



216.341.1800 • augustmack.com
4401 Rockside Road, Suite 300 • Independence, Ohio 44131

October 10, 2025

Christopher Biro
Ohio Environmental Protection Agency
Northeast District Office
2110 East Aurora Road
Twinsburg, Ohio 44087

Re: Monthly Progress Report – September 2025
Material Sciences Corporation
460 W Main Street
Canfield, Ohio 44406
OHD000810283
August Mack Project Number: JZ0412.372

Dear Mr. Biro,

On behalf of Material Sciences Corporation, August Mack Environmental, Inc. (August Mack) is submitting the attached Monthly Progress Report. This submittal was prepared in accordance with the Director's Final Findings and Orders, which were effective on December 31, 2024. This submittal includes information regarding Site activities in September 2025.

Should you have any questions or need any additional information, please do not hesitate to contact us,

Sincerely,

A handwritten signature in black ink, appearing to read "BC Lewis".

Brandon C. Lewis, CP, CHMM
Regional Director, Ohio Offices

A handwritten signature in black ink, appearing to read "Bryant Hoffer".

Bryant Hoffer, CHMM, LPG
Senior Manager, Geologist



September 2025
MONTHLY PROGRESS REPORT
Material Sciences Corporation
460 W Main Street
Canfield, Ohio 44406

Submitted To: Christopher Biro, Environmental Specialist – Ohio EPA
Prepared By: August Mack Environmental, Inc.
On Behalf of: Material Sciences Corporation
Reporting Period: September 1, 2025 through September 30, 2025.

1. Describe the status of the Work and actions taken toward achieving compliance with the Orders during the reporting period.
 - a. Approximately 22,170 gallons of impacted water were treated and discharged to the Publicly Owned Treatment Works (POTW).
 - b. Conducted on-site walks to verify new surface expressions of dark brown liquid were not present.
 - c. Cleaned and removed three (3) 21,000-gallon storage tanks from the Site.
 - d. Pumping down secondary containments occurred as needed throughout the reporting period.
 - e. Per the Preliminary Ditch Interim Measure (IM) Operation and Maintenance (O&M) Plan, and the Ohio EPA's July 29, 2025, comments on the Preliminary O&M Plan, weekly routine inspections of the Adjacent Ditch were completed. The inspection forms are included as **Attachment A**.
 - f. Continued work with Integral Consulting Inc. (Integral) to develop the Level III Ecological Risk Assessment (ERA). Macroinvertebrate samplers deployed during the July 16, 2025, biological sampling event in downstream Sawmill Creek were collected on September 3, 2025.
 - g. Per the Ditch IM Monitoring Plan, sampling was completed in Sawmill Creek during precipitation events great than 0.10 inches. The sampling forms are included as **Attachment B**. A table of cumulative results from Ditch IM Monitoring is included as **Table 1**.
 - h. Continued to develop the Ditch IM Implementation Report and the Final O&M Plan for the Ditch IM.
 - i. The Corrective Action Framework (CAF) was submitted on September 11, 2025.
 - j. Continued to update the Revised RCRA Facility Investigation (RFI) Work Plan based on Ohio EPA comments provided on September 12, 2025.
 - k. The Sign IM Plan for Sawmill Creek was submitted on September 12, 2025, and approved by the Ohio EPA on September 22, 2025.

2. Describe difficulties encountered during the reporting period and actions taken to rectify any difficulties.
 - a. No difficulties encountered during this reporting period.
3. Describe activities planned for next month.
 - a. Continued on-site treatment and laboratory confirmation sampling of wastewater to be discharged to the POTW.
 - b. Continued pick up and disposal of waste from water treatment and Site investigation activities.
 - c. Continued O&M of the Ditch IM, including regular inspections in accordance with the Orders, and Ohio EPA's July 29, 2025, comments on the Preliminary O&M Plan.
 - d. On-going water recovery efforts to collect contaminated subsurface water located underneath the finished ditch liner.
 - e. On-going daily Site walks to identify any additional areas of concern.
 - f. Secondary containment fluid management will continue, as needed.
 - g. Continue to develop the Level III ERA with Integral.
 - h. Installation of the automated water collection system and winterization of equipment.
 - i. Installation of signage along Sawmill Creek per the Ohio EPA approved Sign IM Plan.
 - j. Submittal of the Revised RFI Work Plan based on Ohio EPA's September 12, 2025, comments.
 - k. Submittal of the Ditch IM Implementation Report and Final O&M Plan for the Ditch IM.
4. Identify changes in key Personnel.
 - a. No changes in personnel during this reporting period.
5. List target and actual completion dates for each element of activity, including project completion.
 - a. Initial Site Investigation (ISI)
 - i. ISI conducted beginning in October 2024.
 - ii. ISI Report submitted to Ohio EPA on December 12, 2024.
 - b. Ditch Interim Measure
 - i. Plan Submitted to Ohio EPA on October 7, 2024 with revisions per Ohio EPA requests submitted and subsequently approved on November 15, 2024.

- ii. Interim Measure implementation (including subsurface conveyance infrastructure) occurred from November 2024 through July 2025.
- iii. On June 7, 2025, August Mack submitted a request to restore flow from the ditch to Sawmill Creek. Approval from the Ohio EPA was received on June 9, 2025, contingent upon implementation of the Ditch IM Monitoring Plan.
- iv. Submitted Preliminary Ditch IM O&M Plan on June 19, 2025.
- v. Received approval from the Ohio EPA on June 23, 2025, to complete the ditch liner, remove the dam at the LOC and the upstream dam, and resume natural flow to sawmill creek.
- vi. Ditch IM construction activities were completed in August 2025.
- vii. The Ditch IM Implementation Report will be submitted in October 2025.

c. Vapor Intrusion

- i. Indoor Air Sampling in facility building in December 2024.
- ii. TCE Interim Measure Implementation in February 2025.
- iii. The TCE Interim Measures Implementation Report submitted on March 31, 2025.

d. Water Treatment

- i. Water treatment pilot testing was completed in December 2024.
- ii. A Permit to Install (PTI) was submitted and approved by the Ohio EPA on January 29, 2025.

e. Wetland and Downstream Sawmill Creek Sampling

- i. Wetland and Downstream Sawmill Creek Sampling Work Plan submitted on April 18, 2025.
- ii. Ohio EPA approved the work plan on April 30, 2025.
- iii. Wetland and Downstream Sawmill Creek sampling started the week of May 12, 2025.
- iv. Wetland and Downstream Sawmill Creek Sampling Implementation Report was submitted on July 3, 2025.

f. Corrective Action Framework (CAF)

- i. Initial CAF Meeting held January 29, 2025.
- ii. CAF agreement was submitted on September 11, 2025.

g. RCRA Facility Investigation (RFI) Work Plan

- i. RFI Work Plan was submitted on May 30, 2025.
- ii. Ohio EPA feedback was provided on July 16, 2025.
- iii. Revised RFI Work Plan was submitted on August 13, 2025.
- iv. Additional Ohio EPA feedback was received on September 12, 2025.
- v. The Revised RFI Work Plan will be submitted in October 2025.

- h. Integral Level III Ecological Risk Assessment (ERA)
 - i. Biological sampling event was conducted in downstream Sawmill Creek on July 16, 2025.
 - ii. Macroinvertebrate sample collection in downstream Sawmill Creek occurred on September 3, 2025.
- 6. Provide an explanation for any deviation from any applicable schedule.
 - a. No deviations encountered during this reporting period.
- 7. Indicate how much contaminated soil was removed and contaminated ground water was pumped and indicate where such contaminated media were disposed.
 - a. Approximately 22,170 gallons of wastewater were treated on-Site and discharged to the POTW.
 - b. Approximately 27,900 gallons of hazardous sludge were disposed of off-Site by Arcwood in September 2025.
 - c. Four (4) drums containing hazardous waste from water filtration were disposed of off-Site by Arcwood in September 2025.
 - d. Two (2) drums containing hazardous waste from water treatment operations were disposed of off-Site by Arcwood in September 2025.
 - e. Two (2) drums containing hazardous sludge were disposed of off-Site by Arcwood in September 2025.

Table 1

Analytical results from Ditch IM Monitoring

TABLE 1
SURFACE WATER ANALYTICAL RESULTS

			<i>Sample Location</i>	Field Free Cyanide Analysis (mg/L)	Laboratory Total Cyanide Analysis (mg/L)	Laboratory Free Cyanide Analysis (mg/L)
<i>Sample ID</i>	<i>Date</i>	<i>Time</i>				
T2-0	6/17/2025	17:45	Outfall to Sawmill Creek Tributary	0.20	NA	NA
	8/13/2025	17:00		0.08	0.015	<0.006
	9/4/2025	NR		0.16	NA	NA
	9/23/2025	NR		0.22	0.03	<0.006
T2-100	6/17/2025	17:50	Downstream of Culvert	0.12	NA	NA
	8/13/2025	17:05		0.12	0.068	<0.006
	9/4/2025	NR		0.09	NA	NA
	9/23/2025	NR		<0.004	0.028	<0.006
T2-250	6/17/2025	17:55	Downstream of Culvert	0.17	NA	NA
	8/13/2025	17:10		0.25	0.070	<0.006
	9/4/2025	NR		0.02	NA	NA
	9/23/2025	NR		0.18	0.029	<0.006
Cardinal Dr.	6/17/2025	12:00	Cardinal Drive	0.01	NA	NA
	8/13/2025	17:22		0.06	0.09	<0.006
	8/14/2025	NR		0.06	NA	NA
	9/4/2025	NR		0.11	NA	NA
	9/23/2025	NR		0.02	0.032	<0.006
Verdant Dr.	6/17/2025	12:00	Verdant Drive	0.02	NA	NA
	8/13/2025	17:30		0.06	0.10	<0.006
	8/14/2025	17:30		0.06	NA	NA
	9/4/2025	NR		0.18	NA	NA
	9/23/2025	NR		0.16	0.031	<0.006
Brown Liquid	2/6/2025	NR	Surface expression near RMH <i>Under Liner Locations</i>	8,625	NA	NA
Final Dam Sump	6/17/2025*	16:45	Sump Under Final Dam	285	NA	NA
	8/13/2025	18:15		0.22	0.10	<0.006
	9/4/2025	NR		312	NA	NA
T-400-AP	9/10/2025	NR	Adj Ditch Access Point Under Liner	257	NA	NA
	9/23/2025	NR		218	41.0	14.0

Abbreviations & Notes

Results and Screening Levels are reported in mg/L.

* = Sample was collected from T-1050 prior to Ditch IM construction completion.

Laboratory analytical results for the August 13, 2025 sampling event were submitted to the Ohio EPA on September 2, 2025.

Attachment A

Ditch IM Weekly Inspection Forms – September 2025

Ditch IM Operation & Maintenance Plan
Weekly Inspection Log

Inspectors: _____ Date: _____ Time: _____

Weather: _____

Checklist:

Entire length of the Ditch IM transversed: Yes _____ No _____

1. Any displacement of liner stone observed? Yes _____ No _____

Describe location of stone displacement: _____

If displacement of liner stone is observed greater than a 1-foot area, document with pictures, and follow instructions in the O&M Plan to replace a minimum of 4 inches of OH DOT #1 stone or a sufficient thickness of rip-rap, as applicable, and document here when replaced. Document the stone replacement with pictures.

Stone was replaced on liner: _____
Date _____

Note any further measures recommended to limit future stone displacement:

2. Any rips or punctures observed in the liner? Yes _____ No _____

If Yes, describe type and location: _____

If a liner rip or puncture is observed, document with pictures and follow instructions in the O&M Plan to repair the liner and document when the repair is completed. Upon liner repair, ensure repaired liner is covered with geotextile and covered with protective stone. Document the liner repair date and take pictures.

The liner was repaired: _____
Date _____

How was the liner repaired? _____

3. Any impacted liquid observed within ditch? Yes _____ No _____

If impacted liquid is observed, document with pictures and follow instructions in O&M Plan to recover the impacted liquid and investigate the source of the impacted liquid. If the source of the impacted liquid is a rip or a puncture, document the rip or puncture in Item 2 above and follow the instructions in the O&M Plan for repair. If impacted liquid is from a source outside of ditch liner, contact the August Mack Project Manager to determine proper response action.

Impacted liquid was recovered: _____
Date _____

Impacted liquid volume recovered: _____
Gallons _____

How was the impacted liquid recovered and where was the impacted liquid contained?

4. Any bank erosion seen along the ditch as evidenced by rills, gullies, exposed roots, or sediment deposits at base of slope? Yes _____ No _____

Where is the erosion observed? _____

If erosion of the banks of the ditch is observed, document with pictures and contact the August Mack Project Manager for potential solutions to mitigate current and future erosion.

5. Any debris/obstructions observed within ditch? Yes _____ No _____

Describe debris/obstructions and location: _____

If trees or any debris is observed, document, remove, and move the debris into the nearby woods unless the debris has come into contact with impacted liquid. If the debris has come into contact with impacted liquid, containerize the debris for proper off-Site disposal.

What was disposition of the debris? _____

6. Obstruction of the two 18 inch diameter downstream drainage pipes observed?

Yes _____ No _____

If so, document obstructions here:

If erosion of the ditch banks and/or dam is observed, document with pictures and contact the August Mack Project Manager for potential solutions to mitigate current and future erosion.

Any displacement of the two 18-inch diameter drainage pipes observed?

Yes _____ No _____

If the two 18-inch diameter drainage tiles are displaced, take pictures & document here

Contact the August Mack Project Manager to arrange for the drainage pipe(s) to be moved back in place and recovered in stone, as necessary.

Ditch IM Operation & Maintenance Plan
Weekly Inspection Log

Inspectors: _____ Date: _____ Time: _____

Weather: _____

Checklist:

Entire length of the Ditch IM transversed: Yes _____ No _____

1. Any displacement of liner stone observed? Yes _____ No _____

Describe location of stone displacement: _____

If displacement of liner stone is observed greater than a 1-foot area, document with pictures, and follow instructions in the O&M Plan to replace a minimum of 4 inches of OH DOT #1 stone or a sufficient thickness of rip-rap, as applicable, and document here when replaced. Document the stone replacement with pictures.

Stone was replaced on liner: _____
Date _____

Note any further measures recommended to limit future stone displacement:

2. Any rips or punctures observed in the liner? Yes _____ No _____

If Yes, describe type and location: _____

If a liner rip or puncture is observed, document with pictures and follow instructions in the O&M Plan to repair the liner and document when the repair is completed. Upon liner repair, ensure repaired liner is covered with geotextile and covered with protective stone. Document the liner repair date and take pictures.

The liner was repaired: _____
Date _____

How was the liner repaired? _____

3. Any impacted liquid observed within ditch? Yes _____ No _____

If impacted liquid is observed, document with pictures and follow instructions in O&M Plan to recover the impacted liquid and investigate the source of the impacted liquid. If the source of the impacted liquid is a rip or a puncture, document the rip or puncture in Item 2 above and follow the instructions in the O&M Plan for repair. If impacted liquid is from a source outside of ditch liner, contact the August Mack Project Manager to determine proper response action.

Impacted liquid was recovered: _____
Date _____

Impacted liquid volume recovered: _____
Gallons _____

How was the impacted liquid recovered and where was the impacted liquid contained?

4. Any bank erosion seen along the ditch as evidenced by rills, gullies, exposed roots, or sediment deposits at base of slope? Yes _____ No _____

Where is the erosion observed? _____

If erosion of the banks of the ditch is observed, document with pictures and contact the August Mack Project Manager for potential solutions to mitigate current and future erosion.

5. Any debris/obstructions observed within ditch? Yes _____ No _____

Describe debris/obstructions and location: _____

If trees or any debris is observed, document, remove, and move the debris into the nearby woods unless the debris has come into contact with impacted liquid. If the debris has come into contact with impacted liquid, containerize the debris for proper off-Site disposal.

What was disposition of the debris? _____

6. Obstruction of the two 18 inch diameter downstream drainage pipes observed?

Yes _____ No _____

If so, document obstructions here:

If erosion of the ditch banks and/or dam is observed, document with pictures and contact the August Mack Project Manager for potential solutions to mitigate current and future erosion.

Any displacement of the two 18-inch diameter drainage pipes observed?

Yes _____ No _____

If the two 18-inch diameter drainage tiles are displaced, take pictures & document here

Ditch IM Operation & Maintenance Plan
Weekly Inspection Log

Inspectors: _____ Date: _____ Time: _____

Weather: _____

Checklist:

Entire length of the Ditch IM transversed: Yes _____ No _____

1. Any displacement of liner stone observed? Yes _____ No _____

Describe location of stone displacement: _____

If displacement of liner stone is observed greater than a 1-foot area, document with pictures, and follow instructions in the O&M Plan to replace a minimum of 4 inches of OH DOT #1 stone or a sufficient thickness of rip-rap, as applicable, and document here when replaced. Document the stone replacement with pictures.

Stone was replaced on liner: _____
Date _____

Note any further measures recommended to limit future stone displacement:

2. Any rips or punctures observed in the liner? Yes _____ No _____

If Yes, describe type and location: _____

If a liner rip or puncture is observed, document with pictures and follow instructions in the O&M Plan to repair the liner and document when the repair is completed. Upon liner repair, ensure repaired liner is covered with geotextile and covered with protective stone. Document the liner repair date and take pictures.

The liner was repaired: _____
Date _____

How was the liner repaired? _____

3. Any impacted liquid observed within ditch? Yes _____ No _____

If impacted liquid is observed, document with pictures and follow instructions in O&M Plan to recover the impacted liquid and investigate the source of the impacted liquid. If the source of the impacted liquid is a rip or a puncture, document the rip or puncture in Item 2 above and follow the instructions in the O&M Plan for repair. If impacted liquid is from a source outside of ditch liner, contact the August Mack Project Manager to determine proper response action.

Impacted liquid was recovered: _____
Date _____

Impacted liquid volume recovered: _____
Gallons _____

How was the impacted liquid recovered and where was the impacted liquid contained?

4. Any bank erosion seen along the ditch as evidenced by rills, gullies, exposed roots, or sediment deposits at base of slope? Yes _____ No _____

Where is the erosion observed? _____

If erosion of the banks of the ditch is observed, document with pictures and contact the August Mack Project Manager for potential solutions to mitigate current and future erosion.

5. Any debris/obstructions observed within ditch? Yes _____ No _____

Describe debris/obstructions and location: _____

If trees or any debris is observed, document, remove, and move the debris into the nearby woods unless the debris has come into contact with impacted liquid. If the debris has come into contact with impacted liquid, containerize the debris for proper off-Site disposal.

What was disposition of the debris? _____

6. Obstruction of the two 18 inch diameter downstream drainage pipes observed?

Yes _____ No _____

If so, document obstructions here:

If erosion of the ditch banks and/or dam is observed, document with pictures and contact the August Mack Project Manager for potential solutions to mitigate current and future erosion.

Any displacement of the two 18-inch diameter drainage pipes observed?

Yes _____ No _____

If the two 18-inch diameter drainage tiles are displaced, take pictures & document here

Contact the August Mack Project Manager to arrange for the drainage pipe(s) to be moved back in place and recovered in stone, as necessary.

Ditch IM Operation & Maintenance Plan
Weekly Inspection Log

Inspector: _____ Date: _____ Time: _____

Weather: _____

Checklist:

Entire length of the Ditch IM transversed: Yes _____ No _____

1. Any displacement of liner stone observed? Yes _____ No _____

Describe location of stone displacement: _____

If displacement of liner stone is observed greater than a 1-foot area, document with pictures, and follow instructions in the O&M Plan to replace a minimum of 4 inches of OH DOT #1 stone or a sufficient thickness of rip-rap, as applicable, and document here when replaced. Document the stone replacement with pictures.

Stone was replaced on liner: _____
Date _____

Note any further measures recommended to limit future stone displacement:

2. Any rips or punctures observed in the liner? Yes _____ No _____

If Yes, describe type and location: _____

If a liner rip or puncture is observed, document with pictures and follow instructions in the O&M Plan to repair the liner and document when the repair is completed. Upon liner repair, ensure repaired liner is covered with geotextile and covered with protective stone. Document the liner repair date and take pictures.

The liner was repaired: _____

Date _____

How was the liner repaired? _____

3. Any impacted liquid observed within ditch? Yes _____ No _____

If impacted liquid is observed, document with pictures and follow instructions in O&M Plan to recover the impacted liquid and investigate the source of the impacted liquid. If the source of the impacted liquid is a rip or a puncture, document the rip or puncture in Item 2 above and follow the instructions in the O&M Plan for repair. If impacted liquid is from a source outside of ditch liner, contact the August Mack Project Manager to determine proper response action.

Impacted liquid was recovered: _____

Date _____

Impacted liquid volume recovered: _____

Gallons _____

How was the impacted liquid recovered and where was the impacted liquid contained?

4. Any bank erosion seen along the ditch as evidenced by rills, gullies, exposed roots, or sediment deposits at base of slope? Yes _____ No _____

Where is the erosion observed? _____

If erosion of the banks of the ditch is observed, document with pictures and contact the August Mack Project Manager for potential solutions to mitigate current and future erosion.

5. Any debris/obstructions observed within ditch? Yes _____ No _____

Describe debris/obstructions and location: _____

If trees or any debris is observed, document, remove, and move the debris into the nearby woods unless the debris has come into contact with impacted liquid. If the debris has come into contact with impacted liquid, containerize the debris for proper off-Site disposal.

What was disposition of the debris? _____

6. Obstruction of the two 18 inch diameter downstream

drainage pipes observed? Yes _____ No _____

If so, document obstructions here:

If erosion of the ditch banks and/or dam is observed, document with pictures and contact the August Mack Project Manager for potential solutions to mitigate current and future erosion.

Any displacement of the two 18-inch diameter
drainage pipes observed? Yes _____ No _____

If the two 18-inch diameter drainage tiles are displaced, take pictures and document here: _____

Contact the August Mack Project Manager to arrange for the drainage pipe(s) to be moved back in place and recovered in stone, as necessary.

Attachment B

Ditch IM Monitoring Form – September 2025



Weekly Ditch IM Monitoring

Project Name:

MSC Site Response

Site Address:

460 West Main Street
Canfield, Ohio

Project Number:

JZ0412.372

Employee Completing Sampling:

Sampling Date:

Sampling Event Information

Pre-Rain Weather Conditions	Temperature:	Wind Speed:
Post-Rain Weather Conditions:	Temperature:	Wind Speed:
Storm Start Time		
Rainfall Amount (inches):		
Rain event occurring greater than 0.10 in.?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Is water being pumped/flowing from the top of the liner to Sawmill Creek?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Samples submitted for analysis (if yes then list samples below)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Sample Information

Location	Sample ID	Sample Time	Field pH	Free Cyanide (DR900 - mg/L)
T2-0 (near the Mill Creek Park Bikeway)				
T2-100 (approximately 100 ft downstream of T2-0)				
T2-250 (approximately 250 ft downstream of T2-0)				
At the location Sawmill Creek crosses Cardinal Drive				
At the location Sawmill Creek crosses Verdant Lane				

Notes/Comments



Weekly Ditch IM Monitoring

Project Name:

MSC Site Response

Site Address:

460 West Main Street
Canfield, Ohio

Project Number:

JZ0412.372

Employee Completing Sampling:

Sampling Date:

Sampling Event Information

Pre-Rain Weather Conditions	Temperature:	Wind Speed:
Post-Rain Weather Conditions:	Temperature:	Wind Speed:
Storm Start Time		
Rainfall Amount (inches):		
Rain event occurring greater than 0.10 in.?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Is water being pumped/flowing from the top of the liner to Sawmill Creek?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Samples submitted for analysis (if yes then list samples below)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Sample Information

Location	Sample ID	Sample Time	Field pH	Free Cyanide (DR900 - mg/L)
T2-0 (near the Mill Creek Park Bikeway)				
T2-100 (approximately 100 ft downstream of T2-0)				
T2-250 (approximately 250 ft downstream of T2-0)				
At the location Sawmill Creek crosses Cardinal Drive				
At the location Sawmill Creek crosses Verdant Lane				

Notes/Comments