

Hi! This note is brought to you by the Remediation and Redevelopment Division (RRD) of the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Calumet Field Office. Our division's goal is to keep you up to date on the RRD's environmental projects underway in the Keweenaw Peninsula. My name is Amy Keranen and I'm the project manager for the Abandoned Mining Wastes—Torch Lake project. I can be reached at the following phone number and addresses, and hope you'll keep in touch! EGLE Calumet Field Office (MSP Post), 55195 U.S. 41 North, Calumet, MI 49913; 906-337-0389; keranena@michigan.gov.

Abandoned Mining Wastes Project– Torch Lake Open House on May 21, 2019 at Lake Linden-Hubbell School

The Abandoned Mining Wastes (AMW) project team will be available from 4-7 p.m. on **Tuesday, May 21st** at the Lake Linden-Hubbell High School Auditorium to share our findings with the community. This team consists of staff involved in the planning, fieldwork, interim responses (IRs), and reporting for the project; Mr. Brian Kelly, the On-scene Coordinator from the Environmental Protection Agency (EPA) Emergency Response Branch (ERB) who is managing multiple projects in the area; Honeywell Specialty Materials, Inc. (Honeywell) who is conducting an in-lake sediment removal project in the vicinity of the Lake Linden beach and day park area this spring; representatives of Lake Linden village as the owner and operator of the recreation area where removal activities are taking place; and staff from the Western U.P. Health Department (WUPHD). We will have maps and photos on display to show you where we conducted our work, what we have found, what we have cleaned up and what we have planned. It will be an informal open house that will provide you with the opportunity to drop in, meet the project team and to get any questions answered.

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DEQ Gets a New Name - EGLE and Logo

On April 22, 2019, the Michigan Department of Environmental Quality (MDEQ) was re-named to Michigan Department of Environment, Great Lakes and Energy, or EGLE. Below is our new logo. EGLE merges the former DEQ, the Agency for Energy, and the Office of the Great Lakes.



We're on the web!

EGLE/RRD

https://www.michigan.gov/egle/0,9429,7-135-3306_28608--,00.html

Key Updates

Quincy Mining Company Portage Operations Area (QMCP)

A site investigation (SI) was conducted in 2018 at the QMCP area from Dollar Bay to the Portage Lift Bridge. The SI identified the presence of hundreds of abandoned containers, widespread asbestos, oil sheens on the surface water draining to the Portage Canal, suspect polychlorinated biphenyl (PCB) and mercury containing equipment, and PCBs in surface soils near the Portage Canal.



Transformer scrap in Ripley

The Copper Heritage Trail (used by the public as the snowmobile, ORV, recreational trail) along the Ripley waterfront runs through these privately owned parcels where contaminants are present. EGLE has notified property owners of the study area conditions and is evaluating additional SI activities.



Drums in the QMCP Ripley area

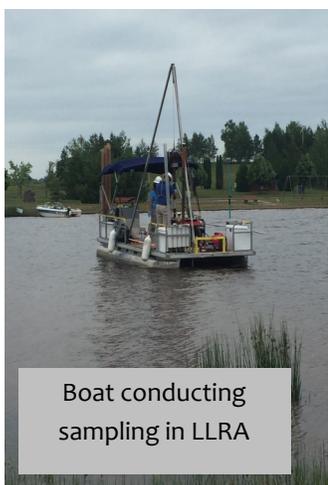
Honeywell Beginning Projects

Lake Linden Recreation Area Sediments Removal

Prior studies conducted at the Lake Linden Recreation Area (LLRA) concluded that contamination exceeding criteria extends outward from the area along the shore that was the focus of a 2007 emergency removal. Based on these findings, in January 2017, the DEQ requested assistance from the EPA ERB to address the contaminated sediments at the LLRA. During 2017 the EPA evaluated the existing information and began working with Honeywell to further evaluate risks and develop a remedial approach for contaminated sediments.

During 2017 and 2018 Honeywell conducted a series of studies and developed a remedial approach to remove a portion of the most highly contaminated shallow, nearshore sediments in the LLRA starting in May 2019. Other contaminated sediments in the LLRA are also being evaluated for remediation by Honeywell and EPA's Great Lakes National Program Office (GLNPO).

Representatives from the WUPHD and Village of Lake Linden continue collaborating with the Michigan Department of Health & Human Services (MDHHS) and Honeywell to identify and implement measures to ensure the safety of the recreational area users.



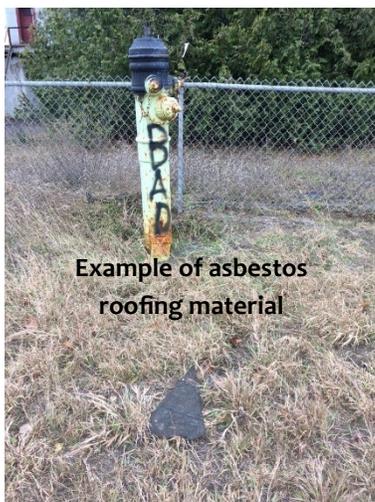
Boat conducting sampling in LLRA



Sediment sample from LLRA

Calumet and Hecla (C&H) Mineral Building Waste Piles and Asbestos Removal

The C&H Mineral Building, located between Lake Linden and Hubbell along M-26, was another area addressed by the AMW project. PCBs, metal contaminated soils, asbestos, reclamation process wastes, abandoned containers, waste piles and demolished smokestack debris were left behind after the mining era. Additionally, asbestos containing building materials (ACBM), specifically roofing material that had blown off the Mineral Building,

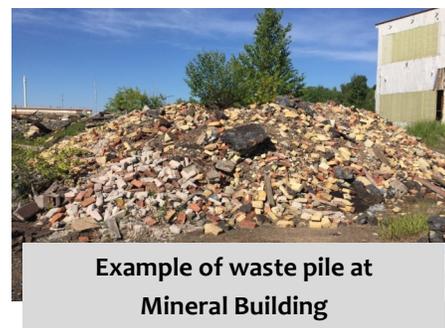


Example of asbestos roofing material

ing, was present on the ground and waste piles including outside of the fenced site property in the Michigan Department of Transportation (MDOT) right of way (ROW) that includes a wide paved shoulder used heavily by local residents for recreational purposes.

In response to the state's request for assistance from the EPA, collaboration between DEQ, EPA, MDHHS, WUPHD, Houghton County, and Torch Lake Township officials took place to find a solution to the C&H Mineral Building roof. Ultimately, the EPA issued Silver Shore Enterprise, LLC. (Silver Shore) a General Notice of Potential Liability dated April 24, 2018 and DEQ issued a Request for Section 201071a of Part 201 Compliance Documentation

dated April 23, 2018 ultimately resulting in removal of the ACBM.



Example of waste pile at Mineral Building

C&H Hubbell Processing Area In-Lake Drums and PCB-Contaminated Sediments

Studies conducted off shore of the C&H Hubbell Processing Area from 2014—2016 identified contaminants, including but not limited to: PCBs, metals, and semi-volatile organic compounds in sediments and deteriorating drum contents in Torch Lake. Lake bottom sonar surveys identified locations of industrial waste on the lake bottom out from the shoreline in the Hubbell Processing Area. An autonomous underwater vehicle (AUV) was used to inspect these in-lake dump locations with a video camera and confirmed that abandoned containers including drums, metal debris, circuit board waste, and other wastes are present on the lake bottom. The AUV was equipped with a sampling arm which enabled sampling the contents of 12 of the reported hundreds of abandoned containers on the lake bottom near known PCB-contaminated sediments in this area. Total PCBs were detected in all 13 of the samples collected from the contents of 12 submerged drums.

This in-lake disposal area is approximately 27-acres in size and is an apparent on-going source of PCBs into the



Drum sample collection

Torch Lake environment. Based on these findings, in November 2017, the DEQ requested assistance from the EPA ERB to address the in-lake drums and PCB-contaminated sediments off-shore of the C&H Hubbell Processing Area. Subsequently the referral was directed to the EPA's GLNPO program that is evaluating the area with Honeywell.



View looking towards land from in-lake drum areas

2018 Remedial Activities Completed

C&H Mineral Building Waste Piles and Asbestos



Mineral Building roof before removal

In response to the EPA and DEQ directives, Silver Shore undertook asbestos removal from the roof of the Mineral Building during the summer of 2018. Over 11 tons of asbestos containing material was removed from the roof and off the ground near the building, including outside of the fenced site property in the MDOT ROW. During 2018 Honeywell and Silver Shore secured the site through fence installation. Additional efforts are anticipated to address the remaining waste and smokestack debris piles.



Mineral Building roof after removal

Quincy Mining Company Mason Operations Area (QMCM)

Evaluation of results of previous studies, and SIs conducted by DEQ in 2017 and EPA ERB in 2018 identified the presence of widespread ACBM, process wastes and abandoned containers throughout the QMCM, including the Quincy Mill ruins west of M-26 that is frequented by recreational users. The DEQ and EPA ERB notified the property owners and representatives of the MDHHS, WUPHD, and Osceola Township of the study area conditions.

Based on these findings the DEQ requested assistance from the EPA ERB. In 2018 the EPA ERB initiated removal of the ACBM, RPM and abandoned containers. Cleanup activities resumed in May 2019. In order to avoid exposure to these hazardous substances and physical hazards, it is recommended the public not enter these privately owned properties. The below 2 pictures show the before and after conditions inside the mining ruins in Mason.



Before EPA ERB cleanup in the fall of 2018

The below photo was taken after EPA ERB removal of waste materials inside the mining ruins in Mason





Coal Dock PCB-Burn Area Remediation

EGLI continues to monitor the capped area at the Hubbell Processing Area Coal Dock property where PCBs, process wastes, abandoned containers and asbestos contamination were addressed via a large project in 2017. The 7 acre capped area and restored drainage ditch withstood the floods of 2018. The image to the left is an aerial photo of the remediated area.

AMW Work Planned for 2019

Complete supplemental SI activities and undertake IRs in the QMCP if needed.

Complete the Coal Dock PCB-Burn Area IR action and implement the long-term Operation & Maintenance plan in the Hubbell Processing Area.

Continue to monitor the EPA ERB/GLNPO and Honeywell removal activities associated with the Lake Linden Recreation Area sediments.

Continue to monitor the EPA and Honeywell/Silver Shore removal activities associated with the C&H Mineral Building waste piles, stack debris, and asbestos.

Continue to monitor the EPA GLNPO and Honeywell assessment activities associated with the C&H Hubbell Processing Area in-lake abandoned containers and PCB-contaminated sediments.

Continue to monitor the EPA ERB removal activities being undertaken in the QMCM.

All project documents will be posted on the Abandoned Mining Wastes project website [AMW Project Web Page](#) as they are finalized.

In the meantime, if you have questions, any information regarding historic waste issues we should be aware of, or any concerns you wish to discuss, please contact me at keranena@michigan.gov).

I'll keep you informed as significant progress is made. Thanks for your interest, patience, and attention to the AMW project and other local sites of environmental interest. I am hoping to see you at the project open house on May 21st. *Amy*