

Hi! This note, previously focused on projects managed by the Calumet Field Office of the Remediation and Redevelopment Division (RRD) of the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Calumet Field Office, has expanded to include work currently being conducted within Torch Lake and coordinated by the United States Environmental Protection Agency, Great Lakes National Program Office (EPA-GLNPO) in partnership with Honeywell. Heather Williams is the EPA-GLNPO project manager working on the Great Lakes Legacy Act cleanup projects with Honeywell, to evaluate and address contaminated sediments and drums in the Lake Linden and Hubbell areas of Torch Lake. In addition to GLNPO, Stephanie Swart and Sam Noffke of EGLE's Water Resource Division (WRD) are working alongside Heather to ensure state program requirements are considered in the sediment project slated to be conducted in 2024/2025. The content of this note has been refined to focus on environmental work being conducted in Torch Lake, Houghton County. *Amy Keranen, EGLE*

Torch Lake Drums & Contaminated Sediments Open House May 23, 2023 at Lake Linden-Hubbell High School

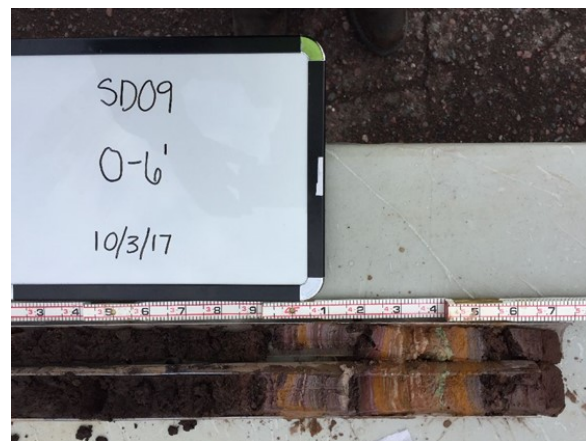
The EGLE Abandoned Mining Wastes (AMW) project team, along with EPA, EGLE WRD and Honeywell staff will be available to meet with the community from **4-7 p.m. on Tuesday, May 23rd** at the Lake Linden-Hubbell High School Auditorium to share findings and plans for in-lake remediation options being considered to address contamination in Torch Lake. EPA GLNPO is partnering with Honeywell to evaluate and address contaminated sediments in the Lake Linden area and sediments, drums and debris in the Hubbell area under the Great Lakes Legacy Act. The current focus of GLNPO and Honeywell's partnership on the in-lake project is due to findings from the AMW in-lake investigations conducted between 2014 and 2017 and GLNPO and Honeywell's investigations since that time. There will be maps and photos on display to show the community where studies have been conducted and future plans. EGLE WRD will also discuss the progress of the Torch Lake benthos pilot study project. The open house provides the community with an opportunity to drop in, meet the project team and get any questions answered. We hope to see you there!

Torch Lake Drums and Contaminated Sediments Clean-up Planned

Past studies conducted at the Lake Linden Recreation Area (LLRA) identified polychlorinated biphenyl (PCB) and metals contamination in the sediments exceeding standards protective of human and aquatic health. Honeywell removed and covered a portion of the most highly contaminated shallow, nearshore sediments in the LLRA to reduce risks to recreational area users in 2019. Studies conducted off shore of the Calumet & Hecla Hubbell Processing Area (HPA) identified potential threats to human and ecological receptors posed by PCB, metals, and semi-volatile organic compound contaminated sediments, drums, debris, and deteriorating drum contents.

In partnership, EPA GLNPO, EGLE WRD and Honeywell have evaluated remedial options for contamination at the LLRA and HPA. Dredging and off-site disposal of contaminated sediments is the remedial option selected for the LLRA. The review of remedial options for the HPA contaminated sediments, drums, debris, and deteriorating drum contents is on-going. Additional studies are planned for 2023 to support implementation of the selected remedial option for the LLRA and evaluation of options for the HPA.

The picture to the right shows the discolored waste layer that is present in the sediments on the bottom of Torch Lake. These wastes were discharged from the former reclamation plant in the LLRA and are the focus of the planned future removal action in the Lake Linden Recreation Area.



The picture to the left is an example of a typical deteriorated drum off-shore of the Hubbell Processing Area. Drums like this are the focus of the planned future removal action at the HPA.

Torch Lake Benthos Experiment

Torch Lake was designated as part of the [Torch Lake Superfund Site](#) in 1986 and as a Great Lakes Area of Concern [Torch Lake AOC](#). Stampsands with high concentrations of metals, especially copper, were deposited in the lake and on the lake bottom. The stampsands that cover much of the lake bottom harm the aquatic organisms (benthos) which are critical to the fishery and health of the lake. The Superfund project selected natural accumulation of sediments in the lake, over time, as the method to allow for the recovery of the benthos. Studies since that selection was made determined that sediment accumulation, and therefore benthos recovery, was going to take over 800 years.

Given that excessive predicted timeframe, in 2019, EGLE's WRD held a technical summit with scientific experts, policy makers from local, tribal, state and federal agencies, construction experts, and other stakeholders to discuss options to improve the benthos in Torch Lake in a shorter timeframe. One outcome from this meeting included construction and monitoring of test plots to determine which types of capping and habitat restoration may work long term.

Test plots, like in the photo to the right, were constructed in 2021 and are monitored periodically to determine if these techniques will improve the Torch Lake benthic community. If the experiment is effective, a larger-scale project will be assessed.



Looking Forward

As we have done during the course of the AMW project, all AMW project documents will be posted on the Abandoned Mining Wastes project website [AMW Project](#) as they are finalized. Documents pertaining to the Torch Lake Area of Concern, managed by Stephanie Swart, are posted on the [Torch Lake AOC \(michigan.gov\)](#) website. Information pertaining to the GLNPO and Hon-eywell work can be found on the EPA website [Torch Lake AOC | US EPA](#)

How to Find Us

Heather Williams, EPA Great Lakes National Program Office (GLNPO), williams.heather@epa.gov | 312.886.5993

Stephanie Swart, EGLE Water Resource Division (WRD), swarts@michigan.gov | 517.331.3779

Amy Keranen, EGLE Remediation and Redevelopment Division (RRD), keranena@michigan.gov | 906.337.0389