

McLouth Steel Corp. Trenton PFAS Site Investigation

Megan Cynar, Project Manager

Michigan Department of Environment, Great Lakes, and Energy

517-256-2681

CynarM@michigan.gov

Background

- Former steel mill
- Numerous historic investigations and cleanup actions
- Several historic fires have been reported at the facility that utilized aqueous film-forming foam (AFFF) to extinguish.
- Placed on National Priorities List (NPL) in May 2019
- Remedial Investigations began in July 2023.



Groundwater Results

- 30 monitoring wells sampled for PFAS
- 145 total detections of PFAS compounds
- 69 of the detected PFAS were above criteria.
- Maximum concentration detected for each:
 - PFHxS – 1,900 ppt (compared to 51 ppt)
 - PFNA – 8.46 ppt (compared to 6 ppt)
 - PFOS – 6,670 ppt (compared to 16 ppt)
 - PFOA – 230 ppt (compared to 8 ppt)

Site listed as a [Michigan PFAS Action Response Team \(MPART\)](#) site on September 16, 2024

MPART

MICHIGAN PFAS ACTION RESPONSE TEAM

Michigan's Drinking Water and Groundwater Cleanup Standards

Compound	Standards
PFNA	6 ppt
PFOA	8 ppt
PFOS	16 ppt
PFHxS	51 ppt
GenX (HFPO-DA)	370 ppt
PFBS	420 ppt
PFHxA	400,000 ppt

Michigan Surface Water Quality Values

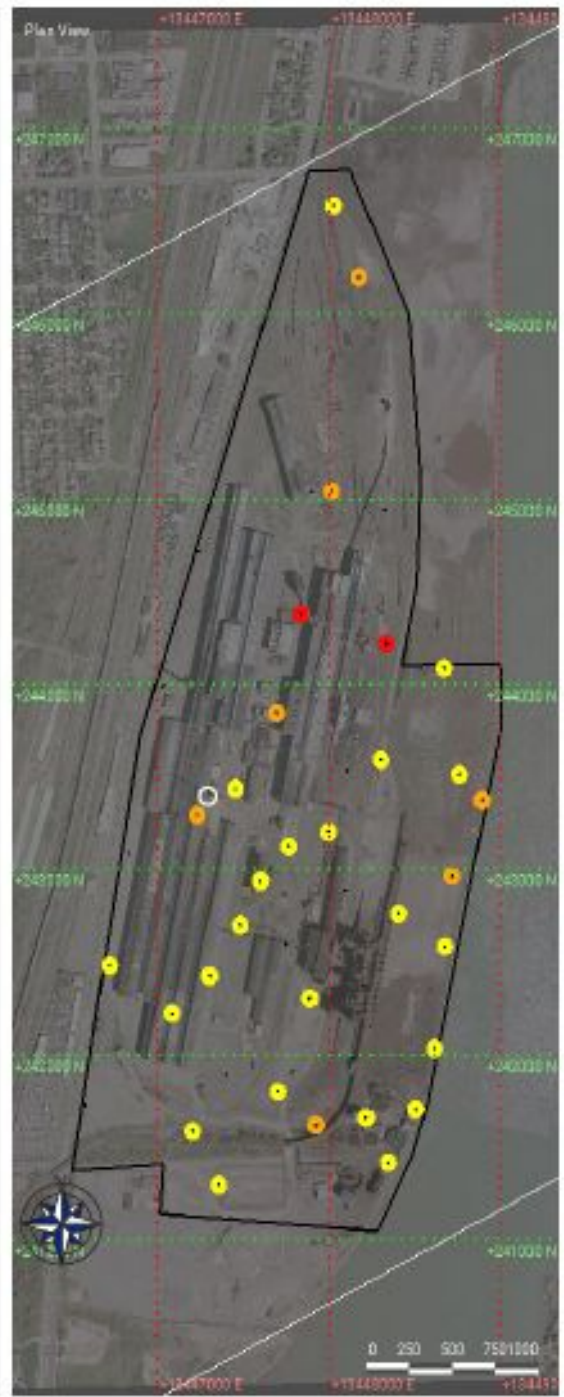
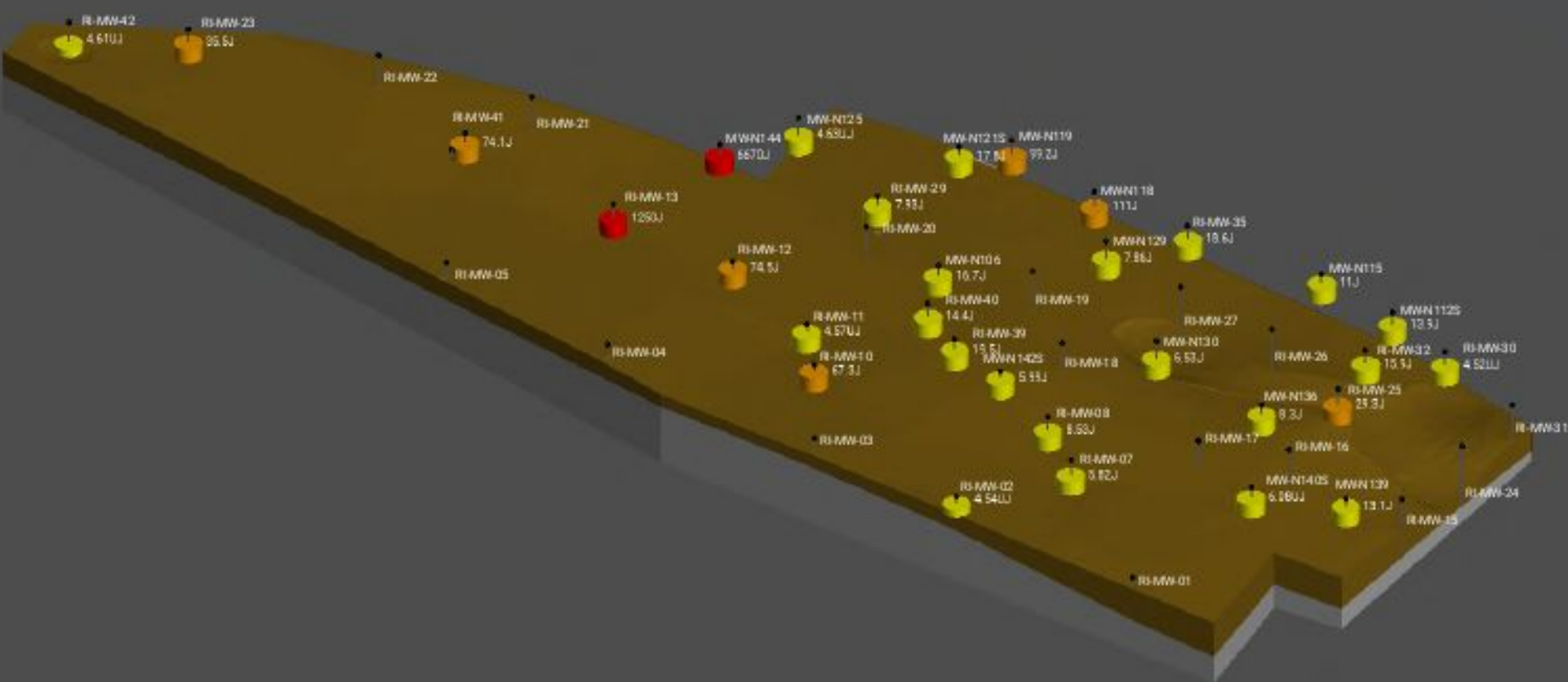
Compound	Water Quality Value
PFNA	30 ppt
<i>If Drinking Water Source</i>	<i>19 ppt</i>
PFOA	170 ppt
<i>If Drinking Water Source</i>	<i>66 ppt</i>
PFOS	12 ppt
<i>If Drinking Water Source</i>	<i>11 ppt</i>
PFHxS	210 ppt
<i>If Drinking Water Source</i>	<i>59 ppt</i>
PFBS	670,000 ppt
<i>If Drinking Water Source</i>	<i>8,300 ppt</i>

Michigan's Rule 57 Water Quality Values apply to NPDES discharges

EPA Drinking Water Maximum Contaminant Levels (MCLs)

Compound	Final MCLG	Final MCL (enforceable levels)
PFOA	Zero	4.0 parts per trillion (ppt) (also expressed as ng/L)
PFOS	Zero	4.0 ppt
PFHxS	10 ppt	10 ppt
PFNA	10 ppt	10 ppt
HFPO-DA (commonly known as GenX Chemicals)	10 ppt	10 ppt
Mixtures containing two or more of PFHxS, PFNA, HFPO-DA, and PFBS	1 (unitless) Hazard Index	1 (unitless) Hazard Index

Groundwater Results - PFOS
 McLouth Steel Corp Superfund Site
 Trenton, Wayne County, Michigan



PFOS (ng/L)	Lithology
● > 200	■ Clay
● > 20	■ Bedrock
● > 2	
● < 2	

Project Action Limit (PAL):
 0.02 nanograms per liter (ng/L)



Next Steps

- Complete soil and groundwater sampling for Year Two of the Remedial Investigation starting in Fall 2024 will include:
 - Collecting one soil sample per new boring location at 1 to 2 feet below ground surface for analysis of PFAS.
 - Completing a PFAS analysis on groundwater samples collected from all newly installed monitoring wells and any existing monitoring wells not previously analyzed for PFAS.

Public Water Supply

- The McLouth Steel Corp., in Trenton, MI, Wayne County, is served by the Great Lakes Water Authority, which is a community water supply (CWS) that provides water to several smaller public water supply systems.
 - The Great Lakes Water Authority (Southwest TP102) CWS is currently on **annual** monitoring with non-detections for all tested PFAS.
 - Wyandotte (TP100) CWS serves areas to the north of the site and is currently on **quarterly** monitoring with past results consistently below current maximum contaminant levels for PFOA (a single result) and non-detections for all other tested PFAS.

Note: the Great Lakes Water Authority (Southwest) and Wyandotte CWSs utilize the Detroit River as their source.

- There are no noncommunity water supplies providing water to the public near the AOI.