface. The liner has been installed around the manhole vaults so that they are still accessible, but the bases of the vaults are encased in liner construction materials. MSC should coordinate with the sanitary sewer operator to form an action plan and/or soil management plan for future sewer maintenance and repair activities. Sewer maintenance/repairs are likely to temporarily disturb the liner and expose underlying contaminated soil and storm/groundwater. The disturbances may lead to subsequent liner repairs, additional soil and water management needs, risk management planning, and hazard communication to the sewer operator's workers.

Action Item: Begin forming an action plan and/or soil management plan for maintenance/repair activities for the sanitary sewer main the runs beneath the adjacent ditch. Identify the entity that operates the sewer and state in the O&M Plan that MSC is developing an action plan and or/soil management plan with the said entity. If MSC has already begun coordinating with the operator, provide details on all items that have been discussed or finalized so far.