



McLouth Steel RI/FS Update

Citizen's Advisory Group Meeting

September 14, 2023



Ernest Ashley, PG, Project Technical Lead, CDM Smith

Nilia Moberly Green, Remedial Project Manager, USEPA



Remedial Investigation / Feasibility Study (RI/FS)

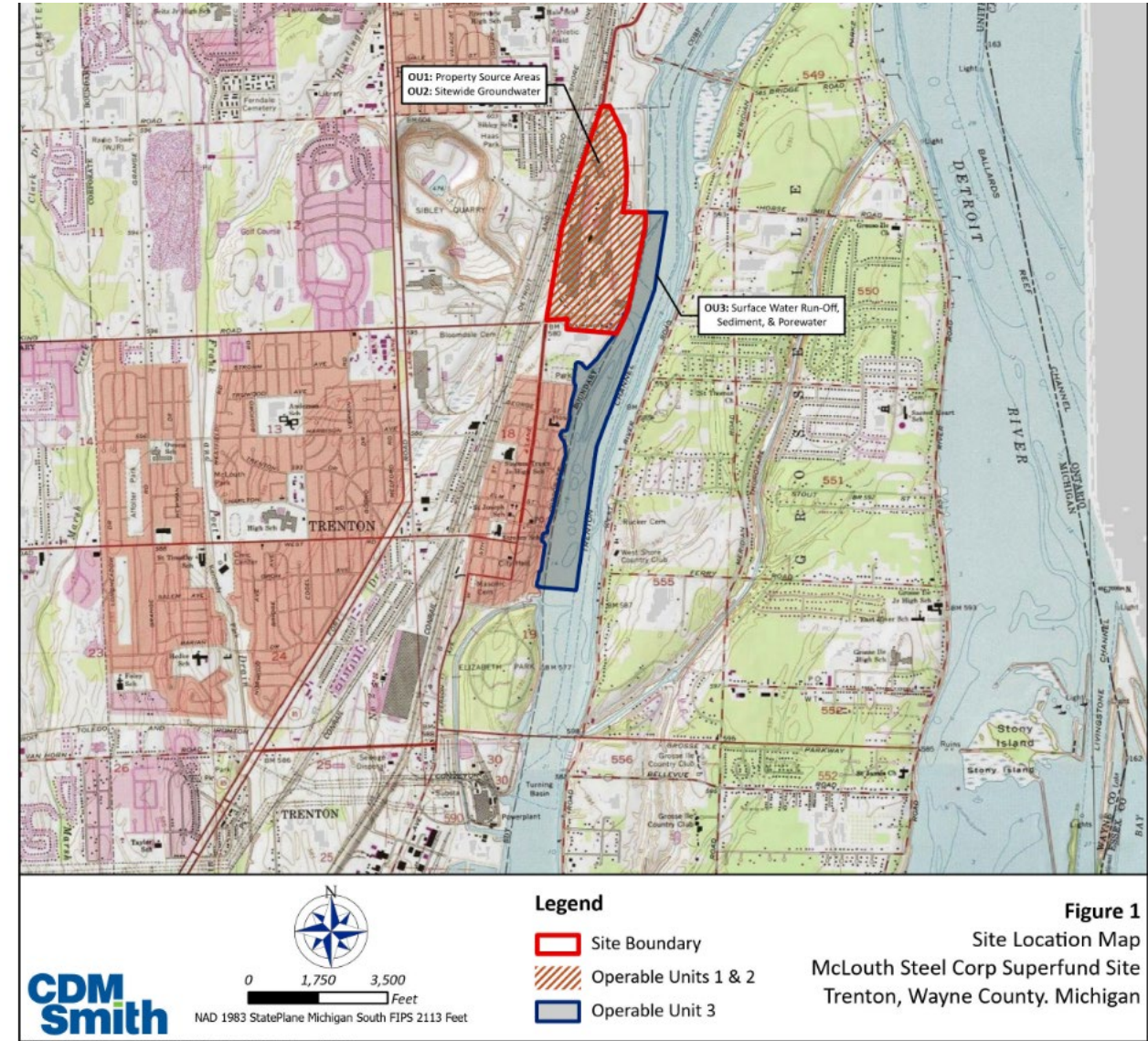
- A Remedial Investigation is being performed to collect information on the nature and extent of contamination at the former steel plant property.
- The goals of the RI are two-fold:
 - to provide enough detail to assess the risks posed by the site to human health and the environment, and
 - to enable evaluation of potential and appropriate remedial measures in the Feasibility Study .



McLouth Steel

Southern Portion – Three Operable Units

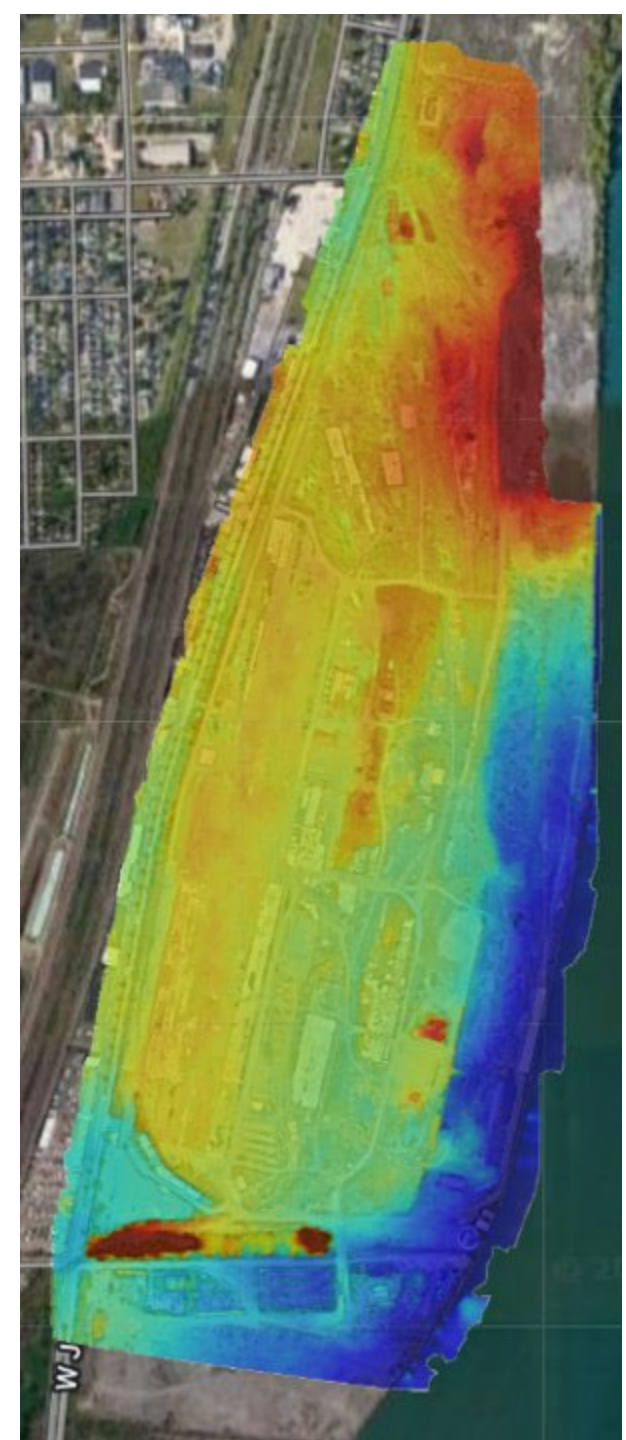
- Operable Unit 1 (OU1) – Source Areas
 - Releases to the land, fill materials, steel plant slag, etc.
- Operable Unit 2 (OU2) – Groundwater
 - Impacts to groundwater, assessment of site hydrogeology, evaluation groundwater discharge
- Operable Unit 3 (OU3) – Trenton Channel
 - Groundwater discharge to surface water, impacts to sediment and porewater



Southern Portion – Work Completed to Date

- ✓ Review and compilation of prior investigations
- ✓ Site reconnaissance and assessment of existing monitoring wells
- ✓ Drone surveys
- ✓ Geophysical surveys and utility clearance activities
- ✓ Soil borings, monitoring well installations, well development
 - ✓ ~25 out of 32 locations completed
- ✓ Soil sampling for chemical laboratory analysis
 - ✓ Samples analyzed for VOC, SVOCs, Metals, PCBs, Dioxins/Furans, PFAS

Drone image showing relative elevations – blue color are the lowest elevations on the site.



Findings to Date

■ Site History

- Extensive fill, made land, historic shorelines, former wetlands and stream channels
- Historic investigations encountered oil, metals, PCBs, high and low pH in groundwater
- Demolition including removal actions completed in 2021

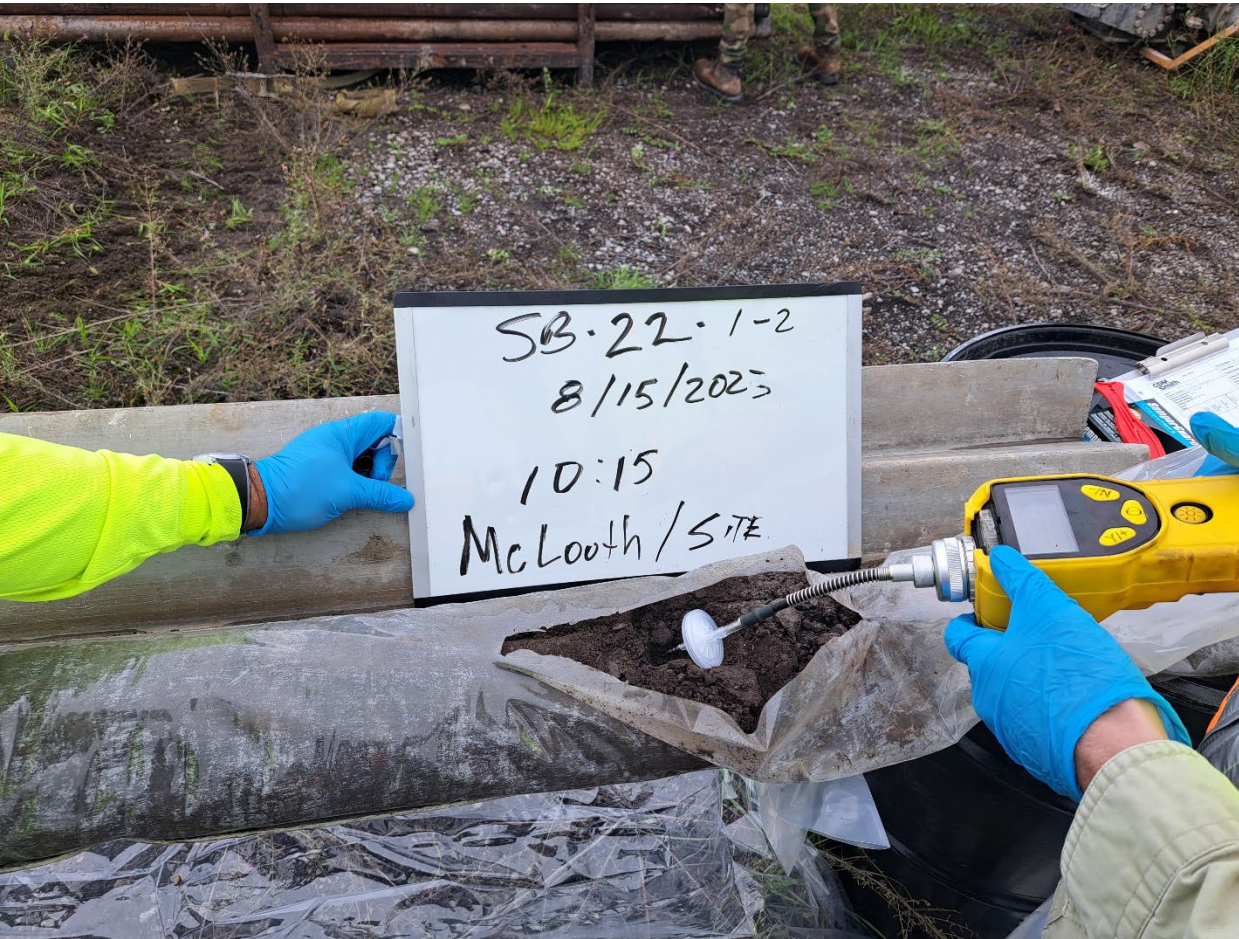
■ Soil Borings

- Predominantly sandy shallow soils
- Extensive native clay present above bedrock
- Depth to bedrock ranges from ~20 to ~40 feet below ground surface



View showing current extent and location of former shorelines and wetlands

Photos of Work to Date



Images of a soil boring soil sample being screened for volatile organic compounds and an example of steel plant slag

Photos of Work to Date



Images of clay overlying bedrock and of the local bedrock

Work to be Completed – OU1 and OU2

- Finish soil boring and soil sampling
- Laboratory analysis of soil samples
- Complete monitoring well installation and well development
- Groundwater sampling of newly installed and existing monitoring wells
- Laboratory analysis of groundwater samples
- Synoptic rounds of water level elevation measurements
- Hydraulic testing of monitoring wells
- Assessment of hydrogeologic site characteristics
- Estimation of groundwater and contaminant mass discharge to Trenton Channel

Images of a rotosonic drilling rig and recently constructed monitoring well



Work to be completed – OU3

■ Marine Surveys

- multi-beam hydrographic, debris and shoreline, side scan sonar, and sub-bottom profile

■ Sediment Sampling

- 23 locations, surface samples (0-0.5') by Ponar dredge and collection of core via by Mudpuppy and vibracore
- Core sample depths 0-1', 1-2', 2-3', 3-5', every two feet thereafter to native clay or refusal
- 6 locations for geotechnical sample collection
- 4 sediment trap locations to assess mobile sediment
- Porewater analyses from surface samples

■ Surface Water Sampling

- 10 locations focused to assess discharge locations and drainage areas

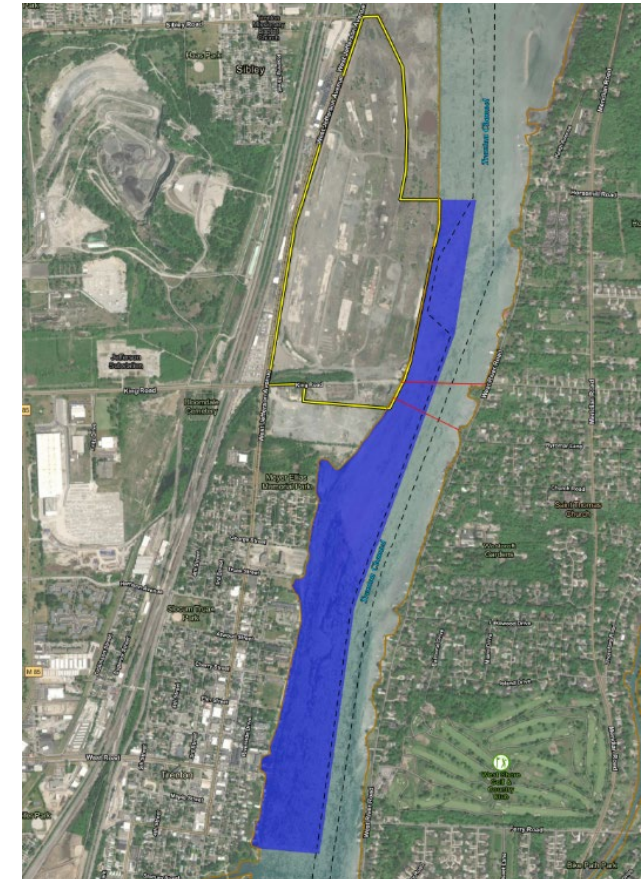


Image of EPA's "Mudpuppy" sampling vessel and the areal extent of OU3

What's Next – General Schedule

- Fall 2023 – Completion of Year 1 OU1/OU2 & OU3 Field Work
- Winter 2024 – Evaluation of OU1/OU2/OU3 Field and Laboratory Data
- Spring / Summer 2024 - Year 2 Field Work
- Fall 2024 – Completion Remedial Investigation and Risk Assessment
- Spring 2025 – Preparation of Feasibility Study
- Fall 2025 – Public Participation on Proposed Plan
- October 2025 – Expected timeframe for Record of Decision for McLouth Steel



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