



REGION 5
CHICAGO, IL 60604

April 8, 2026

Via Electronic Mail Only

Ms. Christopher Vandegrift (vandegriftcj@cdmsmith.com)

Senior Project Manager

CDM Smith

One Allegheny Square, Suite 200

Pittsburgh, PA 15212

RE: Operable Unit 1 Soils Technical Memorandum – Year 2
McLouth Steel Corporation Superfund Site – MID017422304 / A557
1491 West Jefferson Avenue, Trenton, Wayne County, Michigan

Dear Mr. Vandegrift:

The *Operable Unit 1 Soils Technical Memorandum – Year 2* (OU1 Year 2 Tech Memo), prepared by CDM Smith (CDM) on behalf of the United States Environmental Protection Agency (EPA), presents the results of the soil investigation performed in 2025 at the McLouth Steel Corporation Superfund Site (Site). This project was a part of the EPA Design and Engineering Services (DES) Contract No. 68HE0318D0003, Task Order No. 68HE0523F0033. EPA, in collaboration with Michigan Department of Environment, Great Lakes, and Energy (EGLE), has completed its review of the OU1 Year 2 Tech Memo. This review letter includes comments from EPA and comments for EGLE are provided as an enclosure to this letter.

Comments cite the page, section, and paragraph where an issue or question was noted. "Paragraph 1" refers to the first complete paragraph on a cited page; partial paragraphs carrying over from a previous page are referenced as "Paragraph 0" where applicable.

Comments

1. **Pages 1 and 2, Site Background:** As noted in EPA's review of the OU1 Year 1 Tech Memo, references must be provided for the summary information provided in the OU1 Year 2 Tech Memo. The references must also be added to the reference list.
2. **Page1, Site Background, Third paragraph:** For clarity to the public, EPA recommends adding a footnote that in 2019, EGLE assumed all functions related to CERCLA for the State of Michigan and Michigan Department of Environmental Quality (MDEQ) effectively ceased to exist.

3. **Page 2, Site Background, First Paragraph:** EPA is unsure what “including the property” means in this sentence and whether it is necessary information.
4. **Page 2, Site Background, Third Paragraph:** Please switch the order of the last two sentences in the paragraph about the OU1 Year 1 Tech Memo.
5. **Page 3, Physical Setting, First Paragraph:** EPA recommends removing the word “elevation” before “575 feet” in the first sentence and before “585 feet” in the second sentence. Please also spell out “El.” as elevation in the first sentence.
6. **Page 3, Physical Setting, First Paragraph:** Please define NGVD88 as North American Vertical Datum of 1988.
7. **Page 3, Physical Setting, First Paragraph:** Suggest editing the sentence to active tense – The changes to elevations document that fill is the predominant material encountered in borings above the bedrock.
8. **Page 3, Physical Setting, Second Paragraph:** No need to capitalize “Urban Fill” if not a proper name.
9. **Page 3, Overburden Geology, Fourth Paragraph:** The second sentence indicates that fat clay on site ranges from 2 to 23 feet, with several areas where the fat clay is limited or absent. Should this sentence be edited to say “zero to 23 feet” instead of “2 to 23 feet” if the clay was absent in several areas? Also need to specify that the range is thickness, as done fill in the first part of the sentence.
10. **Page 4, Overburden Geology, First Paragraph:** Suggest indicating that these are “borings RI-SB-29 and RI-SB-68.” Please do this throughout the memo.
11. **Page 4, Operable Unit 1 Soil Investigation Activities, Fourth Paragraph:** Please add August 13, 2024, as the date of the OU1 and OU2 Year 2 Scope of Work.
12. **Page 4, Samples Collection, Review and Data Validation, Eight Paragraph:** The first sentence incorrectly references the 2023, instead of the 2025, Quality Assurance Project Plan (QAPP). Update the first sentence to “EPA-approved *Final Quality Assurance Project Plan – Year 2, Revision 1* (QAPP)(CDM Smith 2025).”
13. **Page 5, Samples Collection, Review and Data Validation, Fourth Paragraph:** EPA suggests editing the fourth sentence to “Decontamination water, including water and solutions used to clean field equipment, was....” since “decontamination water” is likely an unfamiliar to many readers.
14. **Page 5, Samples Collection, Review and Data Validation, Fourth Paragraph:** To add clarity, EPA suggests editing the last sentence to “The contents of the frac tank were sampled by CDM Smith to determine appropriate disposal options.”

15. **Page 6, PCB Aroclors, First Paragraph:** Please define µg/kg as micrograms per kilogram since this is the first time used.
16. **Page 9, Pesticides, First Paragraph:** The bold “Figure” is missing the figure number, which is Figure 8.
17. **Page 10, Dioxins/Furans, First Paragraph:** For clarity, please revise the second sentence to the following if it correctly represents the data – 1,2,3,4,6,7,8-heptachlordibenzo-p-dioxine and octachlorodibenzo-p-dioxin were the most consistently detected D/Fs, detected in 97% of the samples with D/F detections.
18. **Page 11, Inorganics (Metals and Cyanide), First Paragraph:** The next to last sentence describes the area where the especially elevated levels of inorganics were detected. If discernable, please include statements about why results in these areas are elevated compared to other areas on-Site (i.e. are these areas near certain historical process areas?).
19. **Page 12, Table 8, Background Soil Inorganics Concentration and Year 2 soil Inorganics Concentration:** Please define mg/kg as micrograms per kilogram since this is the first time used.
20. **Pages 12 and 13, Table 8, Background Soil Inorganics Concentration and Year 2 soil Inorganics Concentration:** The values in the second column are the arithmetic or geometric mean, nonparametric median values shown in Table 2 (2015 update) of EGLE's survey document for Huron-Erie glacial lobe topsoil in EGLE's *Soil Background and Use of the 2005 Michigan Background Soil Survey* (EGLE's Soil Survey; revised January 2023). This does not align with the Appendix A Flow Chart (Flow Chart) provided in EGLE's Soil Survey. According to the Flow Chart, the lesser of the following applies: A) Two standard deviations of the mean, for the appropriate soil type and glacial lobe (Table 2, 3, or 4); or B) The upper limit value in the Typical Range column (Table 1). Table 8 should be updated to align with EGLE's Soil Survey. Additionally, the column header in the OU1 Year 2 Tech Memo should be revised to specify that the values are from the 2015 Table 2 in EGLE's Soil Survey, not the 2005 Table 2. There are two Table 2s in EGLE's Soil Survey. Additionally, a discussion of the appropriateness of utilizing Michigan's soil background concentrations, including characterizing the soil type, should have been included in the OU1 Year 1 and Year 2 Tech Memos. Make sure concentrations are compared to appropriate soil type. Surface soils (referred to as topsoil in EGLE's Soil Survey) is defined differently throughout the OU1 Year 2 Tech Memo

EGLE's Soil Survey states that an official EGLE determination is necessary in order to allow EGLE's background concentrations to apply for fill material. EGLE indicated that revisions to their Soil Survey are pending. CDM will still have to determine if the fill material found will allow for the use of EGLE's background concentrations.
21. **Page 13, Inorganics (Metals and Cyanide), First Paragraph:** Delete the word “typical” from the second sentence. Instead refer to EGLE's State and Regional soil background values.
22. **Page 13, Inorganics (Metals and Cyanide), Fifth Paragraph:** The word “expected” is not

appropriate in the last sentence of the paragraph and should be deleted.

23. **Page 15, Per- and Polyfluoroalkyl Substances, First Paragraph:** Please delete “all” from the first sentence since it is implied.
24. **Page 15, Per- and Polyfluoroalkyl Substances, First Paragraph:** Please define the acronym for perfluorodecanoic acid (PFDA) in the second sentence, instead of the third sentence since this is the first time it is referenced.
25. **Page 16, Findings and Recommendations, First Paragraph:** EPA recommends adding a footnote to the third sentence detailing why the results for boring RI-SB-16 were rejected (i.e. what was the poor quality control issue?). EPA did a word search for “reject” and “rejected” in this document and the OU1 Year 1 Tech Memo, and this is the only instance it was used. So, it is unclear why the data was rejected.
26. **Page 20, Figure 1 Site Layout:** The scale bar is incorrect and must be corrected. This has been noted by EPA in its review of many of CDM’s documents. Please check this prior to any future submittals.
27. **Tables 3a & 3b through Tables 9a & 9b:** It would be nice visually if the columns lined up in both the a. and b. tables, especially when on the same page.
28. **Tables 3a, 4a, and 7a:** Why is the total number of samples (shown in last column of each table) not consistent for all volatile organic compound (Table 3a), semi-volatile organic compound (Table 4a), and inorganic analytes (Table 7a) in Year 1?
29. **Pages 23-29, Figures 5 through 10:** Tables should be updated to include a column for date sampled.
30. **Pages 23-29, Figures 5 through 10:** Figures 5-10 include Year 1 and Year 2 analytical results tables, but there are no visual connections of the results to the sample locations or colors indicating exceedances of screening criteria, including no isoconcentrations. As discussed during a 01/21/2026 meeting regarding the format of figures in the pending OU1 Year 2 Technical Memo, figures must present the results in a readily understandable fashion compared to applicable screening criteria. The color of the boring locations on the figures denotes whether the borings were advanced in Year 1 or Year 2. As noted during our meeting, it would be more helpful if the colors represented the level of contamination at each location. Readers are unable to interpret the data sufficiently to develop a conceptual site model without appropriate figures. This topic has been discussed many times and noted in prior review letters. Please update the figures so they present the results of sampling and analysis in a readily understandable fashion compared to the applicable screening criteria.
31. **Page 23, Figure 5 Distribution of PCBs:** This figure does not include all of the arachnids that were detected above the PAL (i.e. arachnids 1242 and 1268). All contaminants of potential concern (COPC) detected above the PALs should have been represented on Site figures in order to understand contaminant distribution. Please update all Site figures to include all COPCs above

their respective PALs.

32. **General comment:** Comment #8 of EPA's review of the OU1 Year 1 Tech Memo requested clarification about two samples were collected from Site soil piles and that the locations must be included on the appropriate Site figures. This information was not provided in the OU2 Year 2 Tech Memo. This information must be provided in a revised OU1 Year 2 Tech Memo and/or the Remedial Investigation Report.

The above comments and EGLE's enclosed comments must be addressed in a revised OU1 Year 2 Tech Memo and/or the Remedial Investigation Report. If you have questions or require assistance, please contact me at (312) 353-6713 or green.nilia@epa.gov.

Sincerely,

Nilia Moberly Green
Remedial Project Manager
Superfund & Emergency Management Division

Enclosure: The Michigan Department of Environment, Great Lakes, and Energy (EGLE) Comments on the Operable Unit (OU) 1 Soils Technical Memorandum Year 2, McLouth Steel Corp., Superfund Site, Trenton, Wayne County, Michigan

Cc (via email only):

Megan Cynar, Michigan EGLE (cynarm@michigan.gov)

Steven Kaiser, EPA Region 5 (kaiser.steven@epa.gov)

Greg Gehrig, EPA Region 5 (gehrig.greg@epa.gov)

Lance Haman, EPA Region 5 (haman.lance@epa.gov)



GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
REMEDIATION AND REDEVELOPMENT DIVISION



PHILLIP D. ROOS
DIRECTOR

March 19, 2026

VIA EMAIL

Nilia Moberly Green, Remedial Project Manager
United States Environmental Protection Agency
Region 5
77 West Jackson Boulevard, (SR-6J)
Chicago, Illinois 60604-3507

Dear Nilia Moberly Green:

SUBJECT: Comments on Operable Unit 1 Soils Technical Memorandum – Year 2; McLouth Steel Corp., Superfund Site, Trenton, Wayne County, Michigan

Michigan Department of Environment, Great Lakes, and Energy (EGLE) staff has reviewed the “*Operable Unit 1 Soils Technical Memorandum – Year 2*” (Report) for the McLouth Steel Corp. Superfund Site (Site). The Report was prepared by an environmental engineering firm, CDM Smith, on behalf of the United States Environmental Protection Agency (USEPA) and received by EGLE staff via email on January 29, 2026.

EGLE staff’s comments for your consideration are as follows:

SPECIFIC COMMENTS:

1. **Page 3, Physical Settings, Site Soils, Paragraph 3:** EGLE staff recommends removing the word “elevation” before “575 feet” in sentence one and “585 feet” in sentence two.
2. **Page 9, Pesticides:** EGLE staff notes that in the fifth sentence the figure reference is missing a figure number.
3. **Page 15, Findings and Recommendations:** In the third sentence it states in parentheses that surface soil is “0 to 2 feet below ground surface” and subsurface depths “>2 feet below ground surface”; however, previously in Samples Collection, Review and Data Validation, Paragraph two second sentence it states “with surface being defined as 0 to 0.5 feet below ground surface, and subsurface samples being defined as anything deeper than 0.5 feet below ground surface”. Please correct this discrepancy throughout the Report.
4. **Page 16, Findings and Recommendations, Paragraph five:** EGLE staff notes a word seems to be missing in sentence two (“RI-SB-16, RI-SB-25, and RI-SB-32, all of exhibited high contamination”).

5. **Figure 6, Distribution of VOCs:** EGLE staff notes the results reported for RI-SB-35 9-10 appear to be from the "ME" sample; however, sample results from other "ME" samples were not shown in the figure even if they exceeded. Further EGLE notes the meaning of "ME" is not provided in the tables. According to CDM Smith this notation is related to the results being medium level analysis after dilution. Please verify the sample in Figure 6 reported is accurate and add the meaning of "ME" to the tables.
6. **Figure 10, Distribution of Inorganics:** EGLE staff notes the results for RI-SB-44, RI-SB-51, and RI-SB-59 do not match the results reported in the analytical tables.

GENERAL COMMENTS:

1. **Year 2 Boring Logs and Tables:** EGLE staff notes several of the sample locations shown on the boring logs do not match the sample ID in the analytical tables. Specifically, RI-SB-56, RI-SB-67, RI-SB-68, RI-MW/SB-44, RI-MW/SB-46, RI-MW/SB-48, RI-MW/SB-49, RI-MW/SB-59, RI-MW/SB-61, and RI-MW/SB-75.
2. **Figures with Analytical:** EGLE staff notes there are several exceedances of Volatile Organic Compounds, Semi-Volatile Organic Compounds, Polychlorinated biphenyls, pesticides, dioxin/furans, and inorganics that are not shown on Figures 5 through 10. EGLE staff recommends a note be added to the figures to indicate not all exceedances are displayed on the figures.

Additional comments on the Report from the Superfund Section, Remediation and Redevelopment Technical Support Unit are provided as an attachment to this letter.

EGLE staff appreciates the opportunity to review the Operable Unit 1 Soil Year 2 Technical Memorandum and provide comments. If you have any questions or concerns, please contact Megan Cynar, Project Manager, Superfund Section, Remediation and Redevelopment Division (RRD), at 517-256-2681; or CynarM@Michigan.gov; or EGLE, RRD, P.O. Box 30426, Lansing, Michigan 48909-7926.

Sincerely,



Megan Cynar, Project Manager
Remediation and Redevelopment Division
Site Management and Administrative Unit
Superfund Section
517-256-2681

cc: Courtney Fung, EGLE
Matt Baltusis, EGLE

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

TECHNICAL ASSESSMENT MEMORANDUM

TO: Megan Cynar, Project Manager
Superfund Section, Remediation & Redevelopment
Defense/Superfund Site Management and Administrative Unit

FROM: Matt Baltusis, Senior Geologist
Superfund Section, Remediation & Redevelopment
Technical Support Unit 

DATE: March 6, 2026

SUBJECT: Comments to Operable Unit (OU) 1 Soil Year 2 Technical Memorandum
McLouth Steel Corp. Superfund Site, Trenton, Wayne County, Michigan

Michigan Department of Environment, Great Lakes, and Energy (EGLE) Superfund staff has reviewed the *OU1 Year 2 Technical Memorandum, McLouth Steel Corp. Superfund Site, Trenton, Michigan* (Report) document prepared for United States Environmental Protection Agency (USEPA) – Region 5 prepared by an environmental engineering firm, namely CDM Smith (CDM), dated January 29, 386 pages.

The Report describes the soil sampling results of the remedial investigation (RI) performed at the McLouth Steel Corp. Superfund Site (Site). This sampling event was part of the RI work plan. This technical memorandum presents data collected during both Year 1 and Year 2 field events. Year 1 field events occurred from August to September 2023 and were previously summarized in the *Operable Unit 1 Soils Technical Memorandum – Year 1*.

Year 2 field events took place from May to June 2025. These field events were performed to characterize the nature, extent, and concentrations of chemical contaminants in the soil and provide recommendations for additional site characterization, where appropriate. Year 2 field events were performed in accordance with the sampling plan laid out in the Year 2 Scope of Work.

The Year 1 and Year 2 data show widespread distribution of some semi-volatile organic compounds (SVOCs), dioxins/furans, and inorganics.

Recommendation: The following four areas with higher concentrations warrant further evaluation:

- **Northeast Portion of the Site** - A general area with scattered locations of elevated concentrations is present across the northeast portion of the Site, including at soil borings RI-SB-47, RI-SB-48, RI-SB-49, and RI-SB-51. This area had elevated

concentrations of SVOCs, inorganics, and polychlorinated biphenyls (PCBs) with respect to the project action limits (PALs) and the rest of the Site. Across both surface (zero to two feet below ground surface) and subsurface depths (greater than two feet below ground surface), multiple SVOCs (i.e., 1-methylnaphthalene, benzo(a)anthracene, benzo(a)pyrene, and naphthalene) and numerous inorganic analytes exceeded their PALs at various orders of magnitude. In the surface soil samples, multiple PCB Aroclors exceeded their PALs at various orders of magnitude.

- **Southwest Portion of the Site** - Another more limited area of elevated concentrations occurs on the southwest portion of the Site, focused around the initial soil boring, RI-SB-03, and the four subsequent surrounding borings, RI-SB-56, RI-SB-63, RI-SB-64, and RI-SB-65. This area had higher concentrations of SVOCs and inorganics with respect to the PALs than the rest of the Site. Across both surface and subsurface depths, multiple SVOCs (i.e., 1-methylnaphthalene, benzo(a)anthracene, benzo(a)pyrene, and naphthalene) and inorganics exceeded their PALs at various orders of magnitude.
- **Former Underground Storage Tank** - Relatively elevated concentrations occur at soil boring RI-SB-57, which is located near the footprint of a former underground storage tank. This boring had exceedances of volatile organic compounds (VOCs), SVOCs, and inorganics. Specifically, various VOCs are found at the surface depth (i.e., 1,1,1-trichloroethane, 1,1-dichloroethane, chloroform, and tetrachloroethene) and at the subsurface depths (i.e., 1,1-dichloroethane, 1,2,4-trimethylbenzene, ethylbenzene, and trichloroethene) with exceedances of their PALs at various orders of magnitude.

Various SVOCs are found both at the surface and subsurface depths (i.e., 1,4-dioxane, 1-methylnaphthalene, benzo(a)anthracene, benzo(a)pyrene, and naphthalene) with exceedances of their PALs at various orders of magnitude. Numerous inorganics exceeded their PALs at both surface and subsurface depths at a multitude of orders of magnitude. The soil contamination appears to have been delineated and localized in this area.

- **South-Central Portion of the Site** - An area in the south-central portion of the Site, extending from soil boring RI-SB-16 to RI-SB-25, exhibited elevated concentrations of VOCs, SVOCs, PCBs, pesticides, and inorganics. Year 2 soil borings were completed to refine the delineation of soil conditions near the Year 1 borings, RI-SB-16, RI-SB-25, and RI-SB-32, all of which exhibited high contamination. Integrating the Year 1 and Year 2 results indicates that the area near RI-SB-16 (where the Year 1 soil results were rejected because of poor quality control results

and high concentrations), is contaminated with various VOCs, SVOCs, PCBs, and inorganics. Several Year 2 soil borings, RI-SB-58, RI-SB-67, RI-SB-68, RI-SB-69, RI-SB-70, RI-SB-71, and RI-SB-72, provided supporting data indicating the area between RI-SB-16 AND RI-SB-25 is the estimated extent of this elevated contamination.

The combination of Year 1 and Year 2 soil data provides a relatively comprehensive characterization of the soil conditions at former McLouth Steel facility site. The constituents detected are widespread and for the most part not exceeding the PALs by orders of magnitude. The four areas described above have locally elevated concentrations of constituents of concern. The significance of these areas will be further evaluated in conjunction with the Year 2 groundwater quality data and as part of the human health and ecological risk assessment.

All soil borings in Year 1 and several Year 2 borings were drilled to the top of the bedrock surface. In most locations a layer of fat clay was observed above the bedrock surface. In some areas on the eastern and southern portion of the Site (vicinity of RI-SB-29 and RI-SB-68), fat clay was not observed and may not have been deposited or had been eroded away by the Detroit River. A silty clay was typically observed directly above bedrock in these locations. Fat clay is expected to function as an aquitard between the overburden groundwater and the bedrock across most of the McLouth site.

Recommendation: Evaluate the overburden groundwater and the potential windows in the fat clay aquitard to identify the potential for bedrock groundwater impacts and the need for installation of bedrock monitoring wells.

I concur with the findings and recommendations presented in the Report.

This concludes EGLE staff geologist review, please contact Matt Baltusis with any questions.

cc: John Bradley, EGLE