700000

SEVENTH FIVE-YEAR REVIEW REPORT FOR WAUSAU GROUND WATER CONTAMINATION SUPERFUND SITE MARATHON COUNTY, WISCONSIN

Prepared by

U.S. Environmental Protection Agency
Region 5
Chicago, Illinois

3/20/2025

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Signed by: DOUGLAS BALLOTTI

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LIST OF ABBREVIATIONS & ACRONYMS

AMR	Annual Monitoring Report
AFFF	Aqueous Film Forming Foam
C12DCE	Cis-1,2-Dichloroethene
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CD	Consent Decree
CFR	Code of Federal Regulations
City	Wausau, Wisconsin
COC	Contaminant of Concern
CRA	Conestoga-Rovers & Associates Inc.
CW	City Well
DCE	Dichloroethene
EPA	United States Environmental Protection Agency
ES	Wisconsin NR 140 Enforcement Standard
ESD	Explanation of Significant Differences
EW	Extraction Well
FS	Feasibility Study
FYR	Five-Year Review
GAC	Granular activated carbon
GHD	GHD Group Party Ltd (Contractor Representative for Site PRPs)
gpm	Gallons per minute
ICs	Institutional Controls
ICIAP	Institutional Controls Implementation and Assurance Plan
LTS	Long-Term Stewardship
MCL	Maximum Contaminant Level
MW	Monitoring Well
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NEtFOSA	N-ethyl perfluorooctanesulfonamide or Sulfluramid
NEtFOSAA	N-ethyl-perfluorooctane sulfonamidoacetic acid (a perfluorinated alkyl substance)
NEtFOSE	N-(2-hydroxyethyl)perfluorooctylsulphonamide
NPL	National Priorities List
O&M	Operation and Maintenance
OU	Operable Unit
PAH	Polycyclic Aromatic Hydrocarbon
PAL	Wisconsin NR 140 Preventative Action Limit
PCBs	Polychlorinated Biphenyls
PCE	Perchloroethylene, also called tetrachloroethene
PCP	Pentachlorophenol
PFAS	Per- and polyfluoroalkyl substances
PFOA	Perfluorooctanoic acid
PFOS	Perfluorooctane sulfonate
PFOSA	Perfluorooctanesulfonamide
ppt	parts per trillion (also sometimes written as ng/L)
PRP	Potentially Responsible Party

RAOs	Remedial Action Objectives
RI	Remedial Investigation
ROD	Record of Decision
RPM	Remedial Project Manager
Site	Wausau Ground Water Contamination Superfund Site
SVE	Soil Vapor Extraction
TCE	Trichloroethene
µg/L	micrograms per liter
UU/UE	Unlimited Use and Unrestricted Exposure
VC	Vinyl Chloride
VI	Vapor Intrusion
VOCs	Volatile Organic Compounds
WDNR	Wisconsin Department of Natural Resources

I. INTRODUCTION

The purpose of a Five-Year Review (FYR) is to evaluate the implementation and performance of a remedy in order to determine if the remedy is and will continue to be protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in FYR reports such as this one. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The United States Environmental Protection Agency (EPA) is preparing this FYR pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121, consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP)(40 CFR Section 300.430(f)(4)(ii)), and considering EPA policy.

This is the seventh FYR for the Wausau Ground Water Contamination Superfund Site ("Site"). The triggering action for this **statutory** review is the completion date of the previous FYR. The FYR has been prepared due to the fact that hazardous substances, pollutants, or contaminants remain at the Site above levels that allow for unlimited use and unrestricted exposure (UU/UE).

The Site consists of two operable units (OUs), both of which are addressed in this FYR. OU1 addresses the interim groundwater actions at the Site. OU2 is the Final Action that confirms the previously selected groundwater remedy and requires additional remedial actions.

The Wausau Ground Water Contamination Superfund Site FYR was led by D. Michael Holt III, Remedial Project Manager (RPM), EPA. Participants included Jane Gray of the Wisconsin Department of Natural Resources (WDNR). The Potentially Responsible Parties (PRPs) were notified of the initiation of the FYR. The review began on 4/15/2024.

Site Background

The Site is located in central Wisconsin along both the east and west banks of the Wisconsin River in the downtown area of Wausau, Wisconsin (City), which has a population of approximately 39,500 people (see Figure 1, Appendix B). The Site affects six of the City's drinking water production/supply wells (City Wells or CWs). The City's production wells are adjacent to the Wisconsin River and provide drinking water for people who reside on both sides of the Wisconsin River. In 1982, three of the wells were found to be contaminated with high levels of volatile organic compounds (VOCs).

Historically, the EPA identified two areas of concern with activities that resulted in contamination at the Site. The first area is along the west bank of the Wisconsin River (West Bank) and was a property owned and occupied by Marathon Electric Corporation, at which metal parts were manufactured, and a closed municipal landfill. The landfill operated from 1948 to 1955 and accepted almost all commercial, industrial and residential waste generated within Wausau. The landfill appears to be the predominant source of trichloroethene (TCE) contamination of the underlying aquifer. The second area of concern is along the east bank of the Wisconsin River (East Bank) and was property occupied by the Wausau Chemical Co. where bulk solvents were distributed and transferred. The Wausau Chemical Co. was found to be a likely source of soil and groundwater contamination due to spills from past

operations. Also on the east side, Wausau Energy, a petroleum bulk storage and disposal center, may have contributed to the contamination at the Site.

Current and future anticipated Site use on the West Bank consists of the Marathon Electric Corporation (Marathon Electric) industrial electric parts manufacturing. The East Bank is currently owned by the City and is unused, but the City plans to eventually redevelop the area for beneficial use.

FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site Name: Wausau Ground Water Contamination		
EPA ID: WID980993521		
Region: 5	**State:** WI	**City/County:** Wausau/Marathon County
SITE STATUS		
NPL Status: Final		
Multiple OUs? Yes	**Has the site achieved construction completion?** Yes	
REVIEW STATUS		
Lead agency: EPA ***[If "Other Federal Agency", enter Agency name]*:**		
Author name (Federal or State Project Manager): Michael Holt		
Author affiliation: U.S. EPA Region 5		
Review period: 4/15/2024 - 12/5/2024		
Date of site inspection: 8/12/2024		
Type of review: Statutory		
Review number: 7		
Triggering action date: 4/9/2020		
Due date *(five years after triggering action date)*: 4/9/2025		

II. RESPONSE ACTION SUMMARY

Basis for Taking Action

A combined two-phase remedial investigation (RI) and Feasibility Study (FS) was carried out between August 1987 and September 1988, and documented in a 1989 report (Warzyn Inc, 1989). The RI/FS

identified the following groups of contaminants of concern (COCs) at the Site: benzene, toluene, ethylbenzene, and xylene (BTEX) compounds; total chlorinated ethenes; total chlorinated ethanes; single carbon chlorinated compounds; ketones; phthalates; polychlorinated biphenyl compounds (PCBs); polynuclear aromatic hydrocarbons (PAHs); phenols; and inorganic contaminants.

The RI identified the following chlorinated VOCs as the primary COCs in soil and groundwater at the Site that pose a threat to human health: Perchloroethylene (PCE), TCE, cis-1,2-dichloroethene (C12DCE), vinyl chloride (VC), chloroform, and carbon tetrachloride. On the West Bank, the RI found that the former municipal landfill on the Marathon Electric Corporation property contained soil and groundwater highly contaminated by the chlorinated VOCs and was a source of contamination in CW6 (located on West Bank) and, to some extent, CW3 (located on East Bank). On the East Bank, the RI identified soil and groundwater highly contaminated with the chlorinated VOCs at or near the Wausau Chemical Co. property as a source of contamination for CW3 and CW4 (CW4 has been abandoned and is omitted from contemporary Site maps).

During the RI/FS, several important potential exposure pathways were found for the Site. Potential health risks were evaluated for the following exposure pathways and potentially exposed population: (1) residents using municipal water exposed to contaminant concentrations equal to the laboratory detection limits of 0.5 micrograms per liter (µg/L) for PCE and TCE, and 1.0 µg/L for DCE; (2) hypothetical, future users of a private well installed within the contaminated aquifer exposed to the highest concentrations found in groundwater, approximately 4300 µg/L, to obtain the worst-case potential risk for this exposure scenario; and (3) residents exposed to contaminated air emanating from the groundwater treatment procedures (i.e. air stripping towers).

Soil remediation was only considered as a pathway to groundwater in the 1989 Record of Decision (ROD) (EPA, 1989).

Response Actions

Prior to the 1986 NPL listing, the EPA awarded the City a federal grant to help fund the design and installation of a packed tower VOC air stripper on the East Bank. However, VOC levels continued to increase prior to air stripper activation, resulting in the EPA's emergency response team installing a granular activated carbon (GAC) treatment system to CW6 on the West Bank in June 1984. As part of that emergency response, VOC air stripping towers were installed on the East Bank in the summer and fall of 1984 to treat water from CW3 and CW4. The West Bank GAC system was then removed from service in October 1984.

The EPA issued an interim ROD in 1988 for the West Bank and a final ROD in 1989 for the entire Site (EPA, 1988 and 1989). The EPA determined that the Site would be managed with two OUs as determined by the two RODs. The EPA and WDNR entered into judicial settlements with PRPs (i.e. the City, Wausau Chemical Co., and Marathon Electric Corporation) to implement the cleanups. The judicial settlements are memorialized in Consent Decrees (CDs) entered in 1989 and 1991 (EPA 1989; EPA 1991).

The two Remedial Action Objectives (RAOs) for the selected remedy from the OU1 1988 interim ROD address TCE contamination on the West Bank and are the following:

- Protection from long-term exposure to low levels of TCE from ingestion of drinking water; and
- Protection from future increased levels of contamination to the West Well Field.

The response actions selected for the Site's West Bank in the 1988 interim ROD included the following remedial components:

- Installation of a groundwater extraction well (EW-1) located in the southern portion of the contaminant plume (i.e. near the municipal landfill);
- Implementation of a treatment system for removal of contaminants;
- Discharge of the treated water to the Wisconsin River;
- Installation of an additional extraction well, as necessary; and
- Preparation of an operation and maintenance (O&M) monitoring program.

The RAOs for the selected remedies from the 1989 ROD for OU2 (Final ROD) were to address the remaining concerns at the Site following implementation of the Interim Remedial Action and are as follows:

- Reduction of long-term exposure to low levels of VOCs from ingestion of drinking water;
- Protection from potential future use of private wells in contaminated groundwater; and
- Protection from emissions of contaminants from proposed water treatment systems that release VOCs to the atmosphere.

The response actions selected for the Site in the 1989 final ROD included the following additional remedial components:

- Installation of soil vapor extraction (SVE) systems to remove VOC contaminants from soils at each of the identified source areas;
- Treatment of off-gases from the SVE system using vapor phase carbon units (the carbon was to be regenerated off-site); and
- Groundwater remediation utilizing the municipal wells and existing air strippers for expedited removal of contaminant plumes.

This remedy also includes monitoring of groundwater and soil. The selected remedy established that the cleanup levels for groundwater COCs are the Maximum Contaminant Levels (MCLs) per the Safe Drinking Water Act and WDNR's groundwater enforcement standards (ESs) (Wisconsin Administrative Rule Chapter NR 140). These standards are shown below in Table 1 for each COC identified in the ROD.

Table 1: Groundwater Cleanup Standards Selected in the 1989 ROD for Site COCs

COC	Federal Drinking water MCL (µg/L)	Wisconsin NR 140 ESs (µg/L)
TCE	5	5
PCE	5	5
C12DCE	70	7
VC	2	0.2

Although soil specific, numerical cleanup levels were not established in the 1989 ROD, the ROD stated: the performance standards for the SVE in source soils will be determined using a mass flux groundwater model to determine what cleanup levels are needed in soils to achieve cleanup of the aquifer. These cleanup levels will be based on the requirement to attain Wisconsin NR 140 groundwater standards for PCE and TCE at the source boundary. Attainment of cleanup levels were confirmed through sample analysis of groundwater at the boundary of the source areas. SVE soil cleanup standards are seen below in Table 1.1.

Table 1.1 SVE Soil Cleanup Standards

COCs	(µg/kg)
cis-1,2-Dichloroethene (c1,2DCE)	12
Tetrachloroethylene (PCE)	10
Trichloroethylene (TCE)	10
Vinyl chloride (VC)	5
Acetone	20
Benzene	5
Chloroform	5
1,1-Dichloroethene	5
Ethylbenzene	331
Methylene chloride	10
Toluene	28
1,1,2-Trichloroethane	10
Xylenes	44

On March 15, 2024, the EPA issued an Explanation of Significant Differences (ESD). The purpose of the ESD is to document significant changes to the Site remedy by documenting the requirement to implement Institutional Controls (ICs) to prevent exposures to contaminated groundwater, soil, and vapors so that the remedy remains protective. The ESD required the following changes to the remedy (EPA, 2024):

- Maintain existing ICs as part of the remedy, which include the City ordinance preventing private groundwater well installation and the East Bank deed restrictions.
- Add ICs to areas where hazardous substances, pollutants, or contaminants remain above levels that allow for UU/UE. Specifically, impose deed restrictions on properties containing the West Bank landfill area and establish Wisconsin Continuing Obligations to all other areas where contamination exists in soil, groundwater, or vapors that prevent UU/UE.
- Develop an Institutional Controls Implementation and Assurance Plan (ICIAP)
- Develop a long-term stewardship (LTS) plan that contains the following:

    - Provisions that ensure ICs are maintained, monitored, and enforced; and
    - A communications plan to establish communication between the EPA, WDNR, City of Wausau, and Marathon County Health Department.
- The Site will be listed in the Wisconsin Remediation and Redevelopment Database (WRRD) that provides information on contaminated properties and other cleanup and redevelopment activities in Wisconsin.
- Additional ICs will continue to be evaluated and implemented, as necessary, based on Site conditions to ensure that the remedy remains protective.

Status of Implementation

The remedial action components included in the 1988 and 1989 RODs have been constructed as described in several construction completion reports and are listed chronologically below. The PRPs initiated the remedial action after agreeing to implement the 1988 interim ROD through a July 7, 1989 CD. Then the final remedial action was selected by the 1989 ROD and is being implemented through a January 24, 1991 CD. The final remedial action at the Site consisted of two SVE systems to address the East Bank and West Bank chlorinated VOCs soil source areas, a groundwater extraction and treatment system utilizing existing municipal production wells (CW3 and CW6), and an extraction well (EW1) to create a hydraulic flow barrier between the West Bank source area and CW6.

The remediation at the Site has been ongoing for about 35 years as summarized chronologically below:

- EW1 begins operation at the West Bank in 1990;
- SVE operations at both the West Bank and East Bank begin in January 1994;
- The Preliminary Close-Out Report is finalized in March 1994 (EPA, 1994);
- West Bank SVE system is shut down in 1996;
- East Bank SVE system is permanently shut down in 2002 after sampling indicated performance metrics had been reached at most of the Site (CRA, 2002). Site-wide permanent SVE closure is granted in 2007, and deed restrictions are pursued at the affected properties;
- EW1 becomes inoperable in 2012, triggering a pilot study for permanent EW1 shutdown;
- Vapor intrusion (VI) sampling was conducted on the East and West Banks in 2017. Additional VI evaluation activities were completed during 2023 and 2024. See Data Review section for a discussion of the results.
- In 2021, the EW1 well was determined to have achieved its purpose, as described in decision documents, as well as being unnecessary for Site protectiveness. On Nov. 19, 2021, the EPA approved the permanent shutdown of EW1 and memorialized this approval in a letter to GHD (EPA, 2021)
- The air stripper at CW3 was also approved for shut down in 2021 (EPA, 2021). The water pumped from CW3 is still treated by the Wausau Water Works treatment plant which has air strippers in its treatment process.

Groundwater Extraction and Treatment

Prior to the 1986 NPL listing, air strippers were installed in 1984 and 1985 to remove VOCs from both CW3 and CW4. In 1988, the EPA signed an interim ROD that required an additional groundwater extraction well (i.e. EW1) placed between CW6 and the West Bank source area. The 1989 final ROD selected groundwater air stripping in wells CW3, CW4, and CW6 and groundwater pumping and discharge via EW1 to a riprap along the Wisconsin River. The groundwater extraction and treatment system was fully constructed and operational in 1990 as described in a Remedial Action Plan and Preliminary Closeout Report (CRA Inc, 1990 and EPA, 1994 respectively). As noted above, the EPA approved EW1 shutdown in 2021 (EPA, 2021). In 2021, the City modified its groundwater extraction and treatment system when it began construction of a new water treatment facility that includes ion exchange resin and GAC treatments to address per- and polyfluoroalkyl substances (PFAS), which were detected above current EPA MCLs (4 nanograms per liter [ng/L or parts per trillion [ppt]) for perfluorooctane sulfonate [PFOS] and perfluorooctanoic acid [PFOA]) in finished drinking water. The new treatment facility was completed in 2022, and the performance requirements of the 1989 ROD and 1991 CD were met during and after its construction. GAC treatment to address PFAS in municipal water came into effect in November 2024. PFAS was discovered in the municipal water system through voluntary testing performed by the city in June of 2019.

Vapor Intrusion

In 2021, GHD (GHD Group Party Ltd) provided the EPA with a VI Evaluation Report (GHD, 2021), and in 2024 the EPA was provided with a VI summary report for March 2023-March 2024 (GHD, 2024). The information in the 2021 GHD report is largely a summary of previously gathered data from March 2017 to September 2019 and therefore was covered in the 2020 FYR's Data Review Section thoroughly (EPA, 2020). Results from the 2021 VI Evaluation Report showed that there were no VOC concentrations in both indoor air and sub-slab on the East Bank that exceeded the appropriate VI action levels (i.e., residential vs. commercial) for a given occupied building. The 2024 VI summary report from the PRPs concluded that no additional VI evaluation is necessary on the East bank of the site. The EPA and WDNR are currently reviewing the East Bank data to decide whether additional VI evaluation is warranted at this time.

In response to the EPA letter dated January 19, 2023, explaining why further VI sampling was necessary at the Site (EPA, 2023), a VI Evaluation Work Plan Addendum (work plan) was submitted by the PRP to the EPA on January 31, 2023, and approved on March 3, 2023 (EPA, 2023). Due to additional tasks required related to the VI work, a second addendum to the work plan was submitted to the EPA on August 22, 2023, and approved on August 23, 2023 (EPA, 2023).

From March 2023 through March 2024, GHD performed investigation activities to supplement existing Site data in an effort to better understand the potential for VI risk in areas adjacent to the known groundwater plume footprints at the Site. In total, VI investigation sampling was conducted on six occasions: March 2017, August 2017, March 2023, August/September 2023, February 2024, and March 2024. A detailed summary of the VI investigation activities completed during 2023 and 2024 is provided below. A detailed summary of the VI results and their evaluation then follows.

March 2023:

- March 3, 2023, EPA approved 2023 Addendum VI Evaluation Work Plan
    - This addendum added field work related to Vapor Pin installation, sub-slab Vapor Pin sampling, indoor air sampling, and manhole vapor sampling.
- Installed sub-slab vapor sampling points beneath Bridge Community Clinic and Wausau Music on the East Bank and installed sub-slab vapor sampling points SS-1 through SS-7 on the West Bank.
- Collected additional sub-slab and indoor air samples at select commercial/industrial buildings on the West Bank and East Bank. The East Bank results are summarized in Table 2.1. The West Bank results are summarized in Section 2.2 found in Appendix B.
- Collected preferential pathway samples from sanitary sewer manholes that are "up-flow" and "down-flow" of the former Wausau Chemical Company property on the East Bank.

August/September 2023:

- August 23, 2023, the EPA approved 2023 Addendum 2 VI Evaluation Work Plan
    - Addendum 2 added field work related to the installation of temporary soil gas probes and sampling of temporary soil gas probes.
- On the West Bank, installed sub-slab vapor sampling points SS-8 through SS-12 and temporary soil gas sampling points to the west of Marathon Electric, Building B.
- Collected additional sub-slab, indoor air samples, and soil gas to the west of Building B.

February 2024:

- Installed sub-slab vapor sampling points SS-13 and SS-14 on the West Bank.
- Collected additional sub-slab and indoor air samples beneath Marathon Electric Building A and Building B, located on the West Bank.

March 2024:

- Installed sub-slab vapor sampling point SS-15 on the West Bank.
- Collected additional sub-slab, and indoor air samples from beneath Marathon Electric Building A and Building B, located on the West Bank.
- Collected one soil gas sample on the East Bank, in the right of way of Thrive Foodery.

<u>Institutional Controls</u>

On March 15, 2024, the EPA, with WDNR concurrence, issued an ESD to document significant changes to the Site remedy by documenting the requirement to implement ICs. Areas that do not support

UU/UE and for which ICs are required, as well as what ICs have been implemented and what are planned for the Site, are noted in the Table 2 below. Maps that depict the current conditions of the Site and areas that do not allow for UU/UE will be developed as part of the required IC evaluation activities.

Table 2: Summary of Planned and/or Implemented ICs

Media, engineered controls, and areas that do not support UU/UE based on current conditions	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Title of IC Instrument Implemented and Date (or planned)
East Bank soils near the former loading dock and Wisconsin River at former Wausau Chemical property and James E. Cherwinka properties treated with SVE	Yes	Yes	291-2907-252-0987	Restrict water supply well installation; restrict cultivation of agricultural crops; require investigation, notification, and management of contaminated soils below the Wausau Chemical Corporation building; maintain the existing pavement barrier; properly sample and manage soil grids 19-4 and 35-7 if buildings or improvements occur on them; and require industrial (non-residential and non-commercial) use only.	Deed Restriction Doc No. 1475599 April 26th, 2007 & Deed Restriction Doc No. 1507947 April 18th, 2008 (WDNR, 2008)
Impacted groundwater in the City of Wausau	Yes	Yes	The City of Wausau	Prohibit residential use; prohibit well installation	Wausau Ordinance 61-4988 Municipal Code Chapters 23.02.92 and 19.30
Soils on the West Bank with remaining TCE contamination	Yes	Yes	Areas within three parcels 291-2907-234-0996; 291-2907-234-0997; and 291-2907-234-0998	Restrict water supply well installation; restrict cultivation of agricultural crops; require investigation, notification, and management of contaminated soils	Deed Restrictions (planned)

				below the properties; maintain the existing pavement barrier; properly sample and manage soils if buildings or improvements occur on them; and require industrial (non-residential and non-commercial) use only.	
Groundwater at the Site	Yes	Yes	Groundwater at the Site that does not meet MCLs and ESs	Restrict installation of groundwater water wells except for the purpose of monitoring and remediation.	Wausau Ordinance 61-4988 Municipal Code Chapters 23.02.92 and 19.30 WDNR Continuing Obligations (planned)
Soils at the Site	Yes	Yes	Other areas with soil contamination present above UU/UE, including those identified after a detailed evaluation	The planned ICs will include: Notify as well as restrict certain activities (e.g., prohibition of digging or grading) that pose the risk of human exposure to subterranean contamination.	WDNR Continuing Obligations (planned)
Indoor air and vapors at the Site	Yes	Yes	Enclosed spaces or buildings within the vicinity of contaminated soils or groundwater	All structures or buildings with unacceptable VI risk must include VI mitigation systems that are fully protective. The ICs will also restrict building use (i.e. no residential use) in specific areas of the Site or may require further active remediation of contamination before any enclosed space or building can be erected. Overall, the VI ICs will ensure that no buildings	WDNR Continuing Obligations (planned)

				or enclosed spaces are occupied until the property owner has properly evaluated VI and addressed any possible risks to human health.	

Status of Access Restrictions and ICs:
Although not called for in decision documents, the 1991 CD requires that Notices of the CD be filed in the chain of title with the Office of the Register of Deeds, Marathon County. Such notices must be filed for each parcel of the Site owned by the PRPs, including parcels where source areas of contamination are located and parcels where physical components of the remedial action will be or are located. The required deed notices were recorded after 2019 when the East Bank properties were transferred to the City.

As part of the SVE closure process in 2007, WDNR required deed restrictions to be placed on two parcels which have since been combined into a single parcel (See Table 2) that encompass the Wausau Chemical Co. and east bank of the Wisconsin River. Similarly, WDNR required deed restrictions to be added to the former Marathon Electric Corporation property on the West Bank following SVE soil remediation. However, the Marathon Electric Corporation property deed restriction was never finalized or recorded. The lack of IC will be addressed by planned follow up actions detailed below.

The existing Wausau Municipal Code contains a Wellhead Protection ordinance in Chapter 23.02.92 that restricts specific activities in areas near municipal drinking water wells that may result in groundwater contamination. The Municipal Code also includes a provision to regulate Private Water Wells in Chapter 19.30 that regulates the construction and continued use of private wells within the City where public water service is provided to prevent contamination of groundwater. Under Wausau's City Code, the City has authority to deny site plan applications that include groundwater wells. The City also has the authority to regulate installation of groundwater wells and to require abandonment of existing groundwater wells.
Wausau Municipal Code Chapter 19.3 can currently be found at https://library.municode.com/wi/wausau/codes/code_of_ordinances?nodeId=TIT19PL_CH19.30PRWAWE and Chapter 23.02.92 can currently be found at https://library.municode.com/wi/wausau/codes/code_of_ordinances?nodeId=TIT23ZO_ARTIIESZODI_23.02.92WEHEPROVZODI .

The Wausau Chemical Co. and Marathon Electric Corporation properties are also zoned for industrial purposes by the City. This zoning dictates the acceptable land use for both these properties and is a type of governmental IC.

Current Compliance:
Based on inspections and interviews, the EPA is not aware of current Site or media uses that are inconsistent with the stated objectives required by the existing or planned ICs. The Wausau Chemical Co. property was sold to the City, and the property is currently not in use. Furthermore, the existing deed restrictions on the East Bank also appear to be functioning as intended as determined by annual

inspections. Although ICs have not been implemented on the West Bank, the EPA and the PRPs routinely visit the West Bank during the course of ongoing remedial activities and have not observed any Site uses or activities that are inconsistent with the stated requirements of planned ICs.

IC Follow up Actions Needed:
To ensure that effective ICs are implemented, monitored, maintained, and enforced, the PRPs must submit to the EPA and WDNR an ICIAP, which includes an LTS plan attachment, that follows the requirements set forth in the 2024 ESD. The ESD ICs requirements include, but are not limited, to the following:

- prohibit on-site groundwater well installation for any purpose except monitoring and remediation;
- carry out a detailed evaluation of historical soil sampling results and collection and analysis of additional soil samples to determine the precise locations where exposure to soils presents a threat to human health or the environment or are above levels that allow for UU/UE;
- apply soil ICs that include notifications systems, as well as restrictions on activities (e.g., prohibition of digging or grading) that pose the risk of human exposure to subterranean contamination;
- determine the precise locations where VI ICs are required via an extensive review of all current and future environmental sampling reports;
- require all proposed or newly constructed structures or buildings to be sampled and assessed for VI risk;
- include VI mitigation systems that are fully protective of human health in all structures or buildings with unacceptable VI risk;
- restrict building use (i.e. no residential use) in specific areas of the Site and ensure no buildings or enclosed spaces are occupied until VI has been properly evaluated and any potential risks to human health have been addressed;
- develop an ICIAP, which includes LTS components such as a plan to establish communication between the EPA, WDNR, the City, and Marathon County Health Department;
- evaluate Site conditions to ensure the remedy remains protective and, if necessary, reinforce, expand, or add ICs to ensure long-term protectiveness at the Site.

Based on the above requirements, the PRPs need to perform reviews and/or additional studies to determine where ICs are necessary based on contamination present at levels that do not allow for UU/UE. These actions will then culminate in submission of an ICIAP, which includes LTS procedures, to the EPA and WDNR for review and approval, and implementation of deed restrictions on the West Bank properties identified following SVE permanent shutdown. An LTS Plan will be developed in the ICIAP that includes procedures to ensure long-term ICs stewardship, such as regular inspection of ICs at the Site and certification to the EPA that the ICs are in place and effective. Additionally, the EPA will explore use of a communications plan along with an update to WDNR's Continuing Obligations for LTS. Any other ICs identified as needed based on the additional PRP studies and submitted ICIAP and LTS Plans also will need to be implemented. WDNR will issue a Continuing Obligations letter. Continuing

Obligations are legal requirements under section 292.12 of the Wisconsin Statutes designed to protect public health and the environment when contamination remains on a property. Continuing Obligations still apply after a property is sold and require each new owner to comply with the Continuing Obligations.

Systems Operations/Operation & Maintenance

O&M site activities consist of operating and maintaining the City production wells, groundwater monitoring wells, and the annual inspection of the paved surfaces near the East Bank source area. The City's treatment plant with air strippers regularly operates as an integral part of the City's municipal groundwater system, and the groundwater treatment system must be regularly maintained. The Groundwater Monitoring Plan requires an Annual Monitoring Report (AMR) be provided to the EPA and WDNR that contains information on the activities that occurred the previous calendar year (CRA, 2000). Since the last FYR, no modifications were made to the monitoring program.

The City has operated its Production Wells throughout the time periods covered by this review. Drinking water is monitored at the City Water Utility to ensure that the air strippers are efficiently removing the VOCs and that the water meets the performance standards. The City officials conduct tests of the treated water as it leaves the plant after the wells have been run for a few hours. The test results can be found on the WDNR website at: https://airapps.dnr.wi.gov/dwsportalpub (enter Wausau Waterworks for the name under Find Public Water Systems).

Recommended pumping rates for CW3 and CW6 were established in an August 4, 1995, letter from the EPA to ensure appropriate capture of the plumes. In accordance with the letter, pumping of CW3 (on the East Bank) was to be maintained between 65 hours per week at 1,200 gallons per minute (gpm) to 100 hours per week at 1,100 gpm. Pumping of CW6 (on the West Bank) was set at 85 hours per week at 1,400 gpm. CW3 and CW6 generally operate on alternate weekly schedules where CW6 operates on the weekdays and CW3 operates more on the weekends.

During 2023, CW3 operated for an average of 62.7 hours per week with an average pumping rate of 1,448 gpm, operating at approximately 92.4% of the total required gallons based on the 1995 EPA pumping requirements. As CW3 was offline for part of the month of August for repairs, these numbers are slightly lower than usual. CW6 pumped an average of 100.0 hours per week with an average pumping rate of 1,068 gpm. Although well rehabilitation is conducted on a regular basis, CW6 is no longer capable of pumping at the prescribed rate of 1,400 gpm. The total volume of groundwater (332,954,400) pumped by CW6 during 2023 was 89.7% of the EPA recommended volume of 371,280,000 gallons/year.

EW1 has been abandoned since the 2020 FYR. A new water treatment facility which utilizes GAC filtration as a treatment step to remove PFAS was built in 2022. Both of these actions were approved by the EPA and WDNR. An expanded GAC treatment for PFAS came online on 11/14/2024.

All Site monitoring wells are inspected each year. Inspection forms are used to document the well condition. Also, at least once every five years, the PRPs conduct a well survey to determine if any new wells exist in the area of the Site and inspect the asphalt parking lot covering the old landfill on the

Marathon Electric property in accordance with the Maintenance Plan required by WDNR during the landfill closure. No new wells were found during the most recent well survey.

The 2006 Pavement Cover and Building Barrier Maintenance Plan relates to the existing slab-on-grade building and other paved surfaces occupying the area over the contaminated soil on-Site (CRA, 2006). While the PRP group does an annual inspection as required by the maintenance plan, heavy degradation of the asphalt parking lot monitored by this maintenance plan has been noted on multiple occasions in the past without proper follow-up maintenance. The EPA will work with WDNR to ensure that this issue is remedied in accordance with the Pavement Cover and Building Barrier Maintenance Plan and an Issue and Recommendation has been included in this FYR to address the damage.

The groundwater O&M plan for the groundwater extraction treatment and discharge remedy has not been updated or amended since 1990 despite several changes to the system, including EW1 shutdown (CRA, 1990). Further, a site-wide O&M Plan that addresses all ongoing required monitoring does not exist. An updated and comprehensive Site-wide O&M plan that also includes current groundwater O&M procedures should be submitted to the EPA for approval.

III. PROGRESS SINCE THE LAST REVIEW

This section includes the protectiveness determinations and statements from the last FYR as well as the recommendations from the last FYR and the current status of those recommendations.

Table 3: Protectiveness Determinations/Statements from the 2020 FYR

OU #	Protectiveness Determination	Protectiveness Statement
OU1/OU2/Sitewide	Protectiveness Deferred	A protectiveness determination of the remedy for the Wausau Ground Water Contamination Site cannot be made at this time until further information is obtained. Further information will be obtained by taking the following action: Complete additional VI assessments. It is expected that this action will take approximately two years to complete, at which time a protectiveness determination will be made.

Table 4: Status of Recommendations from the 2020 FYR

OU #	Issue	Recommendations	Current Status	Current Implementation Status Description	Completion Date (if applicable)
OU1/OU2/Sitewide	Potential vapor intrusion pathway requires assessment	Complete a vapor intrusion assessment	Ongoing	A VI Evaluation Work Plan Addendum was submitted by the PRP which EPA approved on March 3, 2023 (EPA, 2023). Due to additional tasks required related to	NA

				the VI work, a second addendum was submitted and approved on August 23, 2023 (EPA, 2023). VI sampling on the West Bank is ongoing.	
OU1/OU2/Sitewide	Effective ICs must be implemented	EPA/State complete ICs evaluation; PRPs will implement any additional ICs needed	Completed	ICs were evaluated and IC requirements were documented in the signed 2024 ESD.	3/15/2024
OU1/OU2/Sitewide	Effective ICs must be implemented	EPA/State complete ICs evaluation; WDNR will implement continuing obligations. Consideration will be given to instituting other ICs if needed.	Completed	EPA signed an ESD on 3/15/2024 to include Continuing Obligations letters as part of the remedy selected for the Site. However, the Continuing Obligations and any other ICs that are needed remain to be implemented.	3/15/2024
OU1/OU2/Sitewide	O&M Plan must be updated and monitoring, maintenance, and enforcement of ICs is required	A LTS Plan must be developed and implemented. The O&M plan must be updated	Considered But Not Implemented	EPA signed an ESD on 3/15/2024 to require the PRPs to develop an ICIAP and LTS plan instead.	3/15/2024
OU1/OU2/Sitewide	Remedy decision documents are not clear regarding several matters. The decision documents do not specifically state whether the cleanup standards will allow for UU/UE, whether ICs are required to	Modify remedy decision documents to address these issues.	Completed	EPA, with State consultation, issued an ESD on 3/15/2024 to require ICs in areas where contaminants are above UU/UE, and the development of an ICIAP and LTS procedures.	3/15/2024

	ensure long-term protectiveness, and when remedy modifications are acceptable				
OU1/OU2/Sitewide	Several remedy operation modification requests have been submitted for approval to EPA and WDNR. These include permanently shutting down EW1 and allowing the shutdown of the air stripper for CW3, which is associated with the planned move of the municipal water treatment plant	EPA/WDNR must review these proposals and either approve them, request additional information, or deny these requests, and determine if any formal remedy modifications are needed in the decision documents.	Completed	The two proposed modifications were approved in 2021. (EPA, 2021)(EPA, 2021)	11/19/2021
OU1/OU2/Sitewide	Remedy decision documents are not clear regarding the remedy cover requirements for the old landfill. The landfill is covered mostly with asphalt paving materials which do not successfully prevent the infiltration of precipitation, which may cause more groundwater contamination. The landfill cover must be improved and placed on a regular maintenance schedule.	EPA/WDNR must determine what additional measures are necessary for the old landfill to ensure the remedy is protective in the long-term and modify the decision documents to include these remedies to ensure prevention of infiltration of precipitation.	Considered But Not Implemented	See Explanation below titled Recommendation 7 – Landfill Cover	NA

Recommendation 7 – Landfill Cover

The remedial investigation identified contaminants above RSLs in the landfill areas, namely PAHs, PCBs, pentachlorophenol (PCP), and lead. When the EPA determined exposure pathways, surface soils were not considered health risks due to the assumptions that surface soil contamination came from urban sources (e.g. parking lots and roadways). Additionally, subsurface soil contamination was not considered for health risks due to the presence of an intact paved lot over the old landfill and 1-2 feet of clean fill. These decisions were also made under the assumptions that any excavation activities on the site would be done with proper worker personal protective equipment (PPE), and the parking lot would be maintained or replaced with a replacement surface cover in the event of its removal (Warzyn, 1989).

However, data gaps in the RI along with new toxicological and analytical information have been identified since the 1989 RI. For example, the long-term ecological risks of PAHs, PCBs, PCP, and/or lead soil leachate reaching the Wisconsin River through infiltration of precipitation and runoff into the river were not considered. Also, the detection limit for Benzo(a)pyrene at the time of sampling was 10 µg/L, which is above the current MCL; thus, the detection limit was too high to determine whether groundwater concentrations pose a risk to human health or the environment based on new toxicological and analytical information. Finally, EW1 pumped groundwater, which contained soil leachate, from the landfill area into the Wisconsin River using a treatment technology that would not abate concentrations of contaminants that pose an ecological and human health concern including PAHs, PCBs, or PCP.

Upon review, an EPA toxicologist recommended against making decisions with data that is beyond thirty years old and so has recommended additional sampling of volatile and semi-volatile compounds be performed across the landfill at various depths (both surface and subsurface) to understand if and where contaminants remain above screening levels and do not allow for UU/UE at the site (EPA, 2024). The need for an alternate landfill cover may be evaluated once additional data is available. Currently, portions of the parking lot that were being maintained during the RI have fallen into disrepair and the EPA has commented on the condition of the lot in multiple documents in the past. While there is a Pavement Cover and Building Barrier Maintenance Plan (WDNR, 2006) in effect for the site which says, ”if problems are noted, repairs will be scheduled as soon as practical”, no work has been done to fix the damaged area(s) of the lot.

IV. FIVE-YEAR REVIEW PROCESS

Community Notification, Involvement & Site Interviews

A public notice was made available via website update titled, “Public Notice: EPA Begins 7th Review of Wausau Groundwater Contamination Superfund Site” on 8/19/2024, stating that there was a FYR and inviting the public to submit any comments to the EPA. There was also an ad that ran in the Wausau Daily Herald titled, “EPA Begins 7th Review of Wausau Groundwater Contamination Site” to notify the public of the FYR (see Appendix F). No public comments were received during the review period. The results of the review and the report will be made available at the Site information repository located at the Marathon County Public Library, 300 N. First St. Wausau, and at the following website: www.epa.gov/superfund/wausau-groundwater.

During the FYR process, interviews were conducted to document any perceived problems or successes with the remedy that has been implemented to date**.** The results of these interviews are summarized below.

State Interview

The WDNR believes the PRP group is adequately responding to State and Federal feedback regarding assessing potential migration pathways and receptors to ensure the protection of human health and the environment. WDNR supports the ongoing VI investigations at the Site and has expressed concerns about increasing contaminant trends in groundwater after the decommissioning of EW1. WDNR supports the City's considerations of the potential redevelopment of the East Bank of the Site. WDNR is interested in working with the EPA to gain a better understanding of PFAS impacts at the Site. Community members have not contacted the WDNR with any concerns about the Site and WDNR has been kept informed by both the PRP group and the EPA about happenings at the site.

The full-length interview response is available in Appendix F.

Data Review

Groundwater remediation at the Wausau Site has been ongoing for over 25 years. Over the years, the concentrations of contaminants in groundwater have been reduced significantly. The aquifer has been monitored on a regular basis, in accordance with approved plans. Because of the time necessary to achieve groundwater clean-up goals, containment of contaminated groundwater is the primary measurable and achievable short-term objective, but the long-term objective is to achieve compliance with groundwater clean-up standards.

As described in greater detail below, there have been increases in TCE concentrations within the area of the former municipal landfill area on the West Bank. TCE concentrations have been decreasing steadily at CW6 and CW3. C3S had trichloromethane above the EPA and WDNR MCLs; this contaminant is not a COC for this site and was not detected above limits anywhere else on site. The Site was sampled for 1,4-dioxane in 2021, but 1,4-dioxane was not detected anywhere on site. The wells sampled were located on both the East Bank and West Bank and are indicated in Table 2.1 in Appendix B. PFAS has been sampled for in municipal wells and in treated water, although without an EPA approved QAPP, but has not been sampled for in monitoring wells at the Site.

Based on available data and the Site's hydrogeology, all contaminants are captured by CW6 and CW3. However, future remedy reviews will continue to evaluate this conclusion to ensure the remedy continues to contain contamination.

West Bank

The West Bank remediation program initially consisted of two extraction wells (EW1 and CW6). As discussed earlier, the remediation program on the West Bank now only consists of CW6 to capture the contaminant plume, which is then pumped through the air strippers and the City's municipal treatment plant. The other West Bank MW locations and the VOCs which are regularly sampled for each autumn

are shown in Table 2.1 from the 2023 Annual Monitoring Report (GHD, 2024) which can be found in Appendix B.

In addition, water level elevations are generally collected annually at the following locations: C3S, C4S, C6S, C7S, GM2S, GM4D, MW1A, MW3A, MW4A, MW7, R1D, R2D, R3D, R4D, W52, W53A, W54, W55, W56, W57, WSWD, CW9-OBS, City Wells CW6, CW9, CW10 and CW11 (if pumping). Groundwater contours from depth to water measurements collected in 2023 are presented in Figure 3 in Appendix B.

The primary chlorinated VOC found in the West Bank groundwater is TCE, which was detected at 11 of the 13 West Bank monitoring wells, plus City well CW6. Monitoring wells with TCE concentrations greater than the MCL of 5 µg/L included R2D, W53A, W54, W55, and WSWD. The TCE concentration at CW6 is relatively stable at 2.7 µg/L in 2023, 3.0 µg/L in 2022, and 2.7 µg/L in 2021, all below the MCL of 5 µg/L.

The monitoring wells that exceeded the TCE MCL in the West Bank can be separated into two groups: those wells south of EW1, located on or adjacent to the former landfill on Marathon Electric Corporation property, and those wells north of EW1, downgradient of the former landfill in the direction of groundwater flow towards CW6 (see Figure 4 in Appendix B). Well EW1 had no VOC detections during the 2023 sampling event.

VOC contaminants are more prevalent south of EW1, in the shallower portion of the aquifer near the source area. Monitoring wells south of EW1 exceeding the MCL for TCE included W53A, W54, and WSWD with concentrations of 43 µg/L, W54 140 µg/L, and 32 µg/L, respectively. TCE concentrations at W53A and W54 have exhibited substantial fluctuations since the shutdown of EW1 in 2012 (see the trend graphs in Appendix B). These fluctuations are typical of source area wells where increased precipitation and water level changes could have a localized effect on VOC concentrations in the groundwater. WSWD has been relatively stable, averaging around 30 µg/L of TCE over the prior three annual events.

North of EW1, the West Bank plume is in the deeper portion of the aquifer. Monitoring wells north of EW1 that exceeded the MCL for TCE during the 2023 sampling event included R2D and W55; R2D had a concentration of 10.0 µg/L, and W55 had a concentration of 17 µg/L. R2D is a deep aquifer well approximately 150 feet north of the Marathon Electric Corporation property. Recent decreasing TCE concentrations north of EW1 indicate that, since EW1 stopped pumping, the plume remnant that was in a stagnation zone between EW1 and CW6 continues to migrate north to CW6. This conclusion that the plume remnant continues to migrate north is supported by generally increasing TCE concentrations at W55 since 2012 and generally decreasing concentrations at R3D and W52 (see these trend graphs in Appendix B). The TCE concentrations at R3D remain several orders of magnitude lower compared to data from 1999 through 2007, when concentrations ranged from 280 µg/L to 1,800 µg/L. Review of current data suggests that the remedy is still functioning as intended to capture the groundwater contamination plume.

C12DCE, a TCE degradation product, was detected at three locations in the West Bank, with no concentrations exceeding the cleanup standard of 70 µg/L. Additionally, PCE was detected in well C3S

at very low concentrations not exceeding the MCL. VC was not detected in West Bank well samples. Overall, these results indicate a decrease in chlorinated VOC detections compared to historical data.

The overall extent and stability of the West Bank contaminant plume has not changed significantly since EW1 was shut down. Although there are some fluctuations within the source area itself, TCE and C12DCE were the only VOCs detected downgradient from the source area on the West Bank. These conclusions are supported because the approximate areas of TCE and C12DCE above MCLs is similar or smaller than in the past. Specifically, Figures 4 and 5 in Appendix B, which depict the TCE and C12DCE concentrations from 2023 respectively, and figures/graphs in Appendix B, which depict historical chlorinated VOC concentrations for select West Bank wells, provide data to support these conclusions.

East Bank

East Bank VOC data are presented in Table 4.1 in Appendix B. While PCE was the initial contaminant of concern on the East Bank, the presence of TCE, C12DCE, and VC at concentrations equal to or greater than PCE in some wells indicates an active natural biodegradation process is occurring, since TCE, C12DCE and VC are degradation or daughter products of PCE. For example, the TCE concentration at monitoring well WW6 was higher than the PCE concentration.

PCE and/or its daughter products were detected at 4 of the 9 East Bank monitoring wells. The four monitoring wells had concentrations that exceeded the MCL of at least one VOC. Exceedances of PCE were found in WC5A, WC3B, and 22A. Exceedances of VC were found in WC5A and 24AR.East Bank contaminant concentrations continue to progress as expected based on plume capture by CW3 and biodegradation of PCE into daughter products such as TCE and C12DCE. Concentrations in wells at or near the source are higher, concentrations in mid plume wells are lower, and concentrations of PCE biodegradation products like C12DCE are higher farther downgradient at WW6. A chart showing historical chlorinated VOC concentrations from CW3 located on the East Bank is presented in Appendix B. It should be noted that there is no change shown for 2023, as analytical data was not collected due to well repairs. Individual VOC concentrations for the shallow wells are presented for PCE, TCE, C12DCE, and VC on Figures 4 through 7 in Appendix B, respectively. Overall, the plume on the East Bank is stable and is contained by CW3 when operational.

East Bank Sub-slab and Indoor Air Sampling

Two small commercial properties were sampled for sub-slab and indoor air exceedances. Exterior soil gas sampling was conducted on 3/27/24 at a third business where indoor sampling access could not be obtained. No exceedances of calculated VI screening levels were found at any of the three small businesses sampled. The results of this testing can be found in Table 1 in Appendix B. The PRPs concluded no additional VI work was necessary for the East Bank. But, as indicated earlier, the EPA and WDNR are currently reviewing the East Bank data to decide whether additional VI evaluation is warranted.

West Bank Sub-slab and Indoor Air Sampling

Sampling on the West Bank was limited to the Marathon Electric properties. Four sampling events took place between March 2023 and March 2024; one sampling event in the winter and one event in the summer of each year. This sampling utilized twelve sub-slab locations and seven indoor air locations across the sampling events. Indoor air samples were only analyzed when the corresponding sub-slab reading exceeded Wisconsin's Large Industrial Sub Slab screening levels. There were also two soil gas probes installed on the west side of Marathon Electric Building B.

TCE was found to be above VI screening levels at multiple sub-slab points multiple times during this sampling period. There were 12 total samples which came back above Large Industrial screening levels which came from 7 unique points; these exceedances can be found in Figure 2.2 in Appendix B. Other contaminants were also discovered but were below their respective screening levels. Indoor air samples remained below the Large Industrial indoor action level of 8.8 ug/m^3 except for the IA-02 sample taken on February 12, 2024, which came back at 214 µg/m3. Given indoor air sampling locations in close proximity to IA-02 were far lower in concentration, this sampling result indicates the exceedance may be due to transient and location-specific factors. This location was resampled on March 27, 2024 to determine whether the result was an abnormal, transient, fluctuation or a permanent change in indoor air quality. The results came back below the Large Industrial indoor action level, and the sampling results are shown in Tables 2 & 3 in Appendix B.

In response to the action level exceedance in February 2024, the EPA informed state and local health departments of the situation and required the PRPs to take actions to ensure building occupants are protected in the event that the indoor air remained unsafe in this location. These required actions included resampling the area, sectioning off the location of IA-02, and implementing training procedures to educate employees on the health risks of TCE. Additionally, Marathon Electric minimized the number of employees working in this area and restricted who could be working in Building B due to the risk TCE presents to pregnant people.

Soil gas samples were collected in August/September 2023 from two exterior temporary locations (SG-01 and SG-02) on the west side of Marathon Electric Building B to ensure TCE vapors are not traveling beneath the building towards residential properties. There were no analytical results from either location above the Large Commercial/Industrial Vapor Risk Screening Levels.

Preferential Pathway Assessment

Historical groundwater and VI analytical results indicate that contaminated utility conduits do not exist. There do not appear to be any direct connections between sewer/water mains and commercial or industrial buildings. On the West Bank, the residential area is upgradient from the Site and the groundwater depth is much lower than the East Bank, so no preferential pathway samples were collected. On the East Bank, there were three manhole locations sampled because of their proximity to residential homes and their location downgradient of the Site. Manhole vapor sampling was completed in March 2023, per the WDNR Guidance Document, and followed the recommended sampling method for manholes (WDNR, 2021).

Three manhole locations were sampled, and their locations are shown in Figure 3.1 in Appendix B. No VOC exceedances above the Indoor Air Vapor Action Level were detected.

Based on the VI Summary Report covering March 2023 – March 2024 (GHD, 2024), the PRPs recommend no additional VI evaluation or Preferential Pathway analysis to be done for the East Bank. The EPA is continuing to work on identifying and addressing possible VI source area soils through upcoming PRP sampling events. The sub-slab and indoor air results associated with the West Bank will be addressed by a VI monitoring program, which will be submitted to the EPA and WDNR in a separate submittal and will include periodic sampling at select locations to continue to monitor potential health risks.

Municipal Well PFAS sampling results

PFAS data discussed in this section has been obtained through the WDNR public drinking water system and not through an EPA approved Uniform Federal Policy for Quality Assurance Project Plans (UFP QAPP/QAPP) sampling plan. This FYR includes an Issue and Recommendation for further sampling to be conducted using an EPA approved QAPP. The EPA also plans to review the QAPP for water sampling used by the Wausau Water Works to see if it is comparable to a UFP QAPP and is therefore usable data for Superfund decision making.

PFAS testing of treated water by Wausau Water Works is performed regularly as part of State and Federal public water testing programs. Sampling results in August 2023 showed there were six PFAS compounds detected with the highest detections being for PFOA at 6.1 ng/L and N-ethyl-perfluorooctane sulfonamidoacetic acid (NEtFOSAA) at 4.7 ng/L. The sample results can be found in Appendix D. On August 29, 2023, the City of Wausau released a notice that in addition to their goal of keeping combined PFOA/PFOS levels below 20 ppt, they would also begin to include PFOSA, NEtFOSA, NEtFOSAA, and NEtFOSE (a group of PFAS chemicals that can breakdown into PFOS and PFOA) in the combined PFAS number per the request of the WDNR and Wisconsin Department of Health Services (WDHS). This notice went out shortly after a PFAS exceedance of 22.7 ppt occurred once the new compounds were included. This notice can be found in Appendix D.

Initial sampling in December 2024 of treated water leaving the system has shown non-detects for all PFAS compounds that were tested for. Monitoring to determine the effectiveness of the new GAC system should be included as part of their comprehensive Site-wide O&M plan updates.

The Wausau Water Works performs quarterly sampling for PFAS in the treated water that is being distributed to the municipality and the results can be found by going to: https://apps.dnr.wi.gov/dwsportalpub/ContamResult/Search and typing Wausau Waterworks into the PWS field as well as setting the DNR Sample type to PFAS at the bottom of the tool. PFAS have been found above current MCLs 9 times since monitoring began. PFOA was the source of all 9 instances of MCL exceedances. Appendix D shows a table with sampling results for multiple PFAS compounds, as well as charts showing sampling results over time.

Site Inspection

The inspection of the Site was conducted on 8/12/2024 and can be found in Appendix E. In attendance were David Michael Holt III and Katherine Thomas of the EPA; Jane Gray of the WDNR; OJ Ojinaga, Matt Groves, and Ryan Aamot of GHD; Jacob Holty of Marathon Electric Corporation; and Kevin Fabel of the City. The purpose of the inspection was to assess the protectiveness of the remedy. Interviews were conducted with Marathon Electric Corporation and the City onsite. WDNR provided their responses via email and can be found in Appendix F.

The group toured the Site on both sides of the river and inspected areas inside of the Marathon Electric Corporation facility to better determine how to proceed with VI sampling work currently underway. On the West Bank, the group noted that the asphalt parking lot still had cracks and extensive damage, which reduces its ability to act as a barrier to infiltration. The EPA has raised the issue of the integrity of the parking lot in previous FYRs. Due to the lack of action by PRPs when this issue has been raised in the past, the EPA has included the repair of the asphalt cap as an Issue and Recommendation in this FYR. CW6 was inspected and looked to be in good order.

Interest in the redevelopment of the East Bank in the area where the old Wausau Chemical Co. building was shared among the group. The Wausau Chemical Co. building looked well maintained and had little evidence of trespassing. CW3 was inspected by the group and the City explained their historic issues with maintaining the extraction pump. These issues are overall related to the age of the pump causing expensive maintenance to be performed. WDNR and the EPA received a request for a change to the operations of CW3 in 2020 and are in the process of drafting a response. The City should prepare for the possible outcome of needing to replace the production well. A tour of the Wausau Water Works treatment facility occurred as well with everything looking to be in good working order. Monitoring wells which were observed seemed to be in good working order, although some were noted to be a bit overgrown by vegetation at the time of the Site Inspection.

V. TECHNICAL ASSESSMENT

QUESTION A: Is the remedy functioning as intended by the decision documents?

Question A Summary:

Yes. The remedy is functioning as intended by the 1988 interim ROD and 1989 ROD. However, the recently published 2024 ESD clarifies that significant changes related to ICs are required at the Site to ensure the remedy's long-term protectiveness and planned actions are underway to implement components of the 2024 ESD as well.

Implementation of Institutional Controls and Other Measures

As detailed above, the 2024 ESD requires implementation of WDNR Continuing Obligations as ICs at the Site along with other ICs that limit exposure and risk from contaminated groundwater, soil, and air. It is expected that the additional ICs required by the 2024 ESD will be implemented by 12/31/2027 as seen in the Issues and Recommendations section below.

The ICs which are currently in place include: restrictions on water supply well installation and other uses of the area on the East Bank where the SVE system had historically operated and the prohibition

of residential well use or installation in the City. The EPA believes that these have been implemented effectively, but per the 2024 ESD, further action is necessary.

Remedial Action Performance
Since the beginning of remedial actions at the Site, VOC concentrations have been reduced significantly. Contaminant plumes are currently stable, and groundwater contamination is effectively contained by the current remedy. This Site is on track to achieve cleanup goals. However, the issue of the inadequate landfill cover brought up in the previous FYR remains an issue at the Site. The landfill cover is not included as a remedy component in the decision documents, nor is there an RAO for preventing infiltration of precipitation into the landfill. Remedy performance information and lack of maintenance since the previous FYR seems to suggest a remedy component addressing the landfill cover may need to be included in a decision document.

Systems Operations/O&M
O&M activities consist of operating and maintaining the City production wells, groundwater monitoring wells, and the annual inspection of the paved surfaces near the East Bank source area. This Site does not currently have a Site-wide O&M plan and the current groundwater monitoring plan should be updated. Therefore, PRPs should update the groundwater monitoring plan and include it in a Site-wide O&M plan. The City of Wausau's treatment plant with air strippers regularly operates as an integral part of the City's municipal groundwater system, and the groundwater treatment system must be regularly maintained. No operational shortcomings have been reported to or found by the EPA since the opening of the Wausau Water Works treatment plant in 2022. The Groundwater Monitoring Plan requires an AMR be provided to the EPA and WDNR that contains information on the activities that occurred the previous calendar year. The previous FYR indicated that a final decision about whether EW1 shutdown was to be allowed would come soon after its publication. The EPA approved the shutdown of EW1 on 11/19/2021. CW3 is a historic well which the City has stated requires frequent and expensive maintenance. While the EPA and WDNR deliberate on what the proper next steps for the future of CW3 are, the City should prepare for the possibility of fully replacing CW3.

QUESTION B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of the remedy selection still valid?

Question B Summary:
No, the exposure assumptions and toxicity data used at the time of the remedy selection are not still valid.

Vapor Intrusion
Vapor intrusion remains an issue at this Site, specifically on the West Bank. While VI data has been collected multiple times; additional sampling needs to occur to determine if there are unknown source areas which could be leading to the increased sub-slab detections which have been discovered at the Marathon Electric property.

While there has only been one sub-slab exceedance that was combined with an indoor air exceedance, this instance showed very high levels of VOCs in indoor air. This issue was swiftly addressed by the proper authorities and is discussed previously in this FYR. Soon after this exceedance an additional sub-slab and indoor air paired sample was taken, and indoor air levels were again at allowable levels.

Once a VI investigation is fully completed then the EPA will be able to create a decision document to address the VI concerns present at the Site.

Changes in Exposure Pathways

PFAS are newly identified contaminants that potentially pose a risk to human health or the environment via Site groundwater to municipal drinking water wells. Additional sampling for PFAS is needed to determine if the PFAS present is site-related, and if so, whether the Site remedy remains protective of human health and the environment. The potential exposure pathway remains the same – ingestion of contaminated drinking water – but the EPA needs to now evaluate the impact of the newly identified PFAS.

If PFAS is determined to be site-related, the remedy selection may need to be updated to ensure that human health and the environment are protected from PFAS which has been found in the groundwater at the Site, untreated municipal drinking water city wells, and treated municipal drinking water. On April 10, 2024, EPA added six perfluoroalkyl substances (PFAS) to the National Primary Drinking Water Regulations and established MCLs. The MCLs can be found in Table 5 below. These contaminants are commonly found in numerous hazardous and non-hazardous wastes since the 1950's including chemical wastes and aqueous film forming foam (AFFF). There is PFOA and PFOS contamination at the Site in all municipal drinking water wells, which are remedy components. Chemical releases occurred at the Site and AFFF may have been used in fire suppression systems at the Site. Sampling for PFAS in both monitoring wells and in water being distributed by the Wausau Water Works using an EPA approved QAPP is required to determine if PFAS is site-related and whether the Site remedy remains protective of human health and the environment.

In 2021, the City modified its groundwater extraction and treatment system when it began construction of a new water treatment facility that includes ion exchange resin and GAC treatments to address PFAS. The new treatment facility was completed in 2022. GAC treatment to address PFAS in municipal water came into effect in November 2024. Sampling in December 2024 of treated water leaving the system has shown non-detects for all PFAS compounds that were tested for. Monitoring to determine the effectiveness of the new GAC system should be included as part of their comprehensive Site-wide O&M plan updates.

Table 5: PFAS MCLGs and 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

Expected Progress Towards Meeting RAOs

PFAS contamination at the Site impacts the expected progress towards meeting Site RAOs. Specifically, progress towards meeting the Site RAO for OU1, "protection from future increased levels of contamination to the West Well Field" is greatly affected by the presence of PFAS contamination. The remedy has been focused on addressing VOC contamination in drinking water. Due to the chemical and regulatory differences between VOCs and PFAS, maintaining compliance with PFAS MCLs may require significant or fundamental changes to the Site's remedy to ensure progress is made towards meeting Site RAOs.

The EPA has issued CERCLA 104(e) Information Requests to local companies regarding PFAS to determine the potential sources of PFAS contamination at the Site. The EPA is currently reviewing responses from the Information Requests.

QUESTION C: Has any other information come to light that could call into question the protectiveness of the remedy?

No. No other information has come to light that could call into question the protectiveness of the remedy at this time.

VI. ISSUES/RECOMMENDATIONS

Issues/Recommendations
OU(s) without Issues/Recommendations Identified in the Five-Year Review:
None

Issues and Recommendations Identified in the Five-Year Review:

OU(s): 1 and 2	**Issue Category: Operations and Maintenance**			
	Issue: The O&M plan for the groundwater remedy at the site has not been updated since 1990 and requires modifications, and a Site-wide O&M plan that addresses all ongoing required monitoring (e.g., ICs) does not exist.			
	Recommendation: The PRPs must submit a Site-wide O&M plan for all ongoing required site monitoring, including current groundwater remedy O&M procedures, to EPA for approval.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party**	**Milestone Date**

No	Yes	PRP	EPA	12/31/2027

OU(s): 1 and 2	**Issue Category: Remedy Performance**			
	Issue: Sampling data/studies, risk assessment and soil cleanup levels are needed to determine what areas of the west bank are not UU/UE and need ICs.			
	Recommendation: Perform additional sampling/studies, risk assessment and establish soil cleanup levels to determine what areas of the west bank are not UU/UE and need ICs.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party**	**Milestone Date**
No	Yes	PRP	EPA/State	12/31/2027

OU(s): 1 and 2	**Issue Category: Operations and Maintenance**			
	Issue: Damage to asphalt cap on Marathon Electric property has been noted for multiple years and never addressed per the Pavement and Building Barrier Maintenance Plan.			
	Recommendation: Repair damaged/destroyed asphalt areas on the Marathon Electric property.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party**	**Milestone Date**
No	Yes	PRP	EPA/State	12/31/2025

OU(s): 1 and 2	**Issue Category: Monitoring**
	Issue: PFAS has been detected in municipal water wells, and, sporadically, in finished drinking water. However, the sampling done so far has not been done under an EPA approved QAPP.

	Recommendation: Conduct Site-wide PFAS sampling in groundwater as well as other media, as appropriate, under an EPA approved QAPP.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party**	**Milestone Date**
No	Yes	PRP	EPA	12/31/2027

OU(s): 1 and 2	**Issue Category: Remedy Performance**			
	Issue: Potential VI pathway exists in areas that are not expected based on groundwater VOC plume extent.			
	Recommendation: Complete a VI assessment including, but not limited to, source soil investigation, preferential pathway identification, and comprehensive indoor air and sub-slab sampling.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party**	**Milestone Date**
Yes	Yes	PRP	EPA/State	12/31/2027

OTHER FINDINGS

In addition, the following are recommendations that were identified during the FYR but do not affect current or future protectiveness:

- Currently CW3 has been operating effectively as intended but the city has identified that long term O&M costs could become burdensome. City should begin preparing for the chance that the well will need to be replaced.
- The UFP-QAPP should be updated to include PFAS sampling for monitoring wells, municipal wells, the Wausau Water Works, and in the Wisconsin River.

VII. PROTECTIVENESS STATEMENT

OU1, OU2, & Sitewide Protectiveness Statement	
Protectiveness Determination: Protectiveness Deferred	*Planned Addendum Completion Date:* 12/31/2028
Protectiveness Statement: A protectiveness determination of the remedy at the Wausau Groundwater Superfund Site cannot be made at this time until further information is obtained. Further information will be obtained by taking the following actions: complete a VI	

assessment including, but not limited to, source soil investigation, preferential pathway identification, and comprehensive indoor air and sub-slab sampling. It is expected that these actions should take approximately three years to complete, at which time a protectiveness determination will be made.

VIII. NEXT REVIEW

The next FYR report for the Wausau Groundwater Superfund Site is required five years from the completion date of this review.

APPENDIX A – REFERENCE LIST

The Site's Administrative Record can be found at the following link: https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.ars&id=0505186&doc=Y&colid=4756&region=05&type=AR

References are listed by order of appearance within this FYR document and in the following format: Author listed in SEMS, **Document date in SEMS**; *Document Title in SEMS*; (Document ID# in SEMS)

Warzyn Inc, **7/1/1989**; *Remedial Investigation (RI) Report – Report, Tables & Figures – Vol 1*; (IDs 225515, 225516, 225517)

EPA, **12/23/1988**; *Record of Decision (ROD) (Signed) – Selected Interim Remedial Alternative*; (ID 225484)

EPA, **9/8/1989**; *Consent Decree (CD)*; (ID 155245)

EPA, **9/29/1989**; *Record of Decision (ROD) (Signed) – Wausau Groundwater Contamination*; (ID 209626)

CRA Inc, **3/1/1990**; *Final Remedial Action Plan (RAP) – Groundwater Extraction Treatment & Discharge System*; (ID 278315)

CRA Inc, **12/01/1990**; *CRA INC - OPERATION & MAINTENANCE - GROUNDWATER EXTRACTION TREATMENT & DISCHARGE SYSTEM*; (ID 278325)

EPA; **1/24/1991**; *Consent Decree (CD) (Signed)*; (ID 155306)

EPA, **3/18/1994**; *Preliminary Close-Out Report*; (ID 321826)

CRA Inc, **7/6/1994**; *Soil Vapor Extraction System Construction Completion Report*; (ID 278318)

CRA Inc, **2/1/1996**; *SVE System Performance Evaluation Report – Mid Point of Operations*; (ID 278316)

CRA Inc, **6/29/2000**; *Groundwater Monitoring Plan*; (ID 321861)

CRA, **3/8/2002**; *Letter Re: Soil Sampling Report for Permanent Closure*; (ID 2005557)

CRA, **10/17/2006**; *Pavement Cover and Building Barrier Maintenance Plan*; (ID 995622)

WDNR, **04/18/2008**; *Deed Restriction 1507947*; (ID 998803)

EPA, **03/4/2020**; *USEPA Region 5 Vapor Intrusion Handbook*

EPA, **04/09/2020**; *Sixth Five Year Review Report – Wausau Groundwater Contamination – 2020*; (ID 955611)

WDNR, **06/2021**; *Guidance for Documenting the Investigation of Human-made Preferential Pathways Including Utility Corridors*; (ID 2006777)

EPA, **8/2/2021**; *Conditional Approval and Final Comments Regarding the Conceptual Plan Letter For Modifications to the Wausau Drinking Water Treatment Facility…*; (ID 2005883)

EPA, **11/19/2021**; *Approval of Request to Permanently Shut Down EW1…*; (ID 2005882)

GHD, **12/8/2021**; *Vapor Intrusion Evaluation Report*; (ID 996162)

EPA, **1/19/2023**;*US EPA Letter RE: Request for Additional Sampling and Comments on the Vapor Intrusion Pathway Evaluation…*; (ID 998537)

EPA, **3/3/2023**; *US EPA Letter RE: Partial Approval of the 2023 Addendum: Vapor Intrusion (VI) Work Plan Dated January 31 2023*; (ID 998546)

EPA**, 8/23/2023**; *RE: Vapor Intrusion Workplan Addendum 2 - Wausau Water Supply NPL Site*; (ID 992970)

EPA, **3/15/2024**; *Explanation of Significant Differences*; (ID 989420)

GHD, **3/18/2024**; GHD - *2023 Annual Monitoring Report*; (ID 2005876)

EPA, **4/24/2024**; *Memo: Evaluation of Historical Data From the Wausau Water Supply NPL Site*; (ID 996146)

GHD, **5/23/2024**; *Vapor Intrusion Summary Report*; (ID 2006048)

APPENDIX B – Figures & Tables

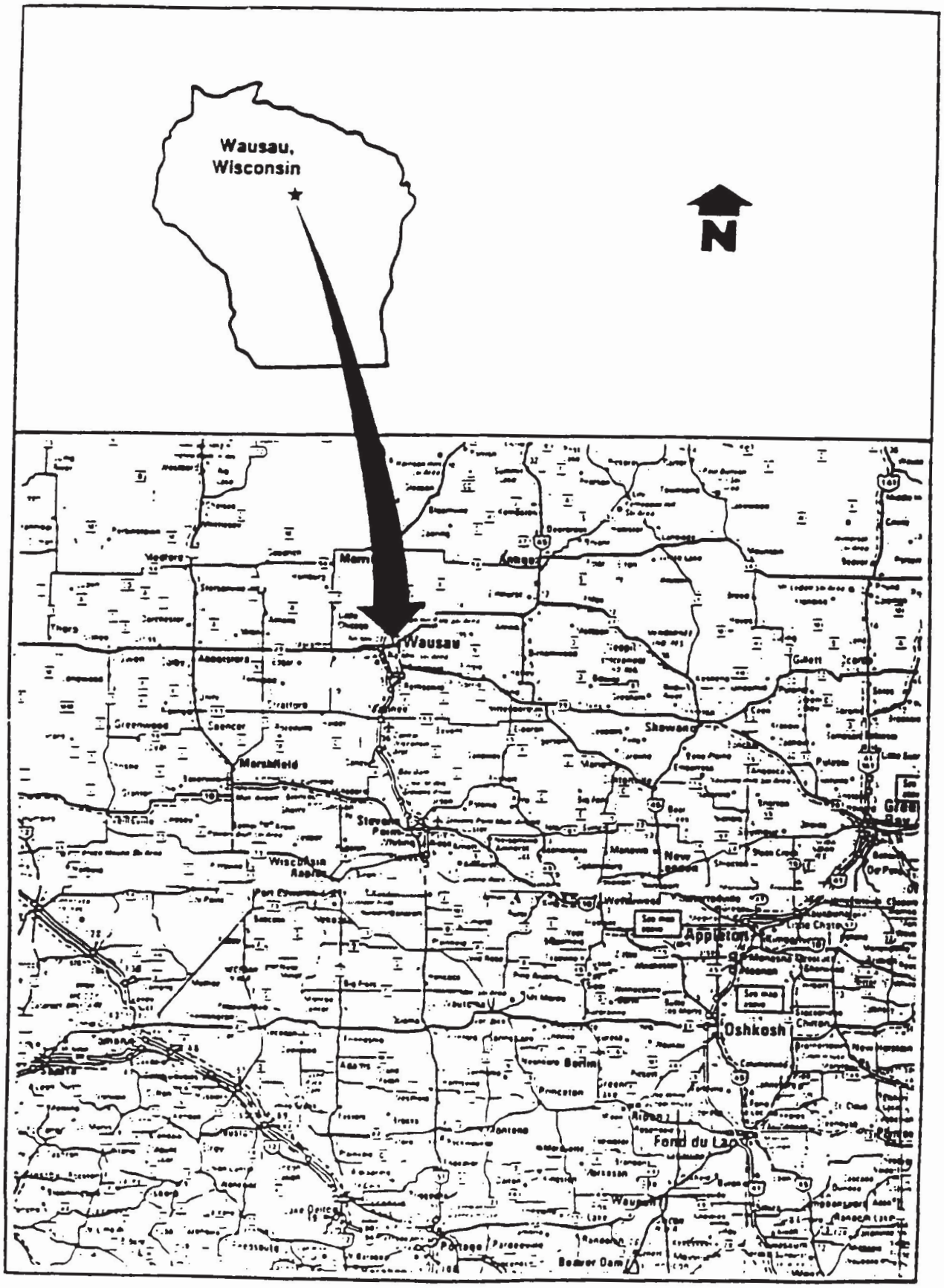
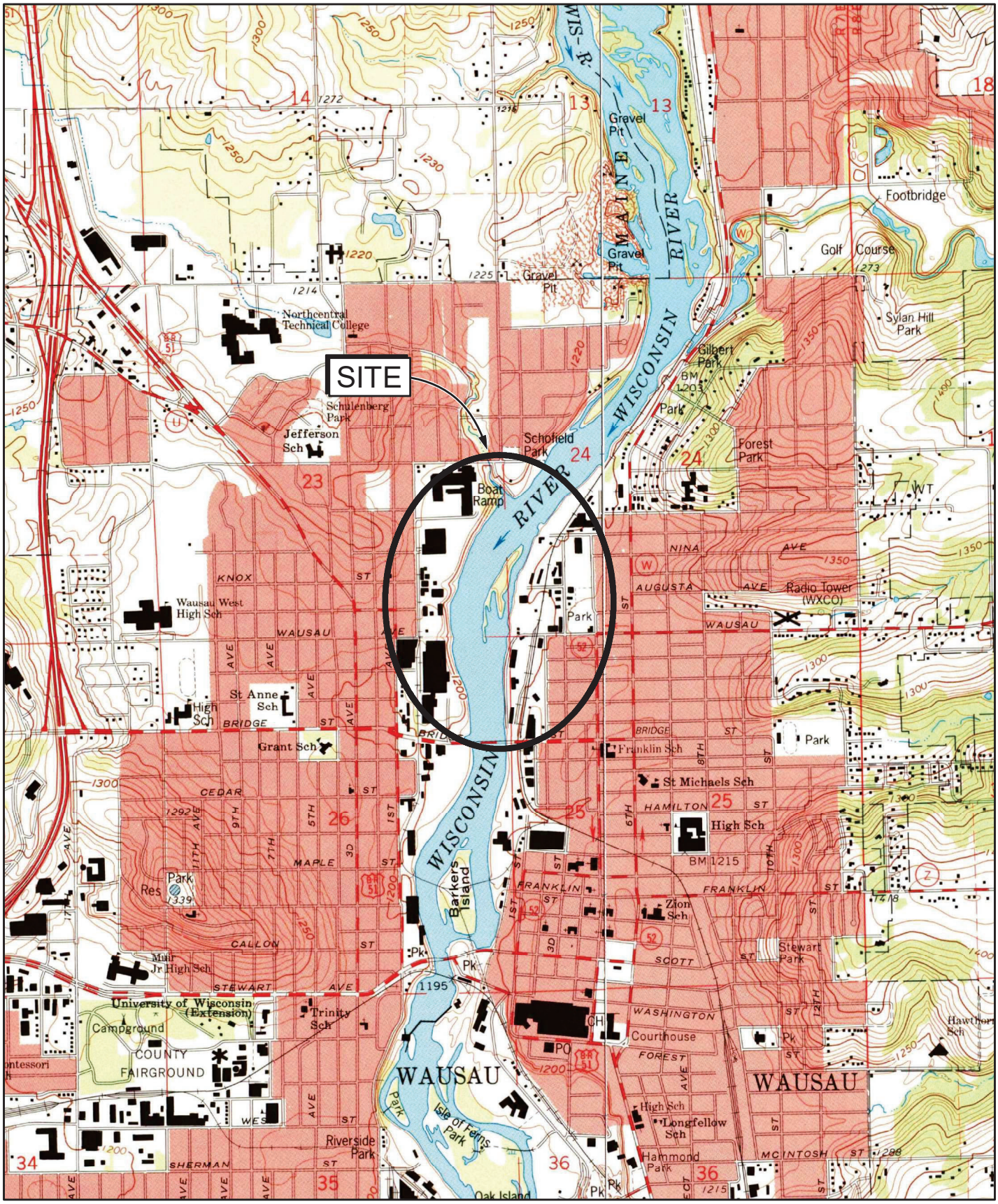


FIGURE 1 REGIONAL LOCATION MAP



Source: USGS 7.5 Minute Quads - Wausau East; Wausau West

0 1,000 2,000 ft

N

GHD

WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN
2019 ANNUAL MONITORING REPORT

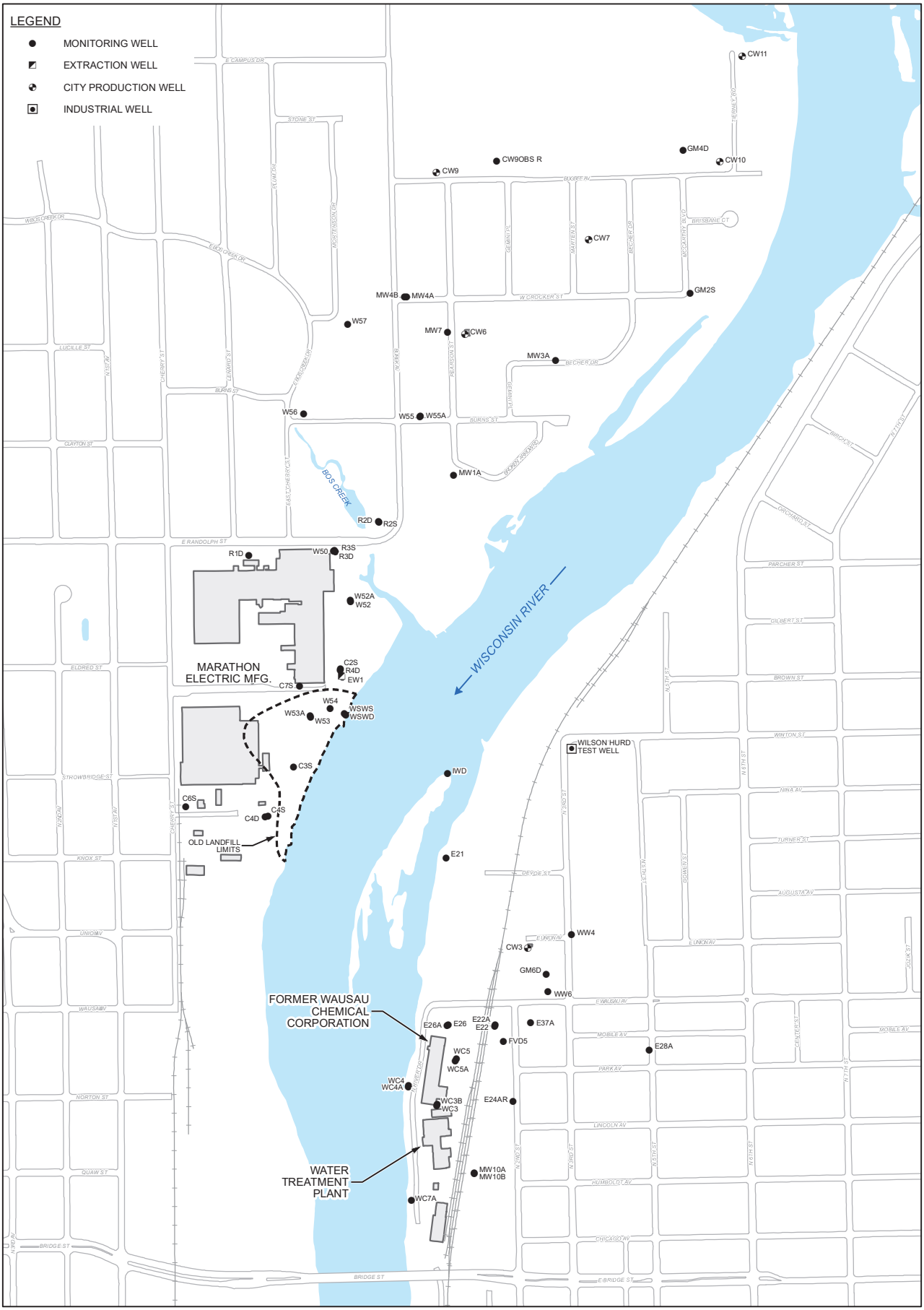
003978-00

Jan 2, 2020

SITE LOCATION

FIGURE 1.1

GIS File: I:\GIS\Projects\6-chars\00----\0039--\003978\003978-REPORTS\003978-00(042)\003978-00(042)GIS-SP001.mxd



Source: Marathon County

0 500 ft

WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN
2019 ANNUAL MONITORING REPORT

003978-00
Jan 3, 2020

SITE PLAN

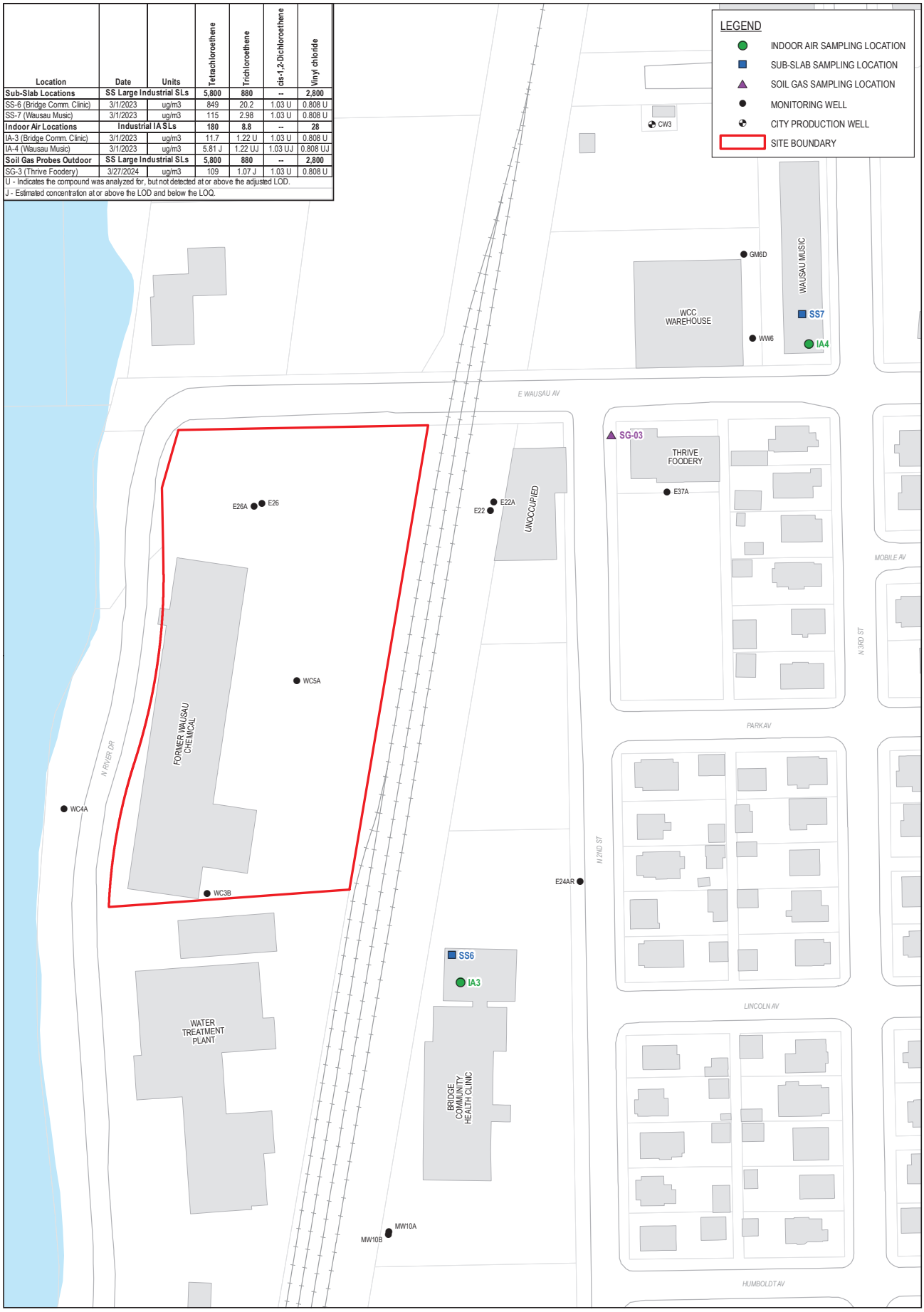
FIGURE 1.2

GIS File: I:\GIS\Projects\6-chars\00----\0039--\003978\003978-REPORTS\003978-00(042)\003978-00(042)GIS-SP002.mxd

Figure 1.3
Aerial Photograph
(Circa. 2015)

Location	Date	Units	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride
Sub-Slab Locations	**SS Large Industrial SLs**		**5,800**	**880**	**--**	**2,800**
SS-6 (Bridge Comm. Clinic)	3/1/2023	ug/m3	849	20.2	1.03 U	0.808 U
SS-7 (Wausau Music)	3/1/2023	ug/m3	115	2.98	1.03 U	0.808 U
Indoor Air Locations	**Industrial IA SLs**		**180**	**8.8**	**--**	**28**
IA-3 (Bridge Comm. Clinic)	3/1/2023	ug/m3	11.7	1.22 U	1.03 U	0.808 U
IA-4 (Wausau Music)	3/1/2023	ug/m3	5.81 J	1.22 UJ	1.03 UJ	0.808 UJ
Soil Gas Probes Outdoor	**SS Large Industrial SLs**		**5,800**	**880**	**--**	**2,800**
SG-3 (Thrive Foodery)	3/27/2024	ug/m3	109	1.07 J	1.03 U	0.808 U

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.
J - Estimated concentration at or above the LOD and below the LOQ.



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Map Projection: Lambert Conformal Conic
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GHD

WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN

2023-2024 EAST BANK VAPOR SAMPLING LOCATIONS

Project No. **003978-10**
Revision No. **-**
Date **05/09/2024**

FIGURE 2.1

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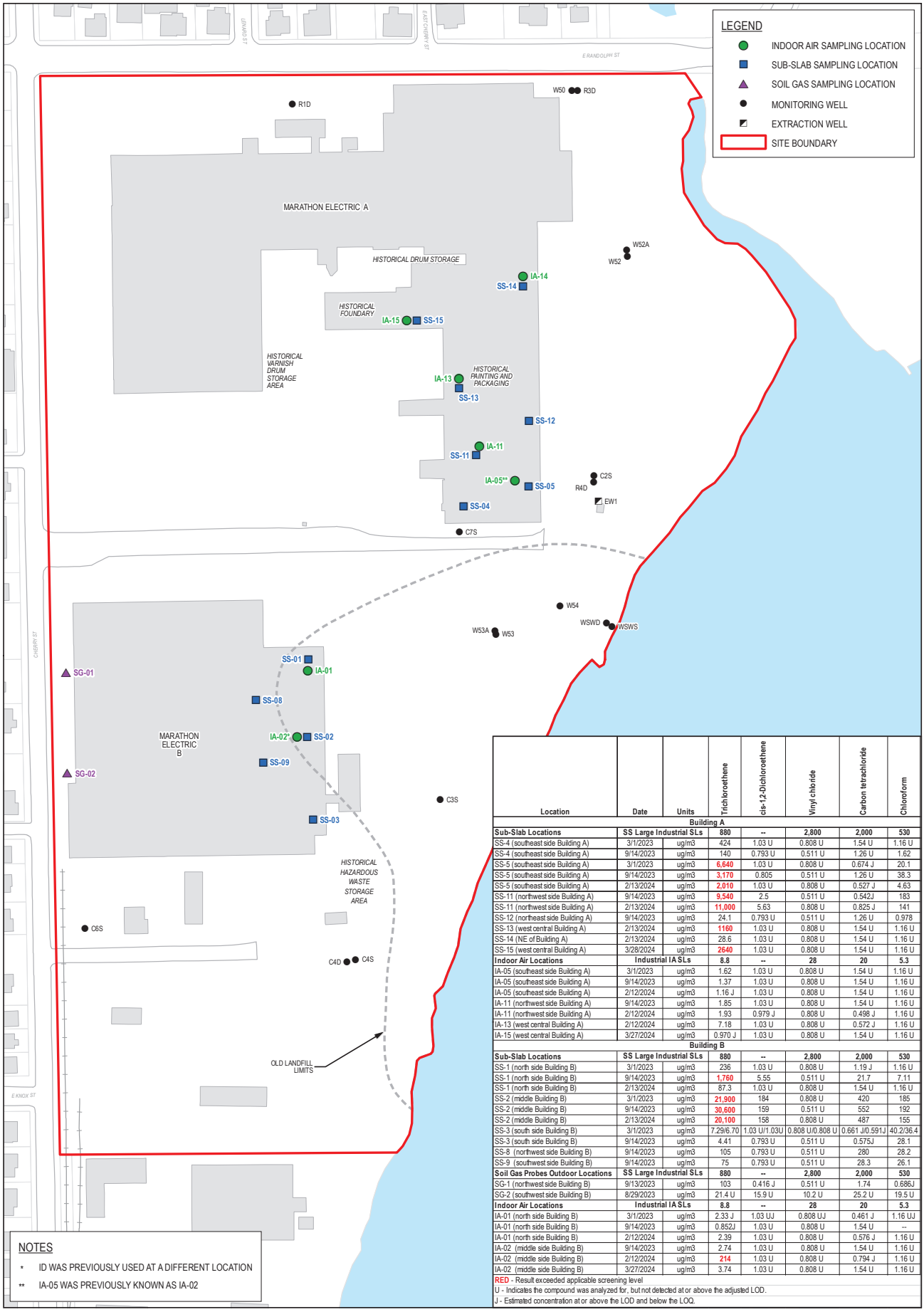

Location	Date	Units	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Carbon tetrachloride	Chloroform
Building A							
Sub-Slab Locations	**SS Large Industrial SLs**		**880**	**--**	**2,800**	**2,000**	**530**
SS-4 (southeast side Building A)	3/1/2023	ug/m3	424	1.03 U	0.808 U	1.54 U	1.16 U
SS-4 (southeast side Building A)	9/14/2023	ug/m3	140	0.793 U	0.511 U	1.26 U	1.62
SS-5 (southeast side Building A)	3/1/2023	ug/m3	**6,640**	1.03 U	0.808 U	0.674 J	20.1
SS-5 (southeast side Building A)	9/14/2023	ug/m3	**3,170**	0.805	0.511 U	1.26 U	38.3
SS-5 (southeast side Building A)	2/13/2024	ug/m3	**2,010**	1.03 U	0.808 U	0.527 J	4.63
SS-11 (northwest side Building A)	9/14/2023	ug/m3	**9,540**	2.5	0.511 U	0.542J	183
SS-11 (northwest side Building A)	2/13/2024	ug/m3	**11,000**	5.63	0.808 U	0.825 J	141
SS-12 (northeast side Building A)	9/14/2023	ug/m3	24.1	0.793 U	0.511 U	1.26 U	0.978
SS-13 (west central Building A)	2/13/2024	ug/m3	**1160**	1.03 U	0.808 U	1.54 U	1.16 U
SS-14 (NE of Building A)	2/13/2024	ug/m3	28.6	1.03 U	0.808 U	1.54 U	1.16 U
SS-15 (west central Building A)	3/28/2024	ug/m3	**2640**	1.03 U	0.808 U	1.54 U	1.16 U
Indoor Air Locations	**Industrial IA SLs**		**8.8**	**--**	**28**	**20**	**5.3**
IA-05 (southeast side Building A)	3/1/2023	ug/m3	1.62	1.03 U	0.808 U	1.54 U	1.16 U
IA-05 (southeast side Building A)	9/14/2023	ug/m3	1.37	1.03 U	0.808 U	1.54 U	1.16 U
IA-05 (southeast side Building A)	2/12/2024	ug/m3	1.16 J	1.03 U	0.808 U	1.54 U	1.16 U
IA-11 (northwest side Building A)	9/14/2023	ug/m3	1.85	1.03 U	0.808 U	1.54 U	1.16 U
IA-11 (northwest side Building A)	2/12/2024	ug/m3	1.93	0.979 J	0.808 U	0.498 J	1.16 U
IA-13 (west central Building A)	2/12/2024	ug/m3	7.18	1.03 U	0.808 U	0.572 J	1.16 U
IA-15 (west central Building A)	3/27/2024	ug/m3	0.970 J	1.03 U	0.808 U	1.54 U	1.16 U
Building B							
Sub-Slab Locations	**SS Large Industrial SLs**		**880**	**--**	**2,800**	**2,000**	**530**
SS-1 (north side Building B)	3/1/2023	ug/m3	236	1.03 U	0.808 U	1.19 J	1.16 U
SS-1 (north side Building B)	9/14/2023	ug/m3	**1,760**	5.55	0.511 U	21.7	7.11
SS-1 (north side Building B)	2/13/2024	ug/m3	87.3	1.03 U	0.808 U	1.54 U	1.16 U
SS-2 (middle Building B)	3/1/2023	ug/m3	**21,900**	184	0.808 U	420	185
SS-2 (middle Building B)	9/14/2023	ug/m3	**30,600**	159	0.511 U	552	192
SS-2 (middle Building B)	2/13/2024	ug/m3	**20,100**	158	0.808 U	487	155
SS-3 (south side Building B)	3/1/2023	ug/m3	7.29/6.70	1.03 U/1.03U	0.808 U/0.808 U	0.661 J/0.591J	40.2/36.4
SS-3 (south side Building B)	9/14/2023	ug/m3	4.41	0.793 U	0.511 U	0.575J	28.1
SS-8 (northwest side Building B)	9/14/2023	ug/m3	105	0.793 U	0.511 U	280	28.2
SS-9 (southwest side Building B)	9/14/2023	ug/m3	75	0.793 U	0.511 U	28.3	26.1
Soil Gas Probes Outdoor Locations	**SS Large Industrial SLs**		**880**	**--**	**2,800**	**2,000**	**530**
SG-1 (northwest side Building B)	9/13/2023	ug/m3	103	0.416 J	0.511 U	1.74	0.686J
SG-2 (southwest side Building B)	8/29/2023	ug/m3	21.4 U	15.9 U	10.2 U	25.2 U	19.5 U
Indoor Air Locations	**Industrial IA SLs**		**8.8**	**--**	**28**	**20**	**5.3**
IA-01 (north side Building B)	3/1/2023	ug/m3	2.33 J	1.03 UJ	0.808 UJ	0.461 J	1.16 UJ
IA-01 (north side Building B)	9/14/2023	ug/m3	0.852J	1.03 U	0.808 U	1.54 U	--
IA-01 (north side Building B)	2/12/2024	ug/m3	2.39	1.03 U	0.808 U	0.576 J	1.16 U
IA-02 (middle side Building B)	9/14/2023	ug/m3	2.74	1.03 U	0.808 U	1.54 U	1.16 U
IA-02 (middle side Building B)	2/12/2024	ug/m3	**214**	1.03 U	0.808 U	0.794 J	1.16 U
IA-02 (middle side Building B)	3/27/2024	ug/m3	3.74	1.03 U	0.808 U	1.54 U	1.16 U

RED - Result exceeded applicable screening level
U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.
J - Estimated concentration at or above the LOD and below the LOQ.

Paper Size ANSI B
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Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983 HARN
Grid: NAD 1983 HARN WISCRS Marathon County Feet

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WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN

2023-2024 WEST BANK
VAPOR SAMPLING LOCATIONS

Project No. 003978-10
Revision No. -
Date 05/09/2024

FIGURE 2.2

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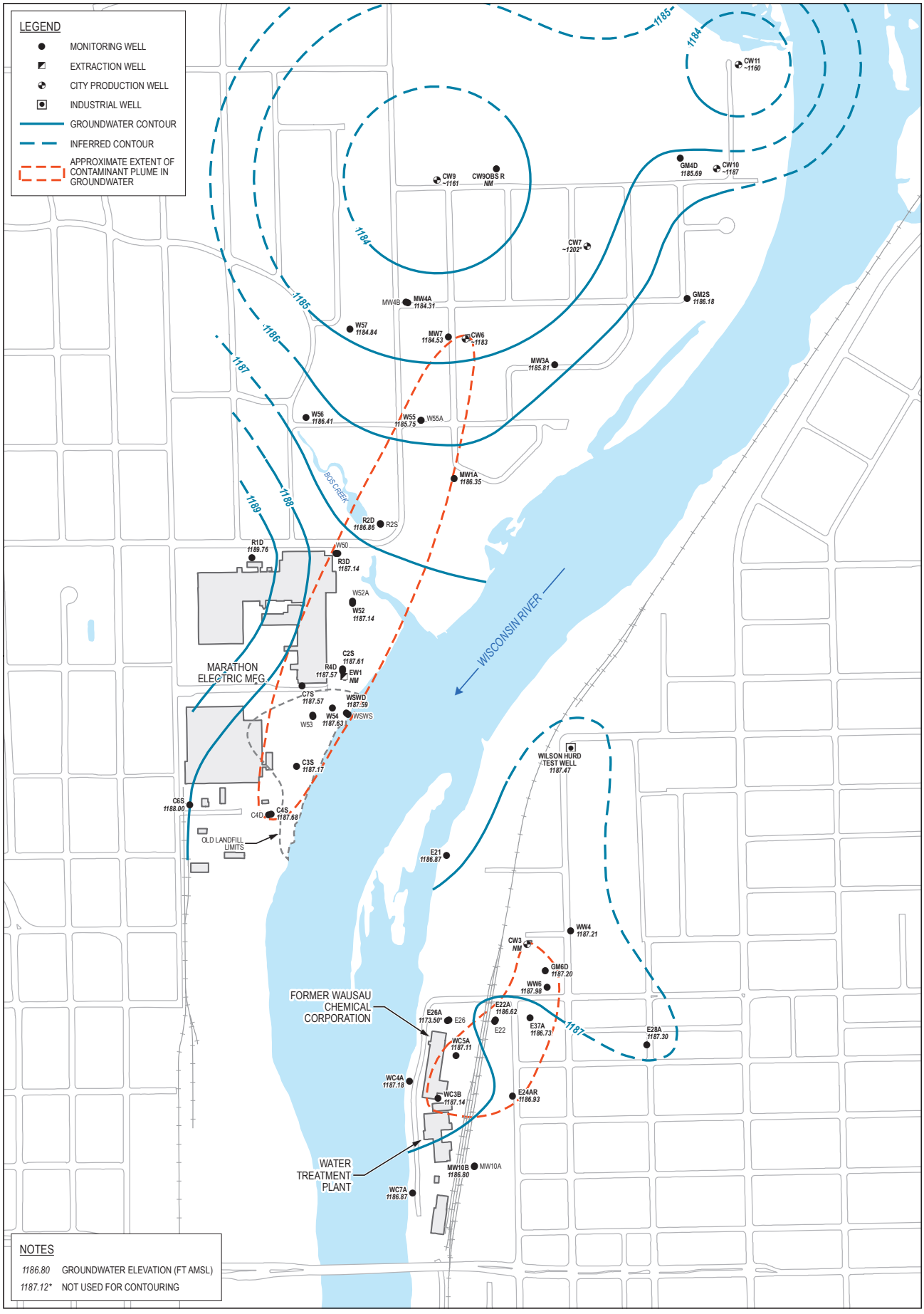

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Feet

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Grid: NAD 1983 HARN WISCRS Marathon County Feet

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GHD

WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN

GROUNDWATER ELEVATIONS AND CONTOURS AUGUST 2023

Project No. 003978-00
Revision No. -
Date 01/29/2024

FIGURE 3

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Data source: Marathon County. Created by: rjcoy

Manhole ID	Date	Units	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride
MH1140	03/01/2023	ug/m3	5.06	2.54	1.03 U	0.808 U
MH1282	03/01/2023	ug/m3	2.47	0.670 J	1.03 U	0.808 U
MH9122	03/01/2023	ug/m3	1.82 J	1.22 U	1.03 U	0.808 U
Indoor Air Vapor Action Level			**42**	**2.1**	**42**	**1.7**
VAL w/Attenuation Factor 0.03			**1400**	**70**	**1400**	**56.7**

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.
J - Estimated concentration at or above the LOD and below the LOQ.

Paper Size ANSI B
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Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983 HARN
Grid: NAD 1983 HARN WISCRS Marathon County Feet

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GHD

WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN

PREFERENTIAL PATHWAY INVESTIGATION
SAMPLING LOCATIONS

Project No. 003978-10
Revision No. -
Date 05/09/2024

FIGURE 3.1

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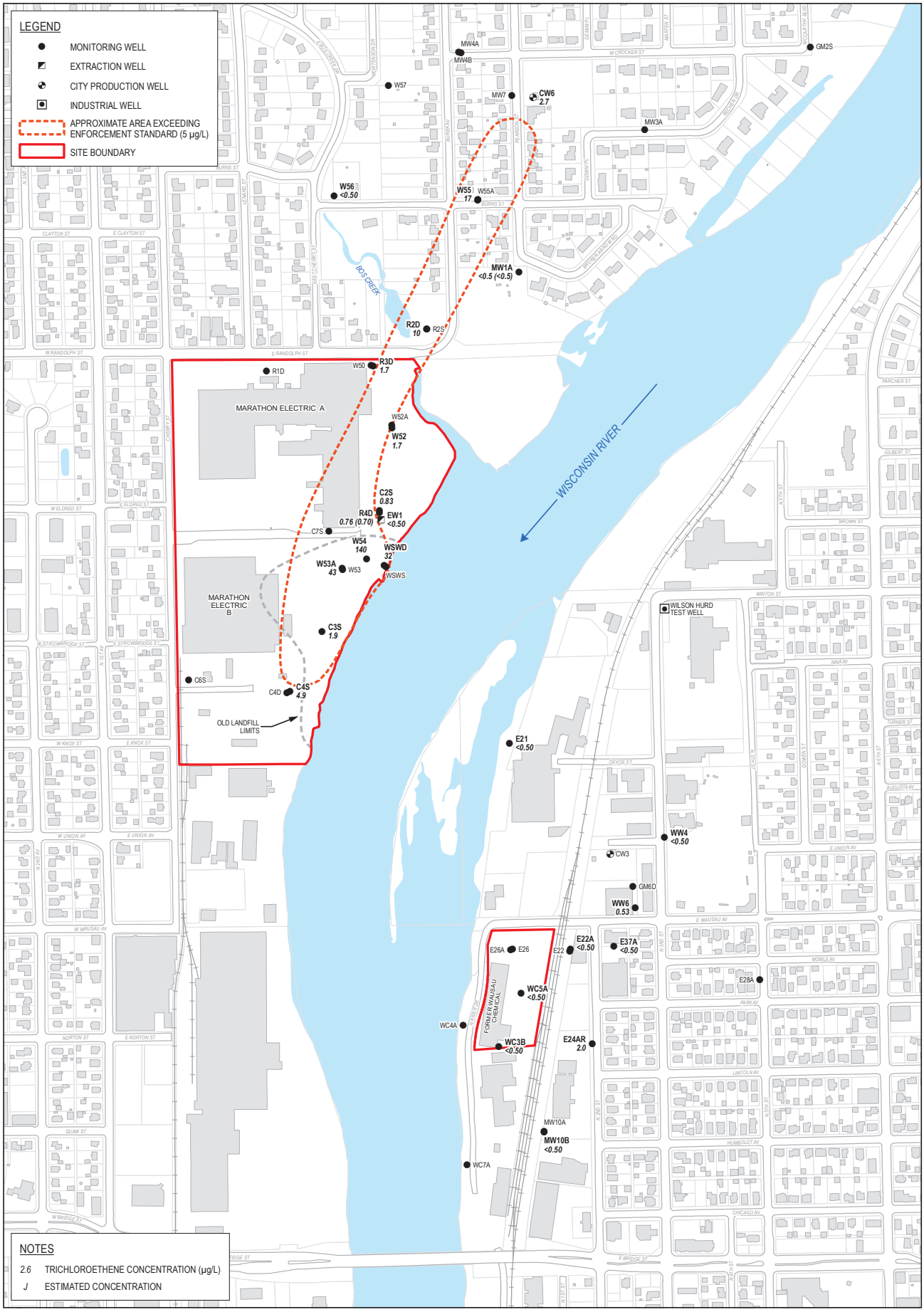

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Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983 HARN
Grid: NAD 1983 HARN WISCRS Marathon County Feet

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GHD

WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN

TRICHLOROETHENE CONCENTRATIONS AUGUST 2023

Project No. **003978-00**
Revision No. **-**
Date **01/24/2024**

FIGURE 4

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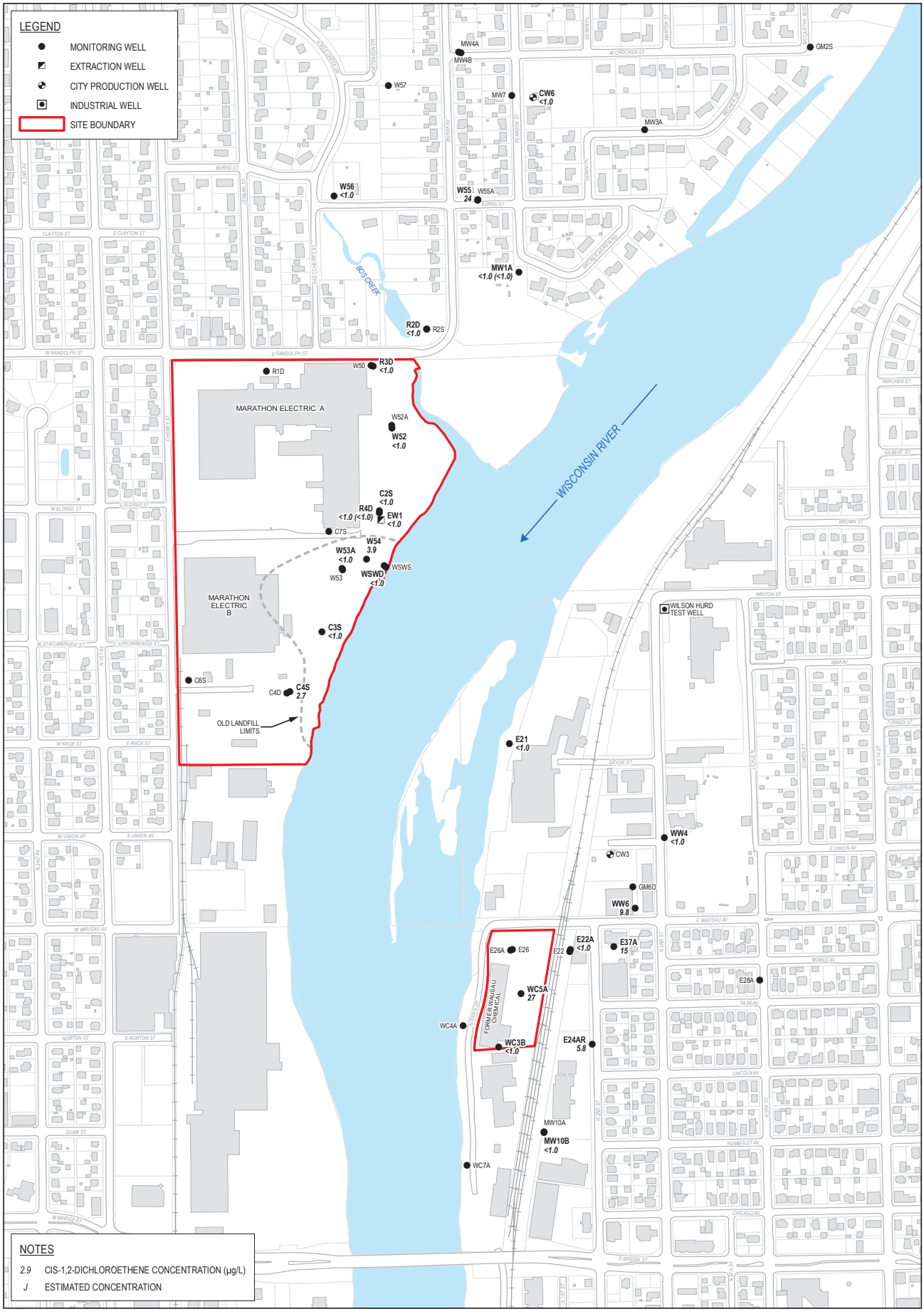

Paper Size ANSI B

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Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983 HARN
Grid: NAD 1983 HARN WISCRS Marathon County Feet

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GHD

WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN

CIS-1,2-DICHLOROETHENE CONCENTRATIONS AUGUST 2023

Project No. 003978-00
Revision No. -
Date 01/24/2024

FIGURE 5

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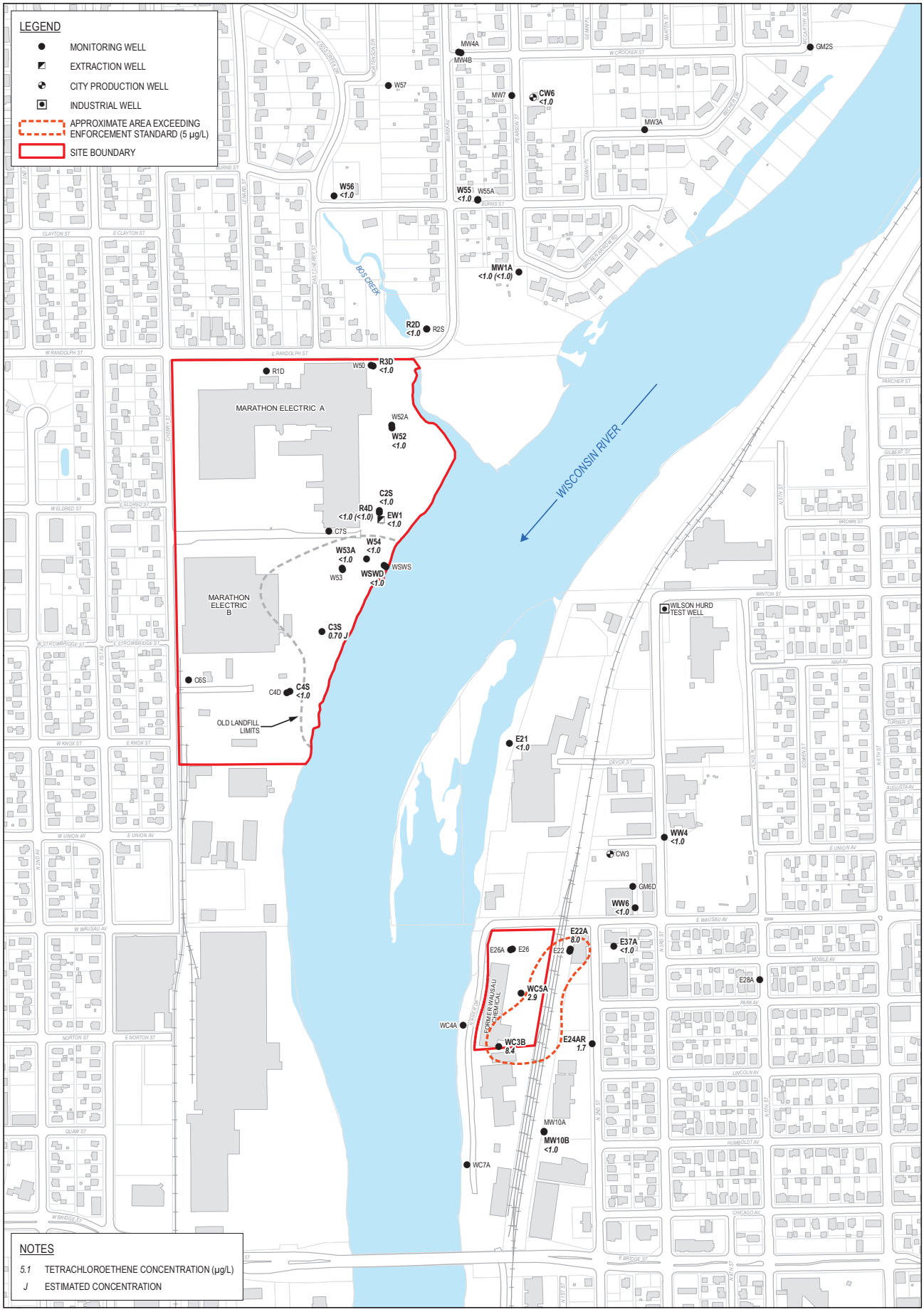

Paper Size ANSI B

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Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983 HARN
Grid: NAD 1983 HARN WISCRS Marathon County Feet

N

GHD

WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN

TETRACHLOROETHENE CONCENTRATIONS AUGUST 2023

Project No. **003978-00**
Revision No. **-**
Date **01/24/2024**

FIGURE 6

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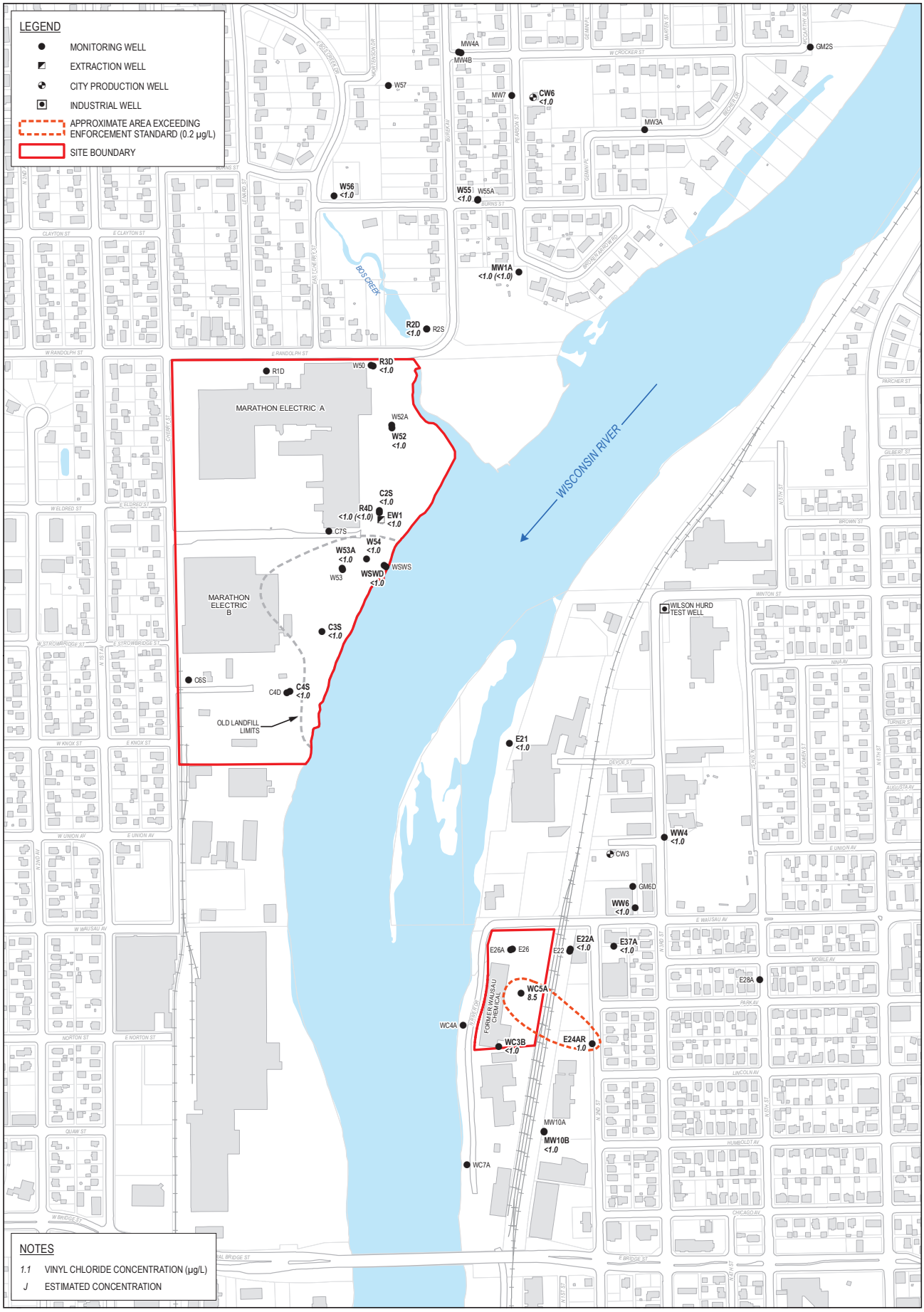

Paper Size ANSI B

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Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983 HARN
Grid: NAD 1983 HARN WISCRS Marathon County Feet

N

GHD

WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN

VINYL CHLORIDE CONCENTRATIONS AUGUST 2023

Project No. **003978-00**
Revision No. **-**
Date **01/24/2024**

FIGURE 7

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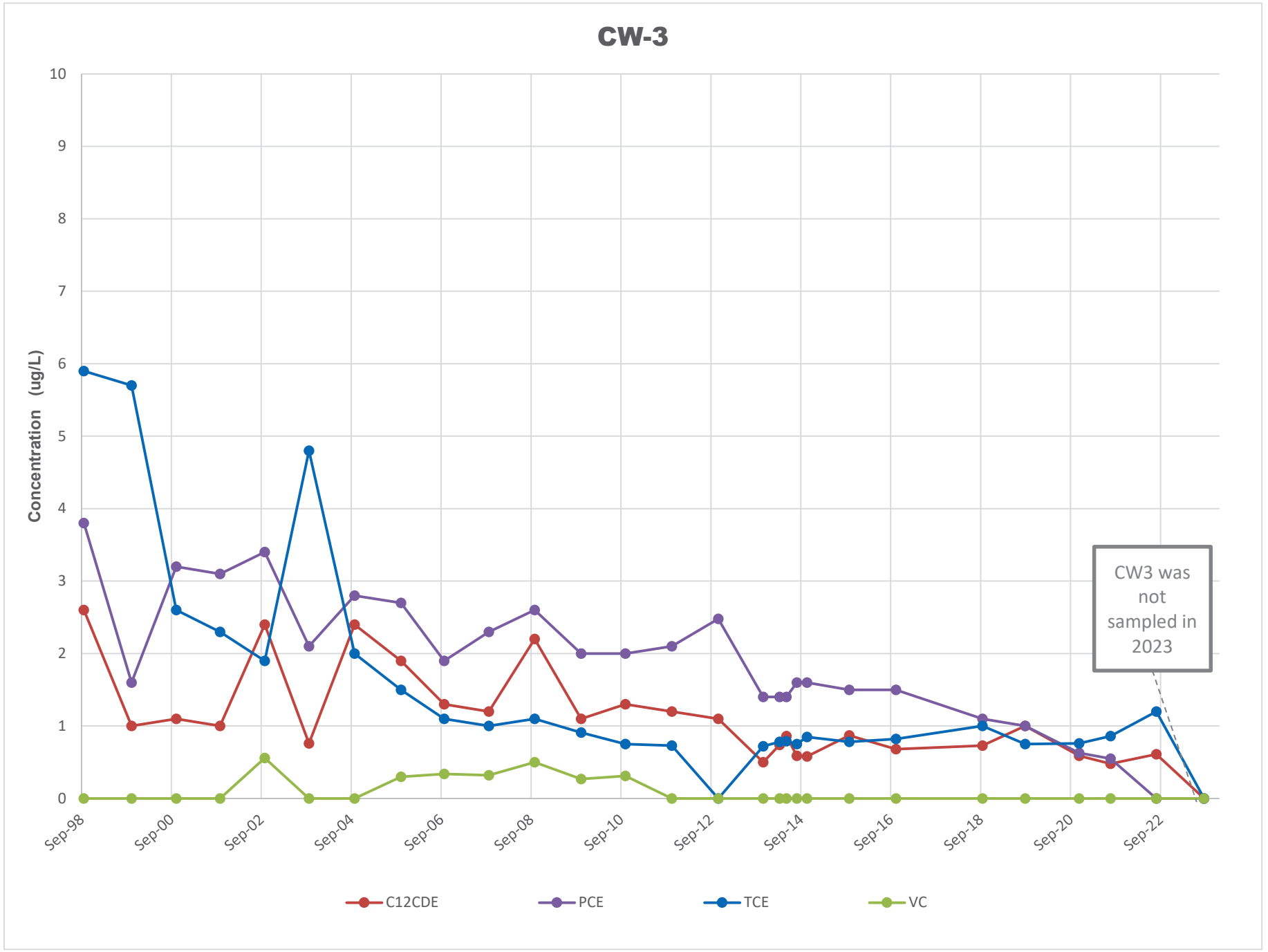
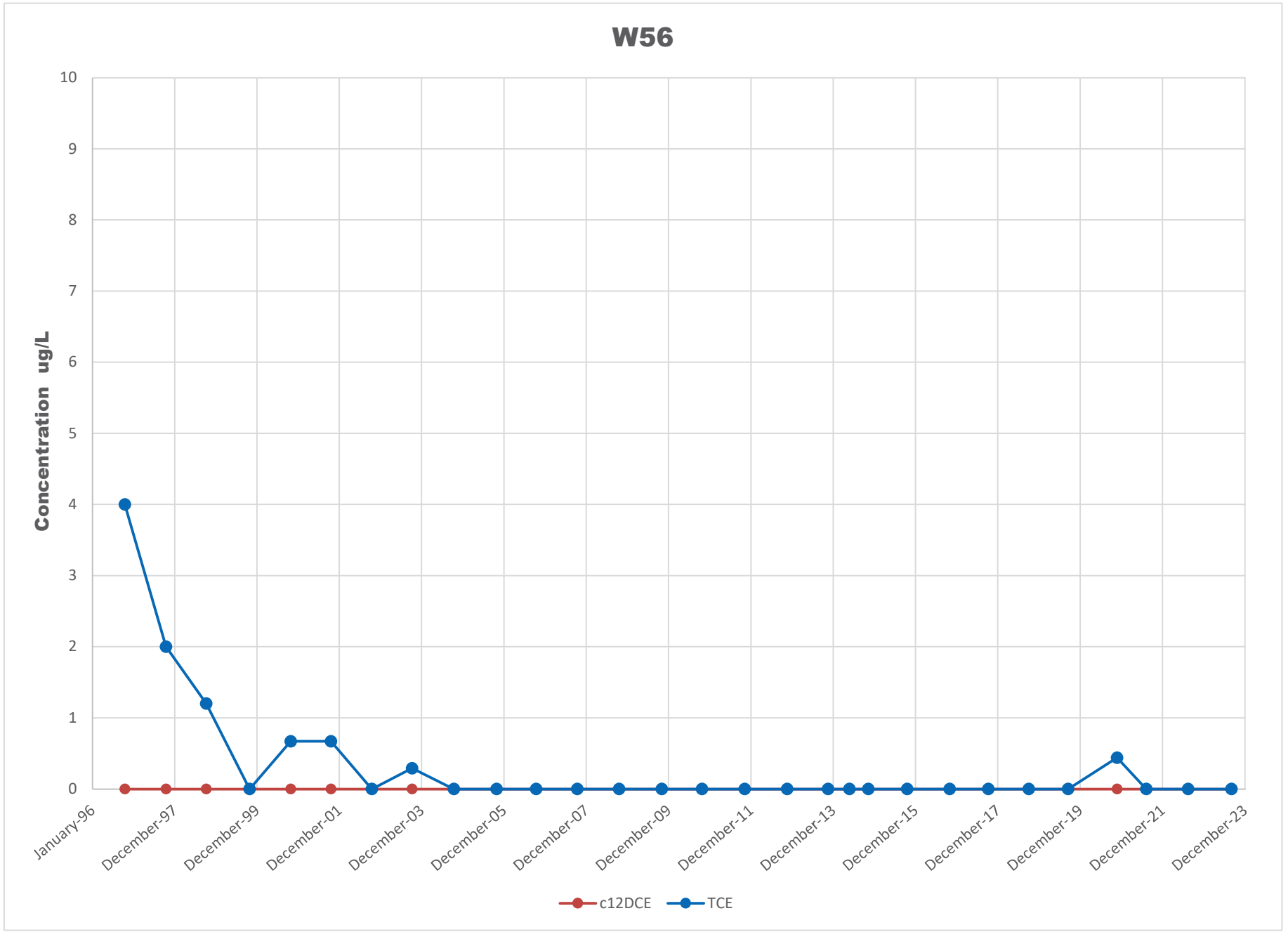
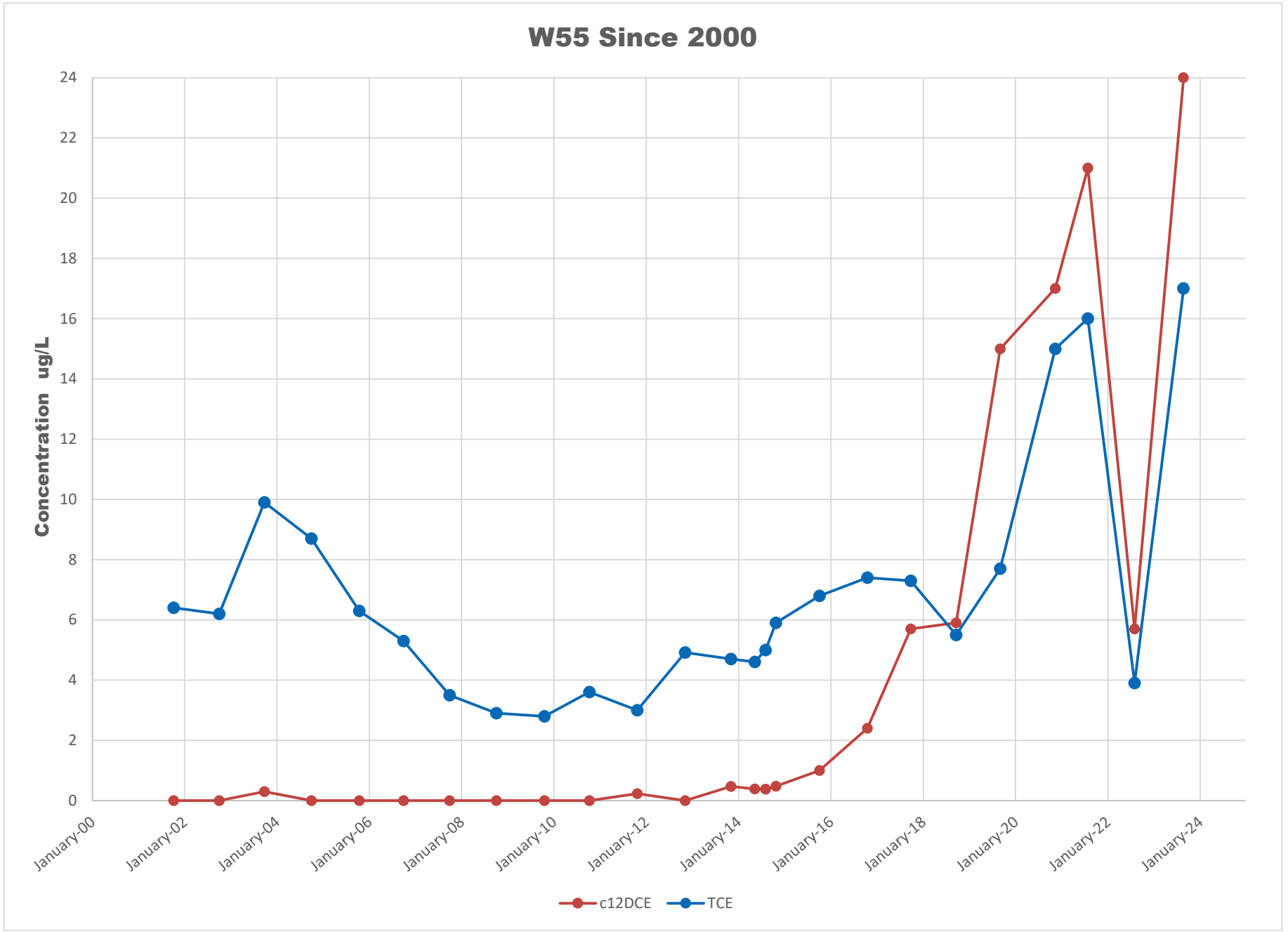
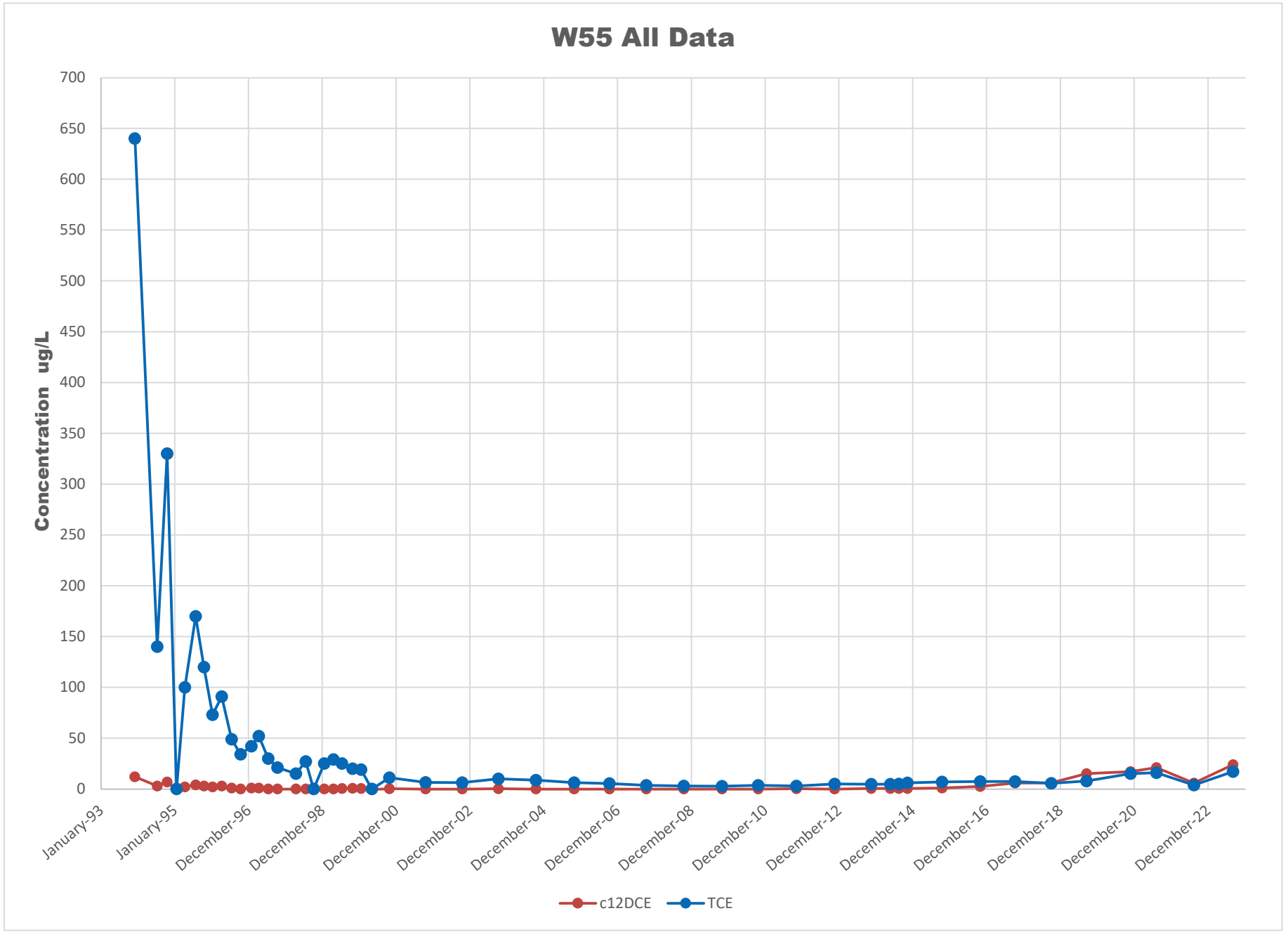
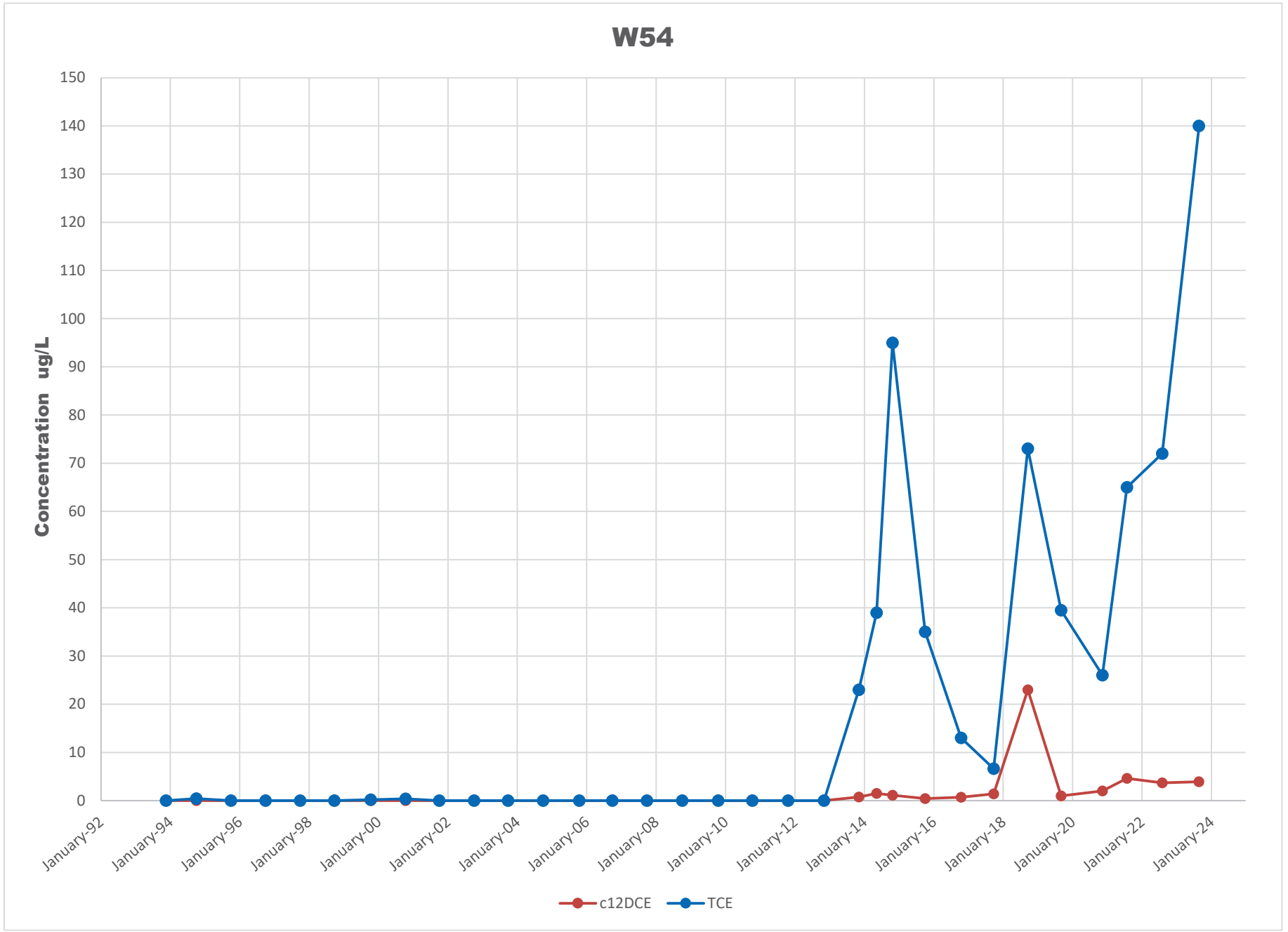
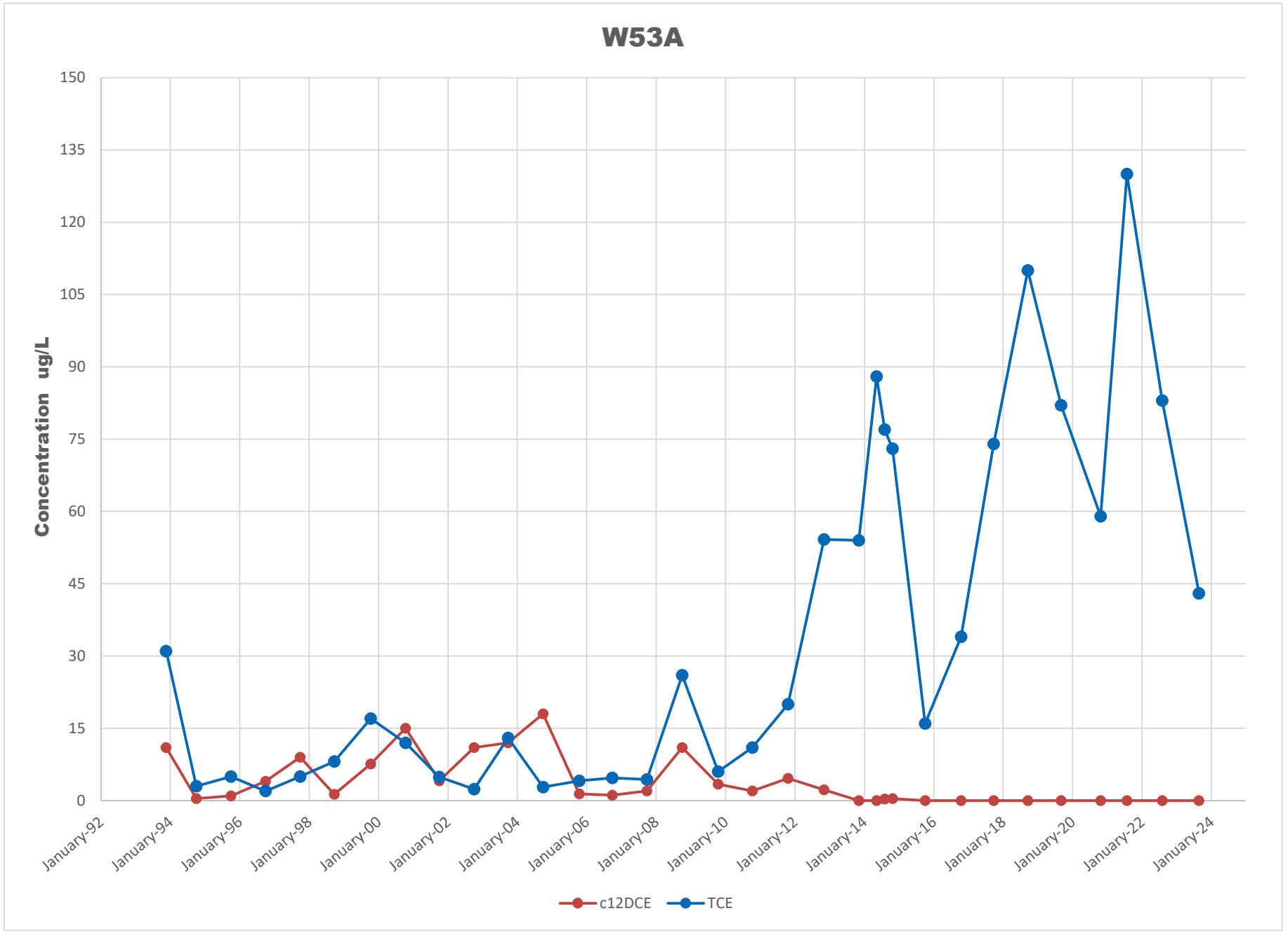

CW-3
Concentration (ug/L)
10
9
8
7
6
5
4
3
2
1
0
Sep-98
Sep-00
Sep-02
Sep-04
Sep-06
Sep-08
Sep-10
Sep-12
Sep-14
Sep-16
Sep-18
Sep-20
Sep-22
CW3 was not sampled in 2023
C12CDE
PCE
TCE
VC

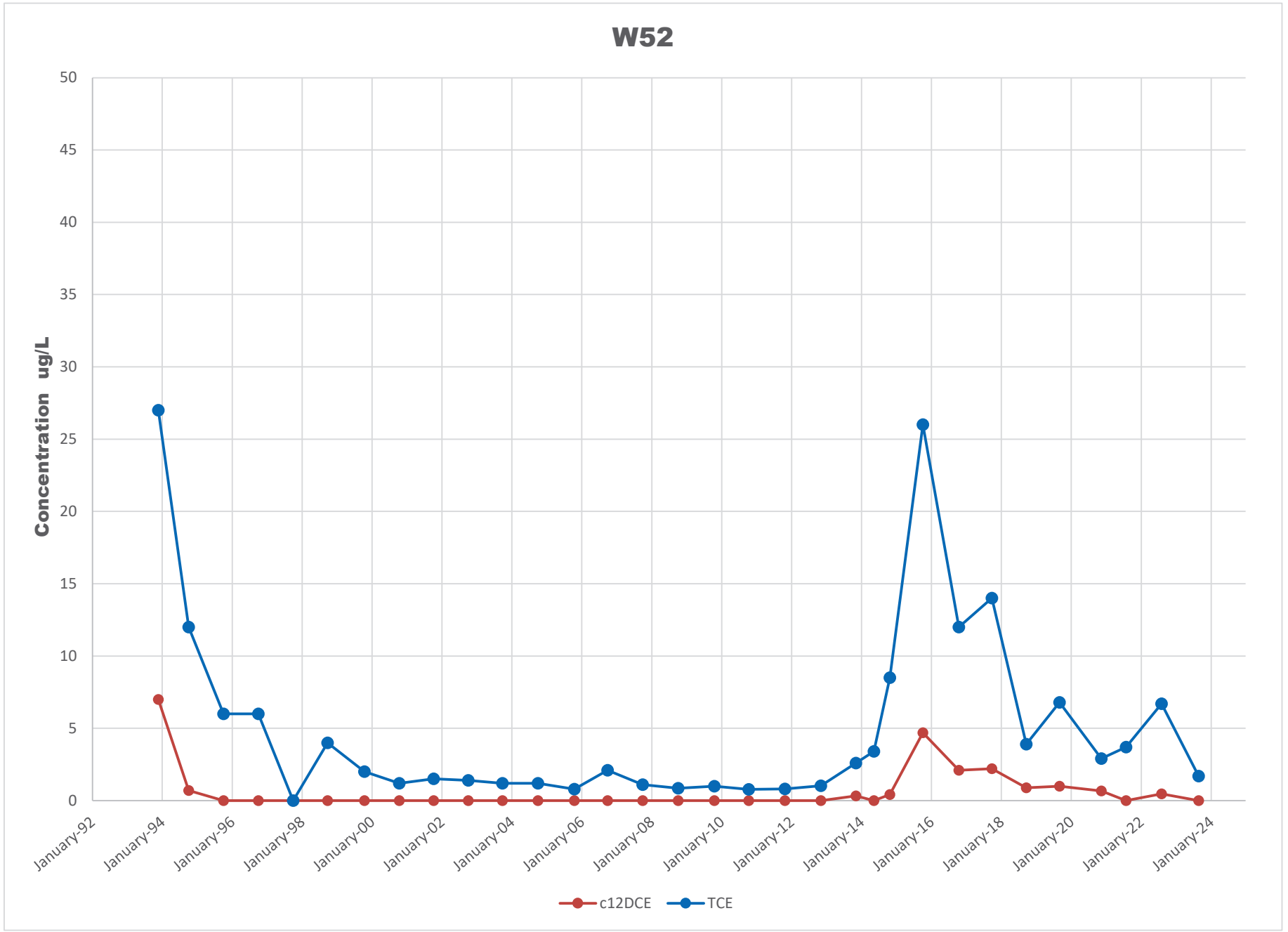

W56
Concentration ug/L
10
9
8
7
6
5
4
3
2
1
0
January-96
December-97
December-99
December-01
December-03
December-05
December-07
December-09
December-11
December-13
December-15
December-17
December-19
December-21
December-23
c12DCE
TCE

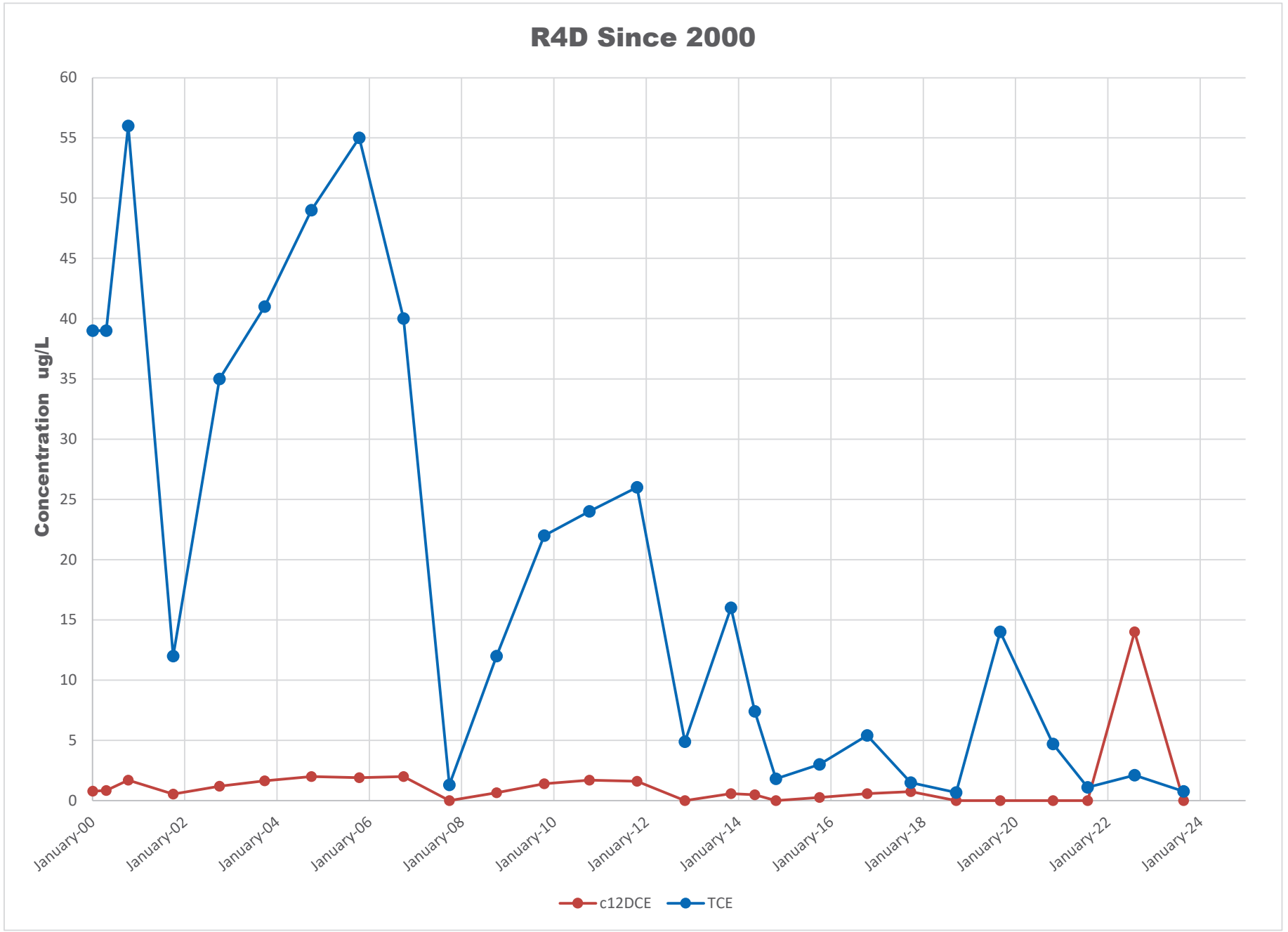

W55 Since 2000
Concentration ug/L
24
22
20
18
16
14
12
10
8
6
4
2
0
January-00
January-02
January-04
January-06
January-08
January-10
January-12
January-14
January-16
January-18
January-20
January-22
January-24
c12DCE
TCE

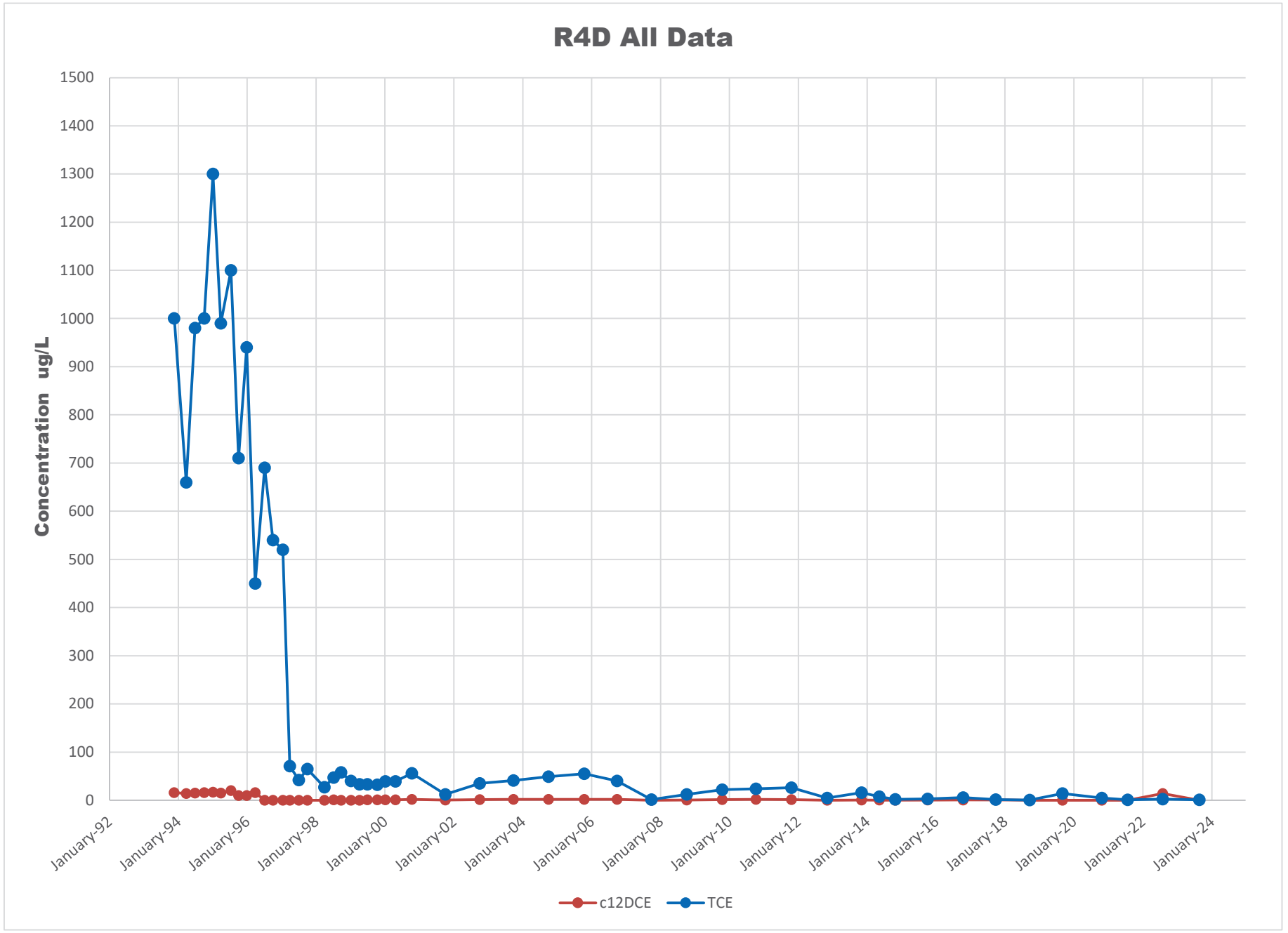

W55 All Data
Concentration ug/L
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0
January-93
January-95
December-96
December-98
December-00
December-02
December-04
December-06
December-08
December-10
December-12
December-14
December-16
December-18
December-20
December-22
c12DCE
TCE

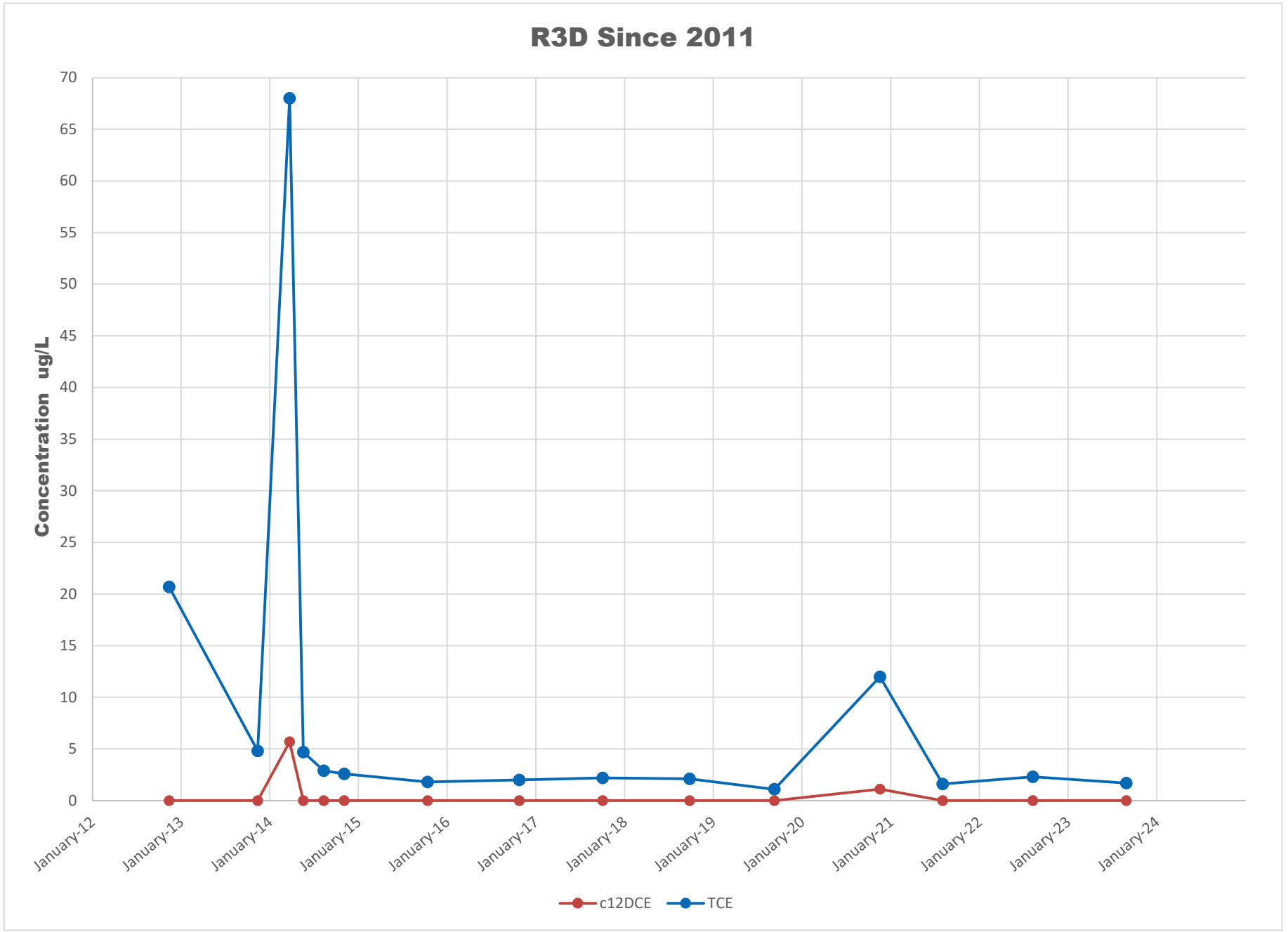

W54
Concentration ug/L
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
January-92
January-94
January-96
January-98
January-00
January-02
January-04
January-06
January-08
January-10
January-12
January-14
January-16
January-18
January-20
January-22
January-24
c12DCE
TCE

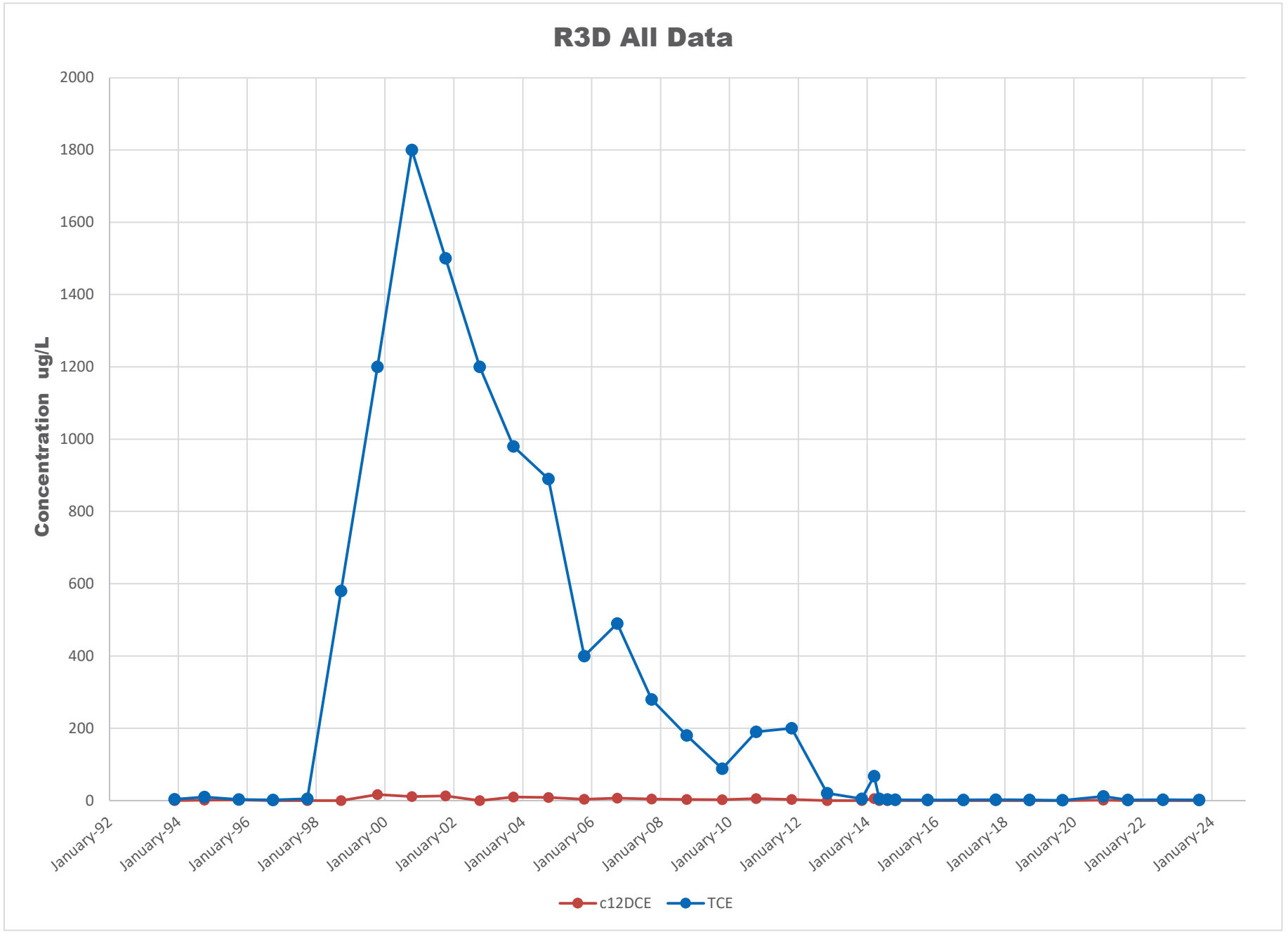

W53A
Concentration ug/L
150
135
120
105
90
75
60
45
30
15
0
January-92
January-94
January-96
January-98
January-00
January-02
January-04
January-06
January-08
January-10
January-12
January-14
January-16
January-18
January-20
January-22
January-24
c12DCE
TCE

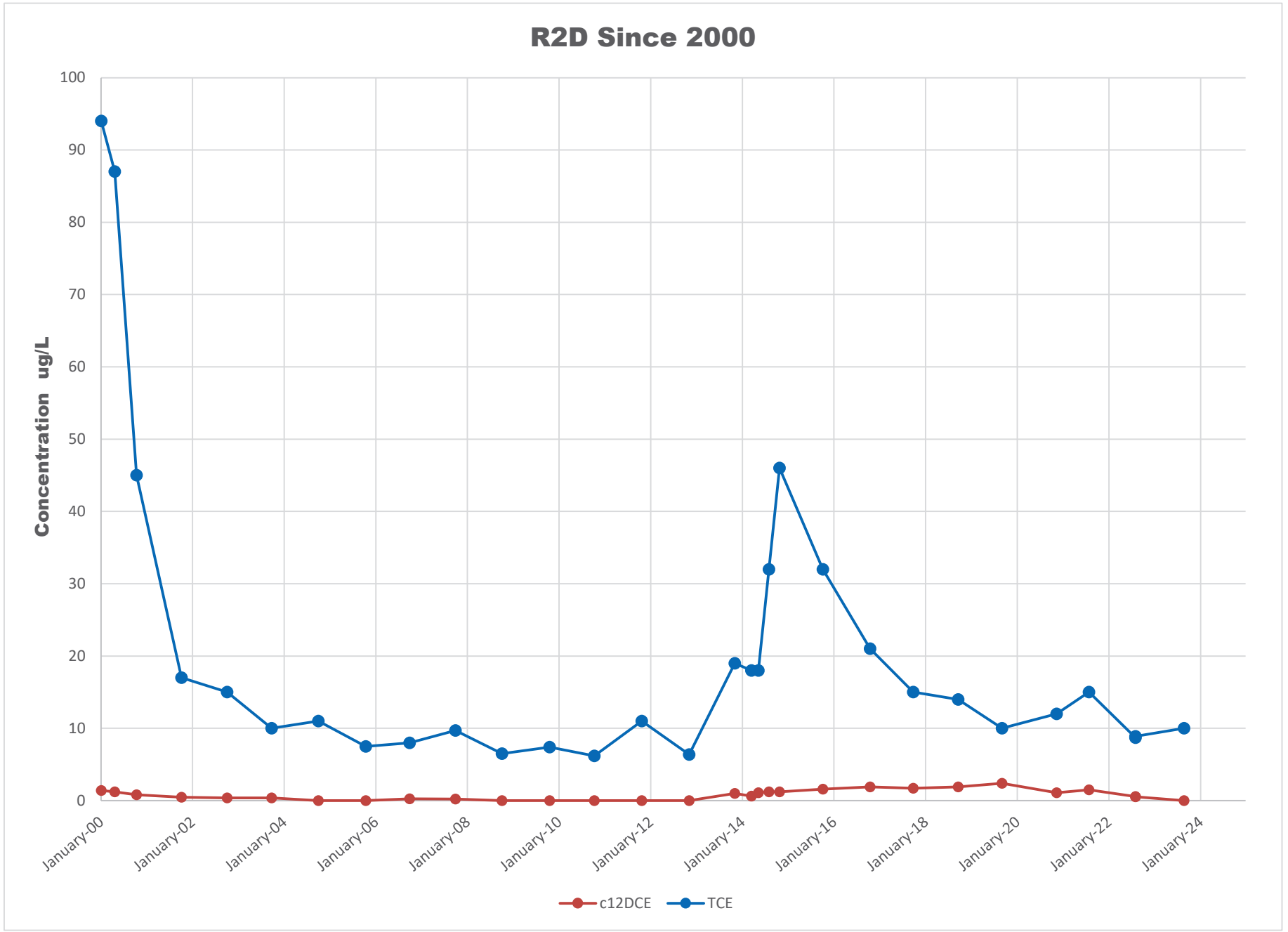

W52
Concentration ug/L
50
45
40
35
30
25
20
15
10
5
0
January-92
January-94
January-96
January-98
January-00
January-02
January-04
January-06
January-08
January-10
January-12
January-14
January-16
January-18
January-20
January-22
January-24
c12DCE
TCE

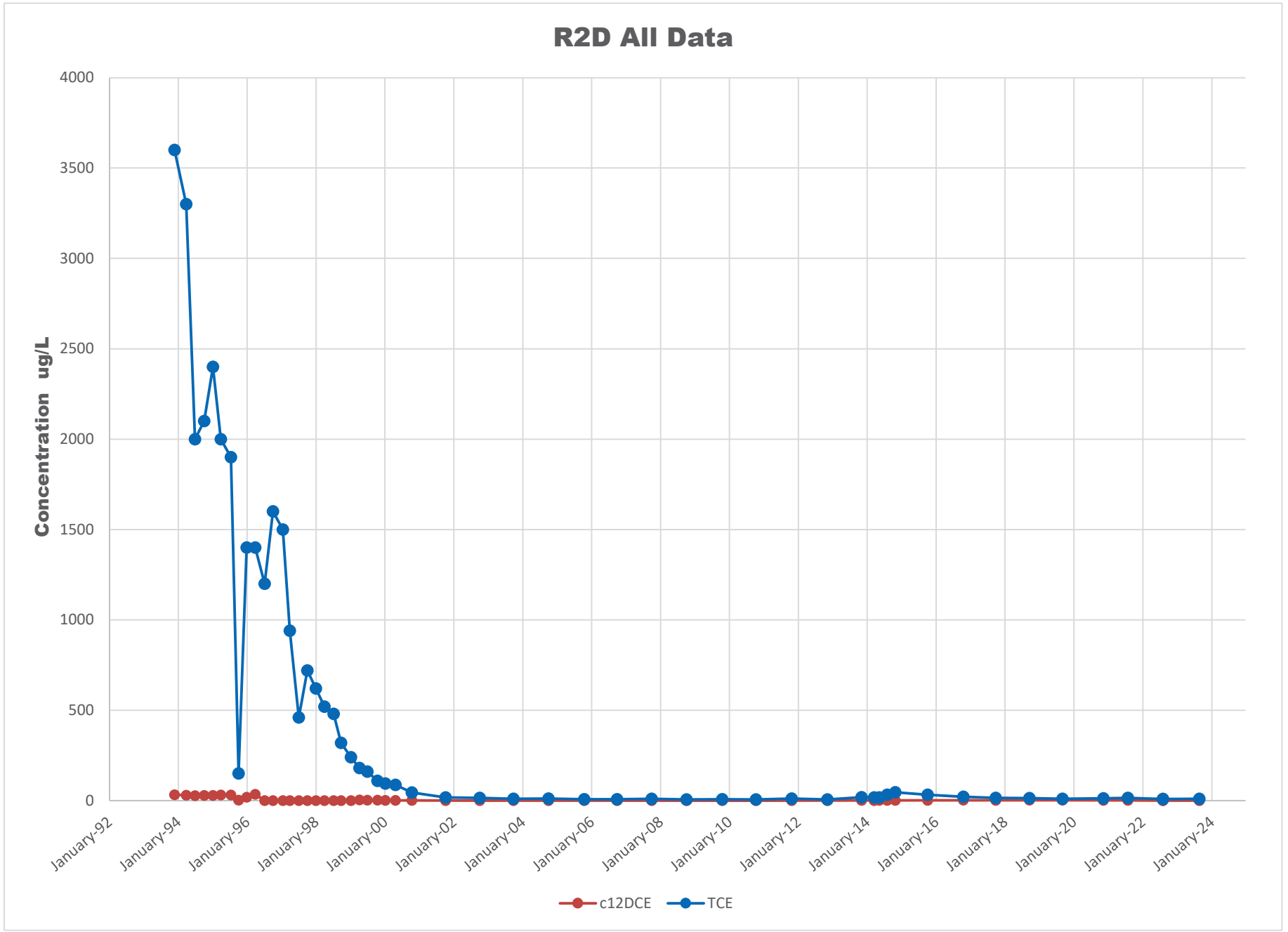

R4D Since 2000
Concentration ug/L
60
55
50
45
40
35
30
25
20
15
10
5
0
January-00
January-02
January-04
January-06
January-08
January-10
January-12
January-14
January-16
January-18
January-20
January-22
January-24
c12DCE
TCE

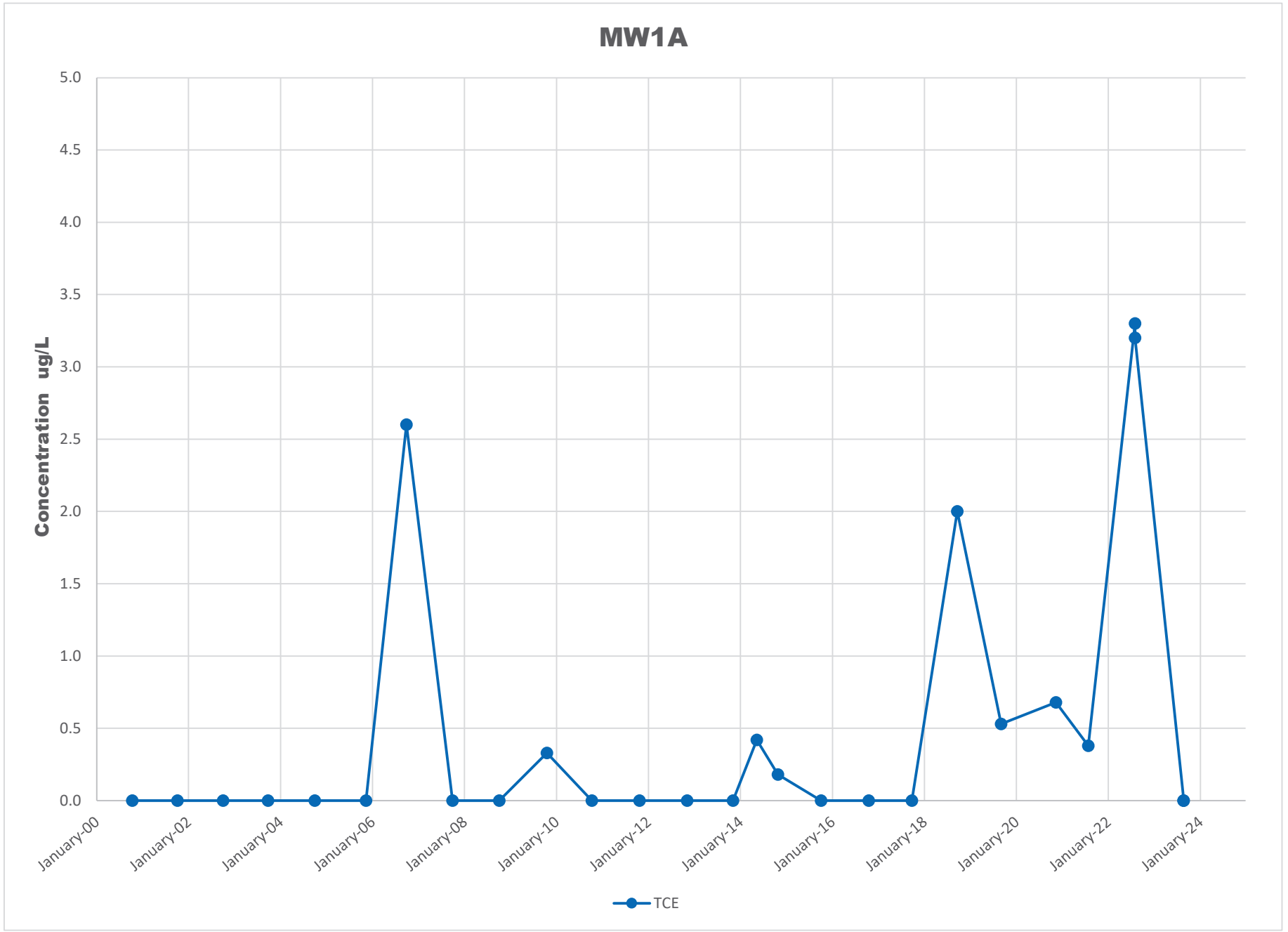

R4D All Data
Concentration ug/L
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
January-92
January-94
January-96
January-98
January-00
January-02
January-04
January-06
January-08
January-10
January-12
January-14
January-16
January-18
January-20
January-22
January-24
c12DCE
TCE

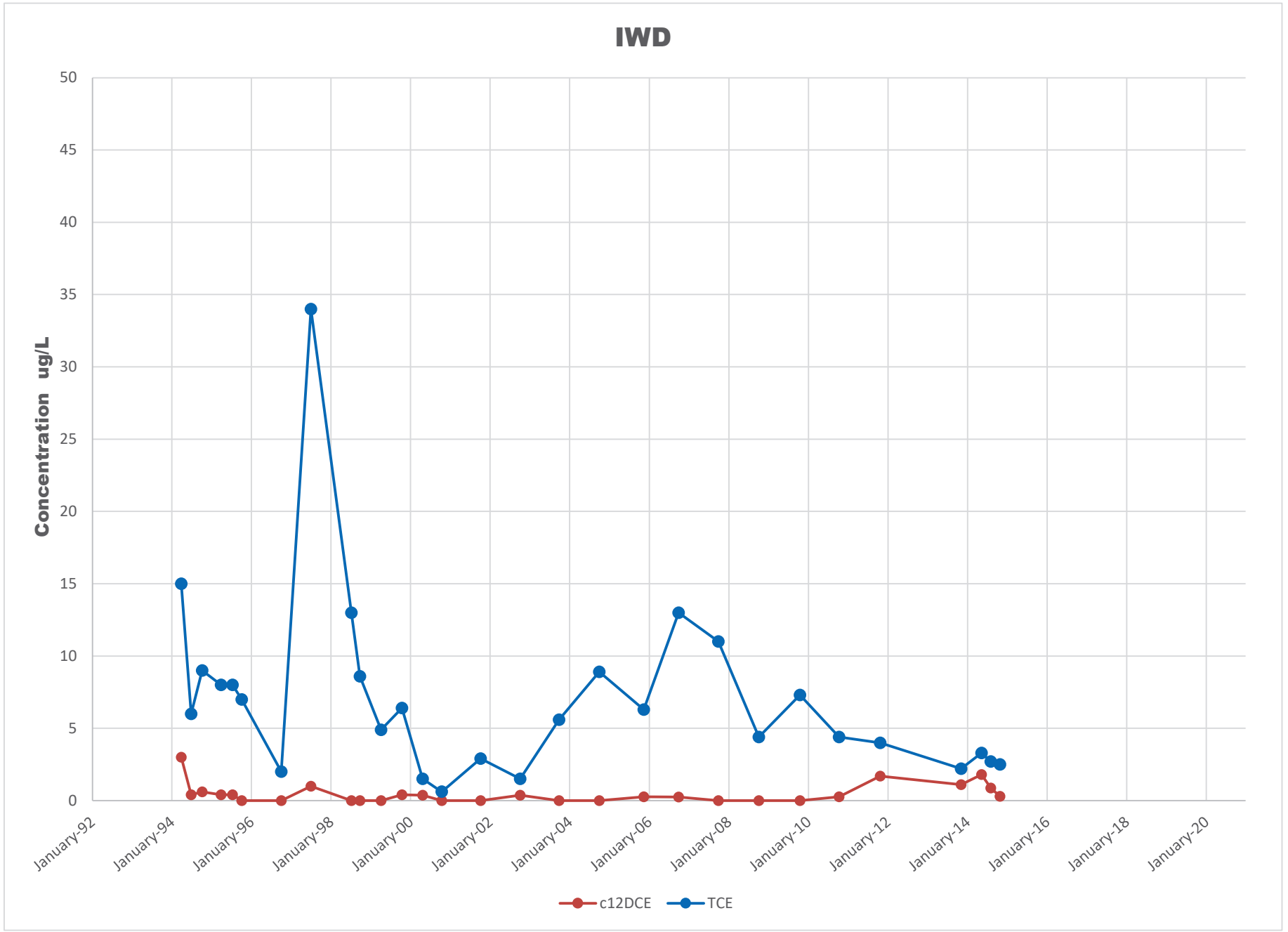

R3D Since 2011
Concentration ug/L
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
January-12
January-13
January-14
January-15
January-16
January-17
January-18
January-19
January-20
January-21
January-22
January-23
January-24
c12DCE
TCE

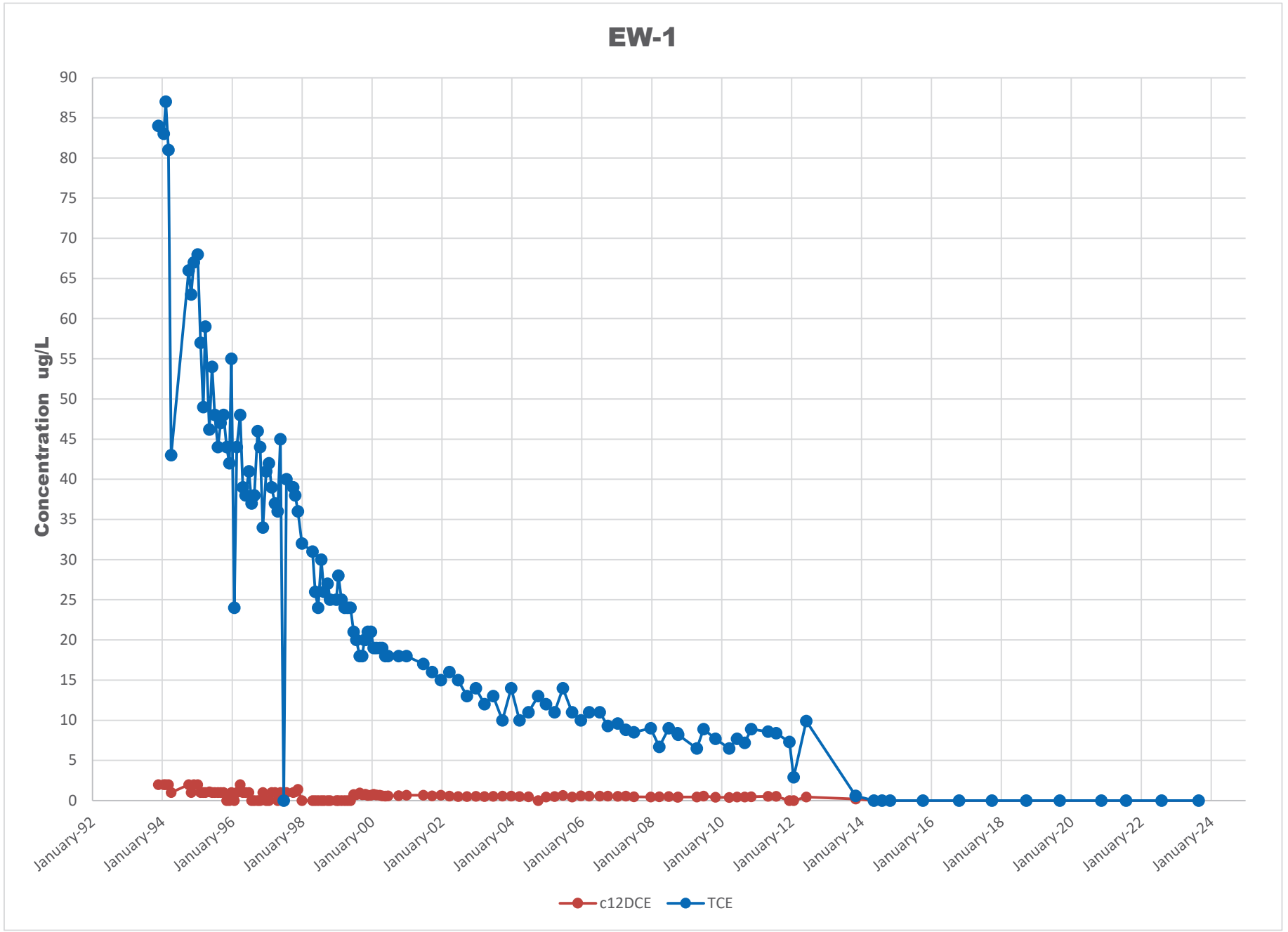

R3D All Data
Concentration ug/L
2000
1800
1600
1400
1200
1000
800
600
400
200
0
January-92
January-94
January-96
January-98
January-00
January-02
January-04
January-06
January-08
January-10
January-12
January-14
January-16
January-18
January-20
January-22
January-24
c12DCE
TCE

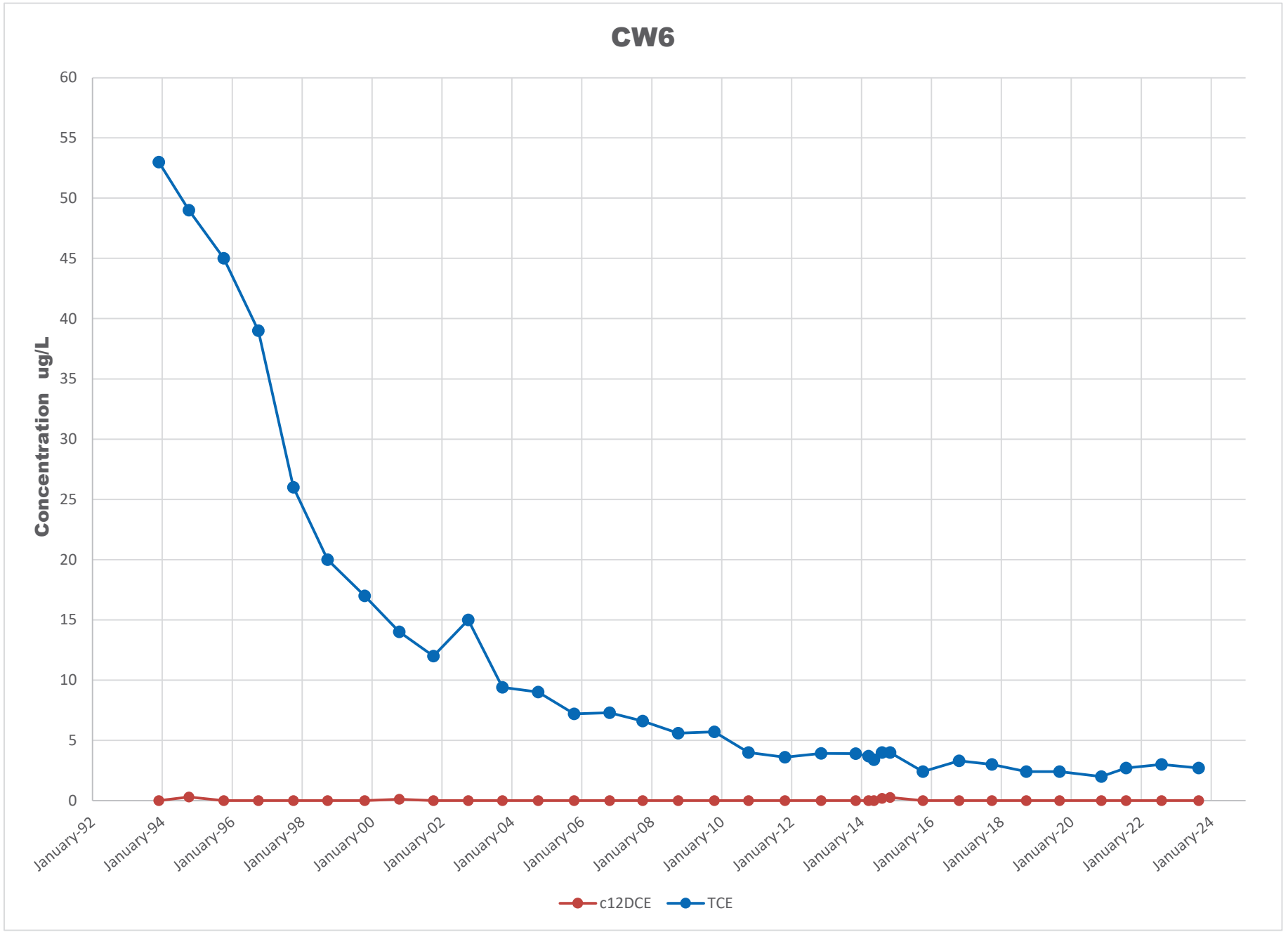

R2D Since 2000
Concentration ug/L
100
90
80
70
60
50
40
30
20
10
0
January-00
January-02
January-04
January-06
January-08
January-10
January-12
January-14
January-16
January-18
January-20
January-22
January-24
c12DCE
TCE

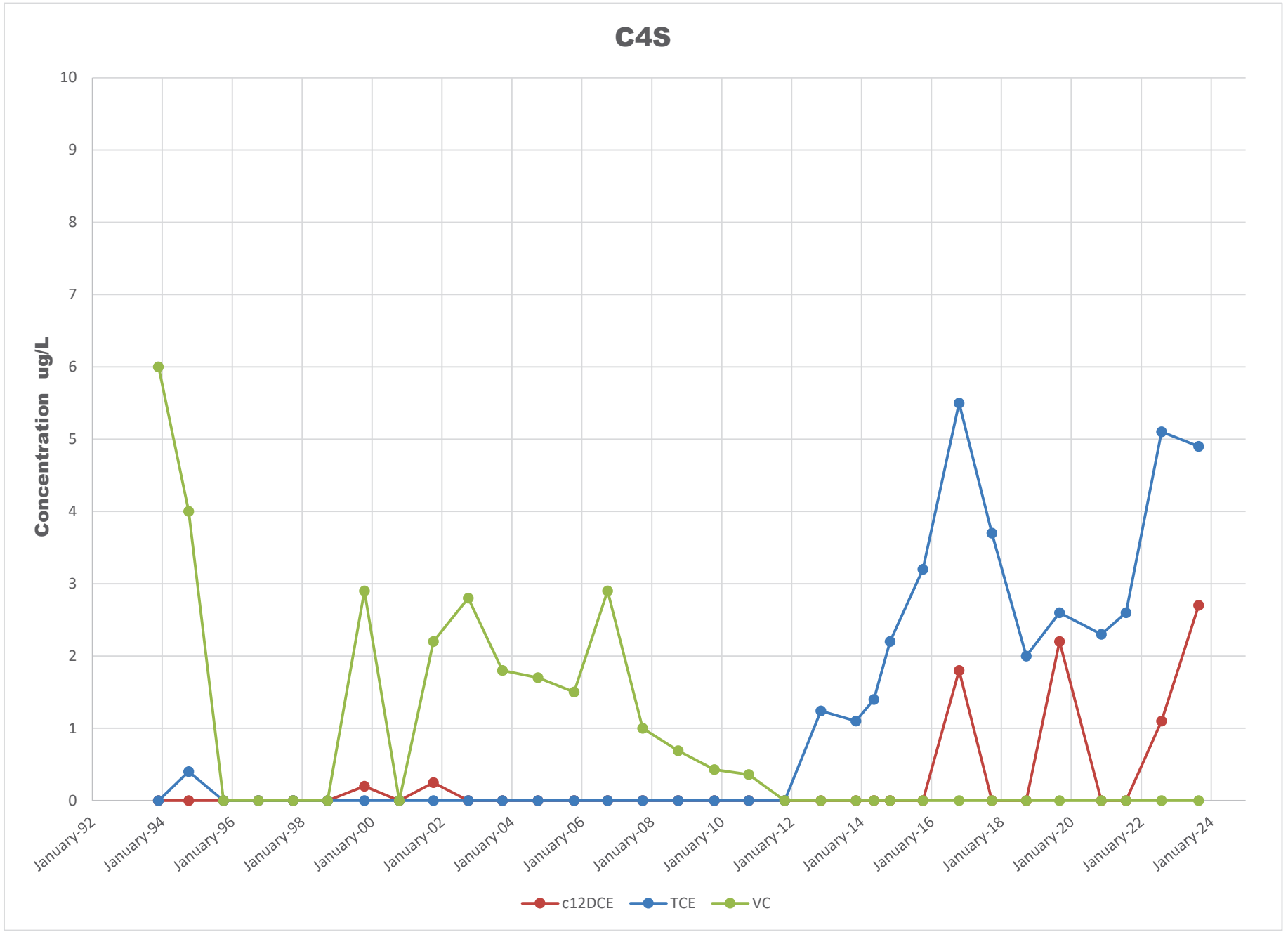

R2D All Data
Concentration ug/L
4000
3500
3000
2500
2000
1500
1000
500
0
January-92
January-94
January-96
January-98
January-00
January-02
January-04
January-06
January-08
January-10
January-12
January-14
January-16
January-18
January-20
January-22
January-24
c12DCE
TCE


MW1A
Concentration ug/L
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
January-00
January-02
January-04
January-06
January-08
January-10
January-12
January-14
January-16
January-18
January-20
January-22
January-24
TCE


IWD
Concentration ug/L
50
45
40
35
30
25
20
15
10
5
0
January-92
January-94
January-96
January-98
January-00
January-02
January-04
January-06
January-08
January-10
January-12
January-14
January-16
January-18
January-20
c12DCE
TCE


EW-1
Concentration ug/L
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
January-92
January-94
January-96
January-98
January-00
January-02
January-04
January-06
January-08
January-10
January-12
January-14
January-16
January-18
January-20
January-22
January-24
c12DCE
TCE


CW6
Concentration ug/L
60
55
50
45
40
35
30
25
20
15
10
5
0
January-92
January-94
January-96
January-98
January-00
January-02
January-04
January-06
January-08
January-10
January-12
January-14
January-16
January-18
January-20
January-22
January-24
c12DCE
TCE


C4S
Concentration ug/L
10
9
8
7
6
5
4
3
2
1
0
January-92
January-94
January-96
January-98
January-00
January-02
January-04
January-06
January-08
January-10
January-12
January-14
January-16
January-18
January-20
January-22
January-24
c12DCE
TCE
VC

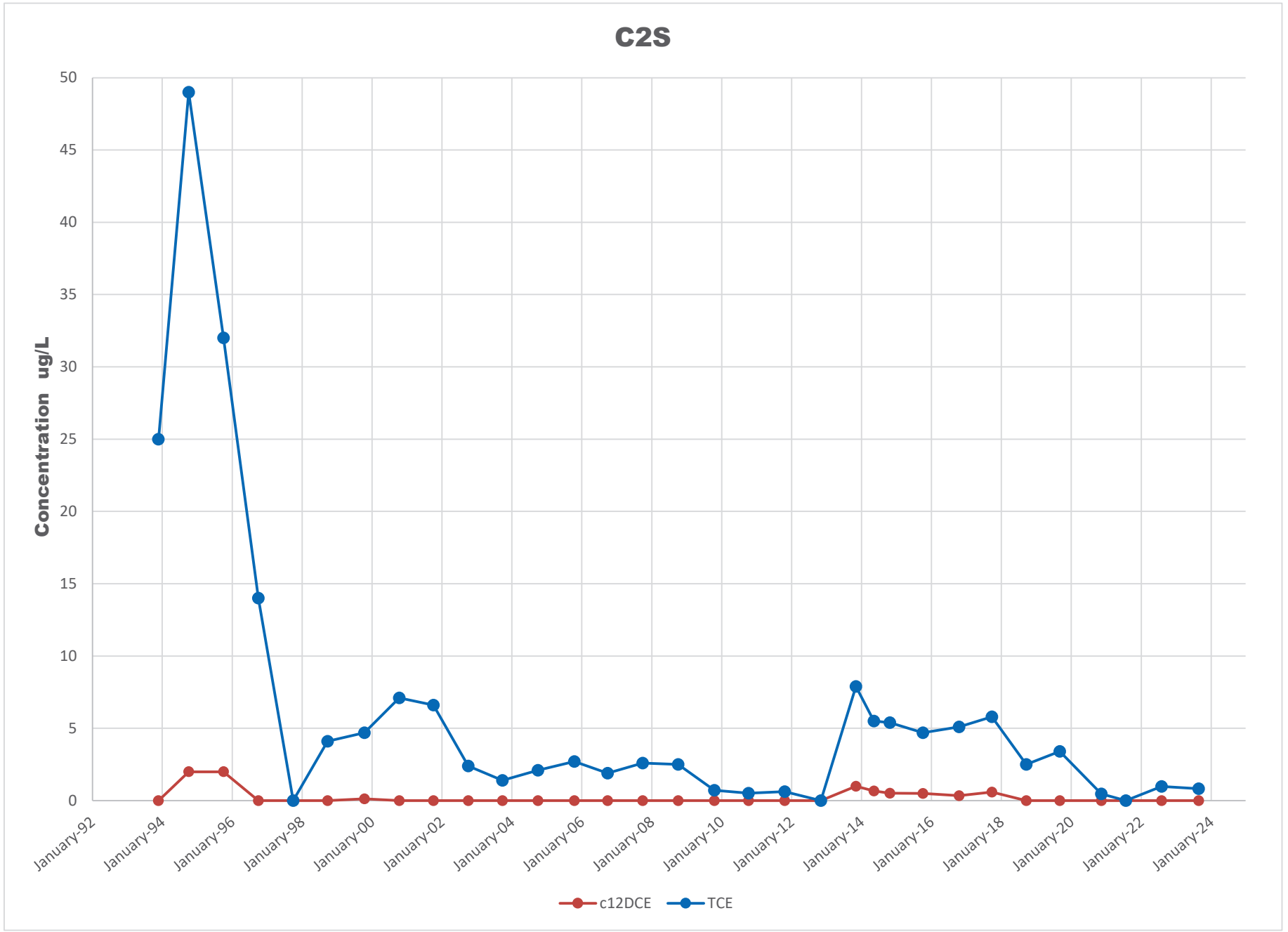

C2S
Concentration ug/L
50
45
40
35
30
25
20
15
10
5
0
January-92
January-94
January-96
January-98
January-00
January-02
January-04
January-06
January-08
January-10
January-12
January-14
January-16
January-18
January-20
January-22
January-24
c12DCE
TCE

Table 1

East Bank
Sub-slab Vapor, Soil Gas, and Indoor Air Results (2023 - 2024)
Wausau Water Supply NPL Site
Wausau, Wisconsin

East Bank	Date	Units	Tetrachloroethene	Trichloroethene	c-1,2-Dichloroethene	Vinyl chloride
Sub-Slab Locations	**Small Commerical SLs**		**5,800**	**290**	**--**	**930**
Bridge Comm. Clinic	3/1/2023	ug/m3	849	20.2	1.03 U	0.808 U
Wausau Music	3/1/2023	ug/m3	115	2.98	1.03 U	0.808 U
Indoor Air Locations	**Small Commerical SLs**		**180**	**8.8**	**--**	**28**
Bridge Comm. Clinic	3/1/2023	ug/m3	11.7	1.22 U	1.03 U	0.808 U
Wausau Music	3/1/2023	ug/m3	5.81 J	1.22 UJ	1.03 UJ	0.808 UJ
Soil Gas Probes Outdoor	**Small Commerical SLs**		**5,800**	**880**	**--**	**930**
Thrive Foodery	3/27/2024	ug/m3	109	1.07 J	1.03 U	0.808 U

Notes:

5,800 - Result exceeded applicable screening level

Note: All units µg/m3

Screening Levels and Action Levels are from Wisconsin DNR "WI Vapor Quick Look-Up Table, Indoor Air Vapor Action Levels and Vapor Risk Screening Levels. Based on May 2023 USEPA Regional Screening Levels.

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

Table 2

West Bank Building A
Sub-slab Vapor and Indoor Air Results (2023 - 2024)
Wausau Water Supply NPL Site
Wausau, Wisconsin

Rexnord Building A	Date	Units	Trichloroethene	c-1,2-Dichloroethene	Vinyl chloride	Carbon tetrachloride	Chloroform
Sub-Slab Locations	**SS Large Industrial SLs**		**880**	**-**	**2,800**	**2,000**	**530**
SS-4 (southeast side Building A)	3/1/2023	ug/m3	424	1.03 U	0.808 U	1.54 U	1.16 U
	9/14/2023	ug/m3	140	0.793 U	0.511 U	1.26 U	1.62
SS-5 (southeast side Building A)	3/1/2023	ug/m3	**6,640**	1.03 U	0.808 U	0.674 J	20.1
	9/14/2023	ug/m3	**3,170**	0.805	0.511 U	1.26 U	38.3
	2/13/2024	ug/m3	**2,010**	1.03 U	0.808 U	0.527 J	4.63
SS-11 (northwest side Building A)	9/14/2023	ug/m3	**9,540**	2.5	0.511 U	0.542J	183
	2/13/2024	ug/m3	**11,000**	5.63	0.808 U	0.825 J	141
SS-12 (northeast side Building A)	9/14/2023	ug/m3	24.1	0.793 U	0.511 U	1.26 U	0.978
SS-13 (west central Building A)	2/13/2024	ug/m3	**1,160**	1.03 U	0.808 U	1.54 U	1.16 U
SS-14 (NE of Building A)	2/13/2024	ug/m3	28.6	1.03 U	0.808 U	1.54 U	1.16 U
SS-15 (west central Building A)	3/28/2024	ug/m3	**2,640**	1.03 U	0.808 U	1.54 U	1.16 U

Table 2

West Bank Building A
Sub-slab Vapor and Indoor Air Results (2023 - 2024)
Wausau Water Supply NPL Site
Wausau, Wisconsin

Rexnord Building A	Date	Units	Trichloroethene	c-1,2-Dichloroethene	Vinyl chloride	Carbon tetrachloride	Chloroform
Indoor Air Locations	**Industrial IA SLs**		**8.8**	**--**	**28**	**20**	**5.3**
Indoor Air - Building A	3/1/2023	ug/m3	1.62	1.03 U	0.808 U	1.54 U	1.16 U
**IA-05 (southeast side Building A)	9/14/2023	ug/m3	1.37	1.03 U	0.808 U	1.54 U	1.16 U
	2/12/2024	ug/m3	1.16 J	1.03 U	0.808 U	1.54 U	1.16 U
IA-11 (northwest side Building A)	9/14/2023	ug/m3	1.85	1.03 U	0.808 U	1.54 U	1.16 U
	2/12/2024	ug/m3	1.93	0.979 J	0.808 U	0.498 J	1.16 U
IA-13 (west central Building A)	2/12/2024	ug/m3	7.18	1.03 U	0.808 U	0.572 J	1.16 U
IA-15 (west central Building A)	3/27/2024	ug/m3	0.970 J	1.03 U	0.808 U	1.54 U	1.16 U

Notes:

880 - Result exceeded applicable screening level

Note: All units µg/m3

Screening Levels and Action Levels are from Wisconsin DNR "WI Vapor Quick Look-Up Table, Indoor Air Vapor Action Levels and Vapor Risk Screening Levels. Based on November 2022 U.S.EPA Regional Screening Levels.

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

** IA-05 was previously known as IA-02

Table 2.1

2023 Groundwater Monitoring Plan
Wausau Water Supply NPL Site
Wausau, Wisconsin

Monitoring Event	VOC Sample Locations		Laboratory Analysis	Groundwater Elevations	
	East Bank	**West Bank**		**East Bank**	**West Bank**
Annual - Fall	CW3*, E21, E22A**, E37A, E24AR, MW10B, WW4, WW6, WC3B**, WC5A	EW1, CW6, R2D**, R3D, R4D, C2S, C3S, C4S, W52**, W53A, W54**, W55*, W56, WSWD, MW1A	Volatile Organic Compounds (VOC) Method 8260B	E21, E22A, E24AR, E26A, E28A, E37A, GM6D, W.HURD, MW10B, WC3B, WC4A, WC5A, WC7A, WW4, WW6	C2S, C3S, C4S, C6S, C7S, GM2S, GM4D, MW1A, MW3A, MW4A, MW7, R1D, R2D, R3D, R4D, W52, W53A, W54, W55, W56, W57, WSWD, City Wells CW6, CW-7, CW9, CW10, CW11 (if pumping)

Site Specific VOC List

Acetone
Benzene
Carbon tetrachloride
Chloroform
1,1-Dichloroethene
cis-1,2-Dichloroethene
Ethylbenzene
Methylene chloride
Tetrachloroethene
Toluene
1,1,2-Trichloroethane
Trichloroethene
Vinyl chloride
Xylenes

Notes:
* - Not sampled in 2023 due to being down for repairs
** - Well sampled for 1,4-Dioxane in 2021

Table 3

West Bank Building B
Sub-slab Vapor and Indoor Air Results (2023 - 2024)
Wausau Water Supply NPL Site
Wausau, Wisconsin

Rexnord Building B	Date	Units	Trichloroethene	c-1,2-Dichloroethene	Vinyl chloride	Carbon tetrachloride	Chloroform
Sub-Slab Locations	**SS Large Industrial SLs**		**880**	**--**	**2,800**	**2,000**	**530**
SS-1 (north side Building B)	3/1/2023	ug/m3	236	1.03 U	0.808 U	1.19 J	1.16 U
	9/14/2023	ug/m3	**1,760**	5.55	0.511 U	21.7	7.11
	2/13/2024	ug/m3	87.3	1.03 U	0.808 U	1.54 U	1.16 U
SS-2 (middle Building B)	3/1/2023	ug/m3	**21,900**	184	0.808 U	420	185
	9/14/2023	ug/m3	**30,600**	159	0.511 U	552	192
	2/13/2024	ug/m3	**20,100**	158	0.808 U	487	155
SS-3 (south side Building B)	3/1/2023	ug/m3	7.29/6.70	1.03 U/1.03U	0.808 U/0.808 U	0.661 J/0.591J	40.2/36.4
	9/14/2023	ug/m3	4.41	0.793 U	0.511 U	0.575J	28.1
SS-8 (northwest side Building B)	9/14/2023	ug/m3	105	0.793 U	0.511 U	280	28.2
SS-9 (southwest side Building B)	9/14/2023	ug/m3	75	0.793 U	0.511 U	28.3	26.1

Table 3

West Bank Building B
Sub-slab Vapor and Indoor Air Results (2023 - 2024)
Wausau Water Supply NPL Site
Wausau, Wisconsin

Rexnord Building B	Date	Units	Trichloroethene	c-1,2-Dichloroethene	Vinyl chloride	Carbon tetrachloride	Chloroform
Soil Gas Probes Outdoor Locations	**SS Large Industrial SLs**		**880**	**--**	**2,800**	**2,000**	**530**
SG-1 (northwest side Building B)	9/13/2023	ug/m3	103	0.416 J	0.511 U	1.74	0.686J
SG-2 (southwest side Building B)	8/29/2023	ug/m3	21.4 U	15.9 U	10.2 U	25.2 U	19.5 U
Indoor Air Locations	**Industrial IA SLs**		**8.8**	**--**	**28**	**20**	**5.3**
Indoor Air - Building B	3/1/2023	ug/m3	2.33 J	1.03 UJ	0.808 UJ	0.461 J	1.16 UJ
IA-01 (north side Building B)	9/14/2023	ug/m3	0.852J	1.03 U	0.808 U	1.54 U	--
	2/12/2024	ug/m3	2.39	1.03 U	0.808 U	0.576 J	1.16 U
IA-02 (middle side Building B)	9/14/2023	ug/m3	2.74	1.03 U	0.808 U	1.54 U	1.16 U
	2/12/2024	ug/m3	**214**	1.03 U	0.808 U	0.794 J	1.16 U
	3/27/2024	ug/m3	3.74	1.03 U	0.808 U	1.54 U	1.16 U

Notes:

880 - Result exceeded applicable screening level

Note: All units µg/m3

Screening Levels and Action Levels are from Wisconsin DNR "WI Vapor Quick Look-Up Table, Indoor Air Vapor Action Levels and Vapor Risk Screening Levels. Based on November 2022 U.S.EPA Regional Screening Levels.

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

Table 4.1

Annual Groundwater Monitoring Event VOC Analytical Results- August 29-30, 2023
Wausau Water Supply NPL Site
Wausau, Wisconsin

		Sample Location:	E21	E22A	E24AR	E37A	MW10B	WC3B
		Sample Name:	W-230829-RA-08	W-230829-RA-01	W-230830-RA-05	W-230830-RA-04	W-230830-RA-03	W-230830-RA-10
		Sample Date:	8/29/2023	8/29/2023	8/30/2023	8/30/2023	8/30/2023	8/30/2023
			EB	EB	EB	EB	EB	EB
	Units	**WDNR ES**						
Volatile Organic Compounds								
1,1,2-Trichloroethane	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	ug/L	9000	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	ug/L	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon tetrachloride	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	ug/L	6	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
cis-1,2-Dichloroethene	ug/L	70	1.0 U	1.0 U	5.8	15	1.0 U	1.0 U
Ethylbenzene	ug/L	700	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylene chloride	ug/L	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	ug/L	5	1.0 U	**8.0**	1.7	1.0 U	1.0 U	**8.4**
Toluene	ug/L	800	0.50 U	0.23 J	0.50 U	0.19 J	0.25 J	0.50 U
Trichloroethene	ug/L	5	0.50 U	0.50 U	2.0	0.50 U	0.50 U	0.50 U
Vinyl chloride	ug/L	0.2	1.0 U	1.0 U	**1.0**	1.0 U	1.0 U	1.0 U
Xylenes (total)	ug/L	2000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 4.1

Annual Groundwater Monitoring Event VOC Analytical Results- August 29-30, 2023
Wausau Water Supply NPL Site
Wausau, Wisconsin

			Sample Location:	WC5A	WW4	WW6	C2S	C3S	C4S
			Sample Name:	W-230830-RA-07	W-230830-RA-02	W-230830-RA-09	W-230830-RA-26	W-230829-RA-16	W-230830-RA-17
			Sample Date:	8/30/2023	8/30/2023	8/30/2023	8/30/2023	8/29/2023	8/30/2023
				EB	EB	EB	WB	WB	WB
	Units	**WDNR ES**							
Volatile Organic Compounds									
1,1,2-Trichloroethane	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	7		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	ug/L	9000		10 U	10 U	10 U	10 U	10 U	10 U
Benzene	ug/L	5		0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon tetrachloride	ug/L	5		1.0 U	1.0 U	1.0 U	1.0 U	**140**	1.0 U
Chloroform (Trichloromethane)	ug/L	6		2.0 U	2.0 U	2.0 U	2.0 U	**61**	0.45 J
cis-1,2-Dichloroethene	ug/L	70		27	1.0 U	9.8	1.0 U	1.0 U	2.7
Ethylbenzene	ug/L	700		0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylene chloride	ug/L	5		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	ug/L	5		2.9	1.0 U	1.0 U	1.0 U	0.70 J	1.0 U
Toluene	ug/L	800		0.50 U	0.19 J	0.50 U	0.50 U	0.50 U	0.50 U
Trichloroethene	ug/L	5		0.50 U	0.50 U	0.53	0.83	1.9	4.9
Vinyl chloride	ug/L	0.2		**8.5**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	ug/L	2000		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 4.1

Annual Groundwater Monitoring Event VOC Analytical Results- August 29-30, 2023
Wausau Water Supply NPL Site
Wausau, Wisconsin

		Sample Location:	CW6	EW1	MW1A	MW1A	R2D	R3D
		Sample Name:	W-230830-RA-18	W-230830-RA-23	W-230829-RA-11	W-230829-RA-12	W-230830-RA-28	W-230829-RA-15
		Sample Date:	8/30/2023	8/30/2023	8/29/2023	8/29/2023	8/30/2023	8/29/2023
			WB	WB	WB	WB Duplicate	WB	WB
	Units	**WDNR ES**						
Volatile Organic Compounds								
1,1,2-Trichloroethane	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	ug/L	9000	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	ug/L	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon tetrachloride	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	ug/L	6	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
cis-1,2-Dichloroethene	ug/L	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	700	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylene chloride	ug/L	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	ug/L	800	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trichloroethene	ug/L	5	2.7	0.50 U	0.50 U	0.50 U	**10**	1.7
Vinyl chloride	ug/L	0.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	ug/L	2000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 4.1

Annual Groundwater Monitoring Event VOC Analytical Results- August 29-30, 2023
Wausau Water Supply NPL Site
Wausau, Wisconsin

		Sample Location:	R4D	R4D	W52	W53A	W54	W55
		Sample Name:	W-230830-RA-24	W-230830-RA-25	W-230830-RA-21	W-230830-RA-22	W-230830-RA-20	W-230829-RA-13
		Sample Date:	8/30/2023	8/30/2023	8/30/2023	8/30/2023	8/30/2023	8/29/2023
			WB	WB Duplicate	WB	WB	WB	WB
	Units	WDNR ES						
Volatile Organic Compounds								
1,1,2-Trichloroethane	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	ug/L	9000	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	ug/L	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Carbon tetrachloride	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	ug/L	6	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
cis-1,2-Dichloroethene	ug/L	70	1.0 U	1.0 U	1.0 U	1.0 U	3.9	24
Ethylbenzene	ug/L	700	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methylene chloride	ug/L	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	ug/L	800	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trichloroethene	ug/L	5	0.76	0.70	1.7	**43**	**140**	**17**
Vinyl chloride	ug/L	0.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	ug/L	2000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 4.1

Annual Groundwater Monitoring Event VOC Analytical Results- August 29-30, 2023
Wausau Water Supply NPL Site
Wausau, Wisconsin

	Sample Location:	**W56**	**WSWD**
	Sample Name:	**W-230829-RA-14**	**W-230830-RA-27**
	Sample Date:	**8/29/2023**	**8/30/2023**
		WB	**WB**
	Units	**WDNR ES**	
Volatile Organic Compounds			
1,1,2-Trichloroethane	ug/L	5	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	7	1.0 U	1.0 U
Acetone	ug/L	9000	10 U	10 U
Benzene	ug/L	5	0.50 U	0.50 U
Carbon tetrachloride	ug/L	5	1.0 U	1.0 U
Chloroform (Trichloromethane)	ug/L	6	2.0 U	2.0 U
cis-1,2-Dichloroethene	ug/L	70	1.0 U	1.0 U
Ethylbenzene	ug/L	700	0.50 U	0.50 U
Methylene chloride	ug/L	5	5.0 U	5.0 U
Tetrachloroethene	ug/L	5	1.0 U	1.0 U
Toluene	ug/L	800	0.50 U	0.50 U
Trichloroethene	ug/L	5	0.50 U	**32**
Vinyl chloride	ug/L	0.2	1.0 U	1.0 U
Xylenes (total)	ug/L	2000	1.0 U	1.0 U

Notes:
EB - East Bank Well
WB - West Bank Well
U - Not detected at the associated reporting limit
J - Estimated concentration
-Detected
-Concentration exceeded
WDNR Enforcement Standard, Upaded 1/25/2023

APPENDIX C – Site Chronology

Appendix C- Site Chronology

Table 6: Site Chronology

Event	Date
Initial discovery of problem or contamination	1982
Removal actions	1984
Pre-NPL responses- Treatment system installed by Wisconsin	1985
Proposed NPL listing	1985
Final NPL listing	1986
Remedial Investigation/Feasibility Study initiated	1987
Remedial Investigation/Feasibility Study completed	1989
Interim ROD signature	1988
Final ROD signature	1989
RD/RA CD for Interim ROD	1989
RD/RA CD for Final ROD	1991
Remedial design start	1990
RA Construction completion	1994
Remedy Construction completion date	1994
West Bank Side SVE system shut down	1996
First Five-Year Review	1996
EPA approves discontinuation of SVE (West Bank Side)	1996
EPA approves discontinuation of SVE (East Bank Side)	1997
Second Five-Year Review	2000
Third Five-Year Review	2005
Fourth Five-Year Review	2010
Pilot Study Begins	2013
Fifth Five-Year Review	2015
Vapor Intrusion Evaluation Work Began	2017
Wausau Chemical Property Purchased by City of Wausau	2019
EW-1 Shut Down Approval Granted	2021
New Wausau Water Works Constructed	2022
Explanation of Significant Differences Published	2024

APPENDIX D – PFAS

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July 28, 2023

Scott Boers
Wausau Waterworks
1801 Burek Ave
Wausau, WI 54403

Project: Investigative PFAS Testing
Project Number: 2023 WDNR Drinking Water Requirerments
Work Order: CB08107
Received: 07/19/23
PWS ID: 73701023

Enclosed are the results of analyses for samples received by our laboratory on 7/19/2023. If you have any questions concerning this report, please feel free to contact a client service representative at clientservices@nlslab.com.

Sincerely,

Ronald T. Krueger For Client Services
Northern Lake Service, Inc.

Northern Lake Service Inc.

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Wausau Waterworks	Project: Investigative PFAS Testing		
1801 Burek Ave	Project Number: 2023 WDNR Drinking Water Requirerments	**Reported:**	**Work Order:**
Wausau, WI 54403	Project Manager: Scott Boers	7/28/23 7:08	CB08107

Sample Summary

Descriptions of all qualifiers listed throughout this report can be found on the Qualifiers and Definitions Page.

Lab ID	Sample	Matrix	Sample Type	Qualifiers	Date Sampled	Date Received
CB08107-01	Water Plant EP500	DW			7/18/23 11:26	7/19/23 9:00
CB08107-02	EP500 Field Blank	DW			7/18/23 11:26	7/19/23 9:00

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Wausau Waterworks	Project: Investigative PFAS Testing		
1801 Burek Ave	Project Number: 2023 WDNR Drinking Water Requirerments	**Reported:**	**Work Order:**
Wausau, WI 54403	Project Manager: Scott Boers	7/28/23 7:08	CB08107

Sample Results

Sample: Water Plant EP500

CB08107-01 (DW) Sampled: 07/18/23 11:26

Analyte	Result	Qualifier	LOD	LOQ	MCL	Units	Date Prepared	Date Analyzed	Analyst	Method	Lab Cert Code
Semi-Volatiles											
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.30	0.98		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.33	1.1		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.36	1.2		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
hexafluoropropylene oxide dimer acid (HFPO DA)	ND		0.40	1.4		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	8.4		0.46	1.6		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
n-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.39	1.3		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluorobutanesulfonic acid (PFBS)	0.56	J	0.29	0.98		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluorodecanoic acid (PFDA)	ND		0.32	1.1		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluorododecanoic acid (PFDoA)	ND		0.23	0.75		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluoroheptanoic acid (PFHpA)	4.6		0.43	1.5		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluorohexanoic acid (PFHxA)	4.6		0.46	1.6		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluorohexanesulfonic acid (PFHxS)	0.54	J	0.33	1.1		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluorononanoic acid (PFNA)	0.67	J	0.45	1.5		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluorooctanoic acid (PFOA)	12		0.48	1.6		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluorooctanesulfonic acid (PFOS)	2.3		0.30	0.98		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluorotetradecanoic acid (PFTA)	ND		0.33	1.1		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluorotridecanoic acid (PFTrDA)	ND		0.42	1.4		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
perfluoroundecanoic acid (PFUnA)	ND		0.29	0.98		ng/L	7/21/23 9:16	7/23/23 12:15	RAW	EPA 537.1, Rev 2.0	2
Surrogate: (SURR) C13-PFHxA	*88%*		*Limits:*	*70-130%*			*7/21/23 9:16*	*7/23/23 12:15*	*RAW*	*EPA 537.1, Rev 2.0*	2
Surrogate: (SURR) C13-HFPODA	*88%*		*Limits:*	*70-130%*			*7/21/23 9:16*	*7/23/23 12:15*	*RAW*	*EPA 537.1, Rev 2.0*	2
Surrogate: (SURR) C13-PFDA	*96%*		*Limits:*	*70-130%*			*7/21/23 9:16*	*7/23/23 12:15*	*RAW*	*EPA 537.1, Rev 2.0*	2
Surrogate: (SURR) d5-NEtFOSAA	*93%*		*Limits:*	*70-130%*			*7/21/23 9:16*	*7/23/23 12:15*	*RAW*	*EPA 537.1, Rev 2.0*	2

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Wausau Waterworks	Project: Investigative PFAS Testing		
1801 Burek Ave	Project Number: 2023 WDNR Drinking Water Requirerments	**Reported:**	**Work Order:**
Wausau, WI 54403	Project Manager: Scott Boers	7/28/23 7:08	CB08107

Sample: EP500 Field Blank

CB08107-02 (DW) Sampled: 07/18/23 11:26

Analyte	Result	Qualifier	LOD	LOQ	MCL	Units	Date Prepared	Date Analyzed	Analyst	Method	Lab Cert Code
Semi-Volatiles											
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.31	1.0		ng/L	7/26/23 5:17	7/26/23 21:47	RAW	EPA 537.1, Rev 2.0	2
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.34	1.1		ng/L	7/26/23 5:17	7/26/23 21:47	RAW	EPA 537.1, Rev 2.0	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.37	1.2		ng/L	7/26/23 5:17	7/26/23 21:47	RAW	EPA 537.1, Rev 2.0	2
hexafluoropropylene oxide dimer acid (HFPO DA)	ND		0.41	1.4		ng/L	7/26/23 5:17	7/26/23 21:47	RAW	EPA 537.1, Rev 2.0	2
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.47	1.6		ng/L	7/26/23 5:17	7/26/23 21:47	RAW	EPA 537.1, Rev 2.0	2
n-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.40	1.3		ng/L	7/26/23 5:17	7/26/23 21:47	RAW	EPA 537.1, Rev 2.0	2
perfluorobutanesulfonic acid (PFBS)	ND		0.30	1.0		ng/L	7/26/23 5:17	7/26/23 21:47	RAW	EPA 537.1, Rev 2.0	2
perfluorodecanoic acid (PFDA)	ND		0.33	1.1		ng/L	7/26/23 5:17	7/26/23 21:47	RAW	EPA 537.1, Rev 2.0	2
perfluorododecanoic acid (PFDoA)	ND		0.23	0.77		ng/L	7/26/23 5:17	7/26/23 21:47	RAW	EPA 537.1, Rev 2.0	2
perfluoroheptanoic acid (PFHpA)	ND		0.44	1.5		ng/L	7/26/23 5:17	7/26/23 21:47	RAW	EPA 537.1, Rev 2.0	2
perfluorohexanoic acid (PFHxA)	ND		0.47	1.6		ng/L	7/26/23 5:17	7/26/23 21:47	RAW	EPA 537.1, Rev 2.0	2
perfluorohexanesulfonic acid (PFHxS)	ND		0.34	1.1		ng/L	7/26/23 5:17	7/26/23 21:47	RAW	EPA 537.1, Rev 2.0	2
perfluorononanoic acid (PFNA)	ND		0.46	1.5		ng/L	7/26/23 5:17	7/26/23 21:47	RAW	EPA 537.1, Rev 2.0	2
perfluorooctanoic acid (PFOA)	ND		0.49	1.6		ng/L	7/26/23 5:17	7/26/23 21:47	RAW	EPA 537.1, Rev 2.0	2
perfluorooctanesulfonic acid (PFOS)	ND		0.31	1.0		ng/L	7/26/23 5:17	7/26/23 21:47	RAW	EPA 537.1, Rev 2.0	2
perfluorotetradecanoic acid (PFTA)	ND		0.34	1.1		ng/L	7/26/23 5:17	7/26/23 21:47	RAW	EPA 537.1, Rev 2.0	2
perfluorotridecanoic acid (PFTrDA)	ND		0.43	1.4		ng/L	7/26/23 5:17	7/26/23 21:47	RAW	EPA 537.1, Rev 2.0	2
perfluoroundecanoic acid (PFUnA)	ND		0.30	1.0		ng/L	7/26/23 5:17	7/26/23 21:47	RAW	EPA 537.1, Rev 2.0	2
Surrogate: (SURR) C13-PFHxA	*77%*		*Limits: 70-130%*				*7/26/23 5:17*	*7/26/23 21:47*	*RAW*	*EPA 537.1, Rev 2.0*	2
Surrogate: (SURR) C13-HFPODA	*85%*		*Limits: 70-130%*				*7/26/23 5:17*	*7/26/23 21:47*	*RAW*	*EPA 537.1, Rev 2.0*	2
Surrogate: (SURR) C13-PFDA	*93%*		*Limits: 70-130%*				*7/26/23 5:17*	*7/26/23 21:47*	*RAW*	*EPA 537.1, Rev 2.0*	2
Surrogate: (SURR) d5-NEtFOSAA	*94%*		*Limits: 70-130%*				*7/26/23 5:17*	*7/26/23 21:47*	*RAW*	*EPA 537.1, Rev 2.0*	2

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Wausau Waterworks	Project: Investigative PFAS Testing		
1801 Burek Ave	Project Number: 2023 WDNR Drinking Water Requirerments	**Reported:**	**Work Order:**
Wausau, WI 54403	Project Manager: Scott Boers	7/28/23 7:08	CB08107

List of Certifications

Code	Description	Number	Expires
2	NLS (Crandon) WDNR Laboratory ID No.	721026460	8/31/23

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Wausau Waterworks	Project: Investigative PFAS Testing		
1801 Burek Ave	Project Number: 2023 WDNR Drinking Water Requirerments	**Reported:**	**Work Order:**
Wausau, WI 54403	Project Manager: Scott Boers	7/28/23 7:08	CB08107

Qualifiers and Definitions

Item	Definition
J	Result is between LOD and LOQ and considered to be within a region of less-certain quantitation.
ND	Analyte NOT DETECTED at or above the LOD or MRL.
LOD	Limit of Detection.
LOQ	Limit of Quantitation.
NA	Not Applicable.
Dry	Dry Weight Basis.
Wet	Wet Weight Basis.
% Dry	Equal to: (mg/kg dry) / 10000.
1000 ug/L	Equal to: 1 mg/L.
MCL	Maximum Contaminant Levels for Drinking Water Samples. Shaded results indicate >MCL.
RPD	Relative Percent Difference.
%REC	Percent Recovery.
Source	Sample that was matrix spiked or duplicated.

All LOD/LOQs adjusted to reflect preparation volumes, dilutions, and/or solids content.

SAMPLE COLLECTION AND CHAIN OF CUSTODY REC

CB08107

Wisconsin Lab Cert. No. 72
WI DATCP 105-000330

CLIENT	Wausau Water Works
ADDRESS	1801 Burek Ave
CITY / STATE / ZIP	Wausau / WI / 54401
PROJECT DESCRIPTION / NO.	QUOTATION NO.
DNR FID #	DNR LICENSE #
CONTACT	Scott Boers
PHONE	7152617265
PURCHASE ORDER NO.	FAX

MATRIX:
SW = surface water
WW = waste water
GW = groundwater
DW = drinking water
TIS = tissue
AIR = air
SOIL = soil
SED = sediment
PROD = product
SL = sludge
OTHER

Indicate G or C if WW Sample is Grab or Composite.

ANALYZE PER ORDER OF ANALYSIS

ITEM NO.	NLS LAB. NO.	SAMPLE ID	COLLECTION DATE	COLLECTION TIME	MATRIX (See above)	Disinfection By-Products	N	PFAS	N	NO.	COLLECTION REMARKS (i.e. DNR Well ID #)
1.		VanEvt D16	7-18-23	10:38	DW	G					
2.											
3.		Elm St. D7	7-18-23	10:56	DW	G					
4.											
5.		Water Plant EP500	7-18-23	11:26	DW			G			
6.											
7.											
8.											
9.											
10.											

ONE SAMPLE PER LINE

COLLECTED BY (signature)	CUSTODY SEAL NO. (IF ANY)	DATE/TIME
RELINQUISHED BY (signature)	RECEIVED BY (signature)	DATE/TIME
DISPATCHED BY (signature)	METHOD OF TRANSPORT: ST	DATE/TIME

RECEIVED AT NLS BY (signature): MS	DATE/TIME: 7/19 a	CONDITION: ok	TEMP.: 2°C #12
COOLER #	REMARKS & OTHER INFORMATION		
	WDNR FACILITY NUMBER	E-MAIL ADDRESS	

REPORT TO

INVOICE TO

PRESERVATIVE:
NP = no preservative
S = sulfuric acid
N = nitric acid
Z = zinc acetate
M = methanol
OH = sodium hydroxide
HA = hydrochloric & ascorbic acid
H = hydrochloric acid

IMPORTANT:

1. TO MEET REGULATORY REQUIREMENTS, THIS FORM MUST BE COMPLETED IN DETAIL AND INCLUDED IN THE COOLER CONTAINING THE SAMPLES DESCRIBED.
2. PLEASE USE ONE LINE PER SAMPLE, NOT PER BOTTLE.
3. RETURN THIS FORM WITH SAMPLES - CLIENT MAY KEEP PINK COPY.
4. PARTIES COLLECTING SAMPLE, LISTED AS REPORT TO AND LISTED AS INVOICED TO AGREE TO STANDARD TERMS & CONDITIONS ON REVERSE.

Dept. of Natural Resources
Bureau of Drinking Water
P.O. Box 7921
Madison WI 53707

PFAS ANALYSIS
(ENCLOSE FORM WHEN SENDING SAMPLE TO LAB)

Public Water Supply
Form Number: 5744
Revision: 20230517
Generated: 6/13/2023

Section I: System Information (to be completed by Department of Natural Resources/SAMPLER)

System Name: _____ PWS ID: _____

DNR Contact: _____ Region: ___ System Type: ☐MC ☐NN ☐OC ☐TN

System Address: _____ City: _____ County: _____

Entry Point ID: EP500 WI Unique Well No: _____ Note: _____

Sampler Contact Info: (Notify DNR Contact of Corrections)	**Sampler:** (Leave Blank If You Don't Use These Services) Provide information to have results faxed or emailed or to change a billing address, if your lab offers these services Fax Number: _____ Email: _____ Billing Address: _____

Sample Source: (Location)	**Sample Type:** (Check Only One)
__ W - Well Source	__ D - Compliance Sample
__ E - Entry Point	__ C - Confirmation Sample
__ D - Distribution System	X I - Investigation Sample
	__ W - Raw Water Sample

Special Instructions: _____

Collect Sample between: _____ and _____

Section II: Sample Information (to be completed by SAMPLER -- ALL ITEMS REQUIRED)

Sample Collection Date: 7 / 18 / 23 (mm/dd/yyyy) Time: 11 : 26 ☒a.m. ☐p.m.

Address where sample was collected: Wausau Water Works, 1801 Burek Ave., Wausau, WI

Monitoring Site ID: EP500 Sample Tap Location (e.g. kitchen sink): Lab Tap

First Initial and Last Name of Sampler: D - Jensen Sampler Phone: 715 261 7265

Section III: To be completed by LAB. Report results on back for PWS and electronically to DNR within 10 days per NR 809.80

☐ **Check here if some or all of the parameters were analyzed by a subcontracted lab.**
NOTE: A separate form must be completed by each lab with data for only the parameters which that lab analyzed.

Laboratory ID: _____ Laboratory Name: _____

Date Sample Received: ___ / ___ / _____ Time: _____ : _____ Lab Sample ID: _____

Signature of Receiving Lab Official: _____ Date Reported to PWS: ___ / ___ / _____

Condition of Sample Upon Receipt: _____

Notice: This form must be submitted with laboratory samples analyzed to determine compliance with ch. NR 809, Wis. Adm. Code, Safe Drinking Water. Completion of this form or a similar form approved by the Department is mandatory. Failure to submit a completed form to the Department is a violation punishable by a forfeiture of no less than $10 nor more than $5000, or by a fine of not less than $10 nor more than $100 or imprisonment of not less than 30 days, or both. Each day of continued violation is a separate offense (ss. 144.99, Wis. Stats.). Authorization for these requirement is under s. 280.13(d), Wis. Stats. and ch. NR 809.80. Personally identifiable information on this form will be used for no other purpose. Reference Requirement #96738670.

PFAS ANALYSIS System Name: _____

To be completed by the laboratory performing analysis. PWS ID: _____ Lab Sample ID: _____

Storet Code	Parameter	SDWA Method	MDL	Results	MCL	Units
* 99597	PFOA				70	NG/L
* 99598	PFOS				70	NG/L
97433	11-CHLOROEICOSAFLUORO-3-OXAUNDECANE-1-SULFONIC ACID					NG/L
97434	4,8-DIOXA-3H-PERFLUORONONANOIC ACID					NG/L
97415	4:2 FLUOROTELOMER SULFONIC ACID					NG/L
97414	6:2 FLUOROTELOMER SULFONIC ACID					NG/L
97413	8:2 FLUOROTELOMER SULFONIC ACID					NG/L
97432	9-CHLOROHEXADECAFLUORO-3-OXANONANE-1-SULFONIC ACID					NG/L
97435	HEXAFLUOROPROPYLENE OXIDE DIMER ACID					NG/L
97436	N-ETHYL PERFLUOROOCTANESULFONAMIDO-ACETIC ACID					NG/L
97437	N-METHYL PERFLUOROOCTANESULFONAMIDO-ACETIC ACID					NG/L
99987	PERFLUORO-N-BUTANESULFONIC ACID					NG/L
99991	PERFLUORO-N-BUTANOIC ACID					NG/L
99996	PERFLUORO-N-DECANOIC ACID					NG/L
99998	PERFLUORO-N-DODECANOIC ACID					NG/L
99989	PERFLUORO-N-HEPTANESULFONIC ACID					NG/L
99994	PERFLUORO-N-HEPTANOIC ACID					NG/L
99988	PERFLUORO-N-HEXANESULFONIC ACID					NG/L
99993	PERFLUORO-N-HEXANOIC ACID					NG/L
99995	PERFLUORO-N-NONANOIC ACID					NG/L
99992	PERFLUORO-N-PENTANOIC ACID					NG/L
99924	PERFLUORO-N-TETRADECANOIC ACID					NG/L
99923	PERFLUORO-N-TRIDECANOIC ACID					NG/L
99997	PERFLUORO-N-UNDECANOIC ACID					NG/L
97425	PERFLUOROPENTANESULFONIC ACID					NG/L
95507	NONAFLUORO-3,6-DIOXAPHEPTANOIC ACID					NG/L
95504	PERFLUORO(2-ETHOXYETHANE)SULFONIC ACID					NG/L
95501	PERFLUORO-4-METHOXYBUTANOIC ACID					NG/L
95498	PERFLUORO-3-METHOXYPROPANOIC ACID					NG/L

***The full suite of PFAS contaminants listed under EPA Method 537.1 or EPA Method 533 must be analyzed as part of the perfluoro-n-octanoic acid (PFOA) and perfluoro-n-octanesulfonic acid (PFOS) analysis. Any detection of any other PFAS contaminant identified as part of the analysis must also be reported to the DNR as specified under NR 809.207(2), Safe Drinking Water, Wis. Adm. Code.**

Approved By: QA Officer: _____ Date: _____

Laboratory Manager: _____ Date: _____

Comments: _____

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800-278-1254 • www.nlslab.com

August 24, 2023

Scott Boers
Wausau Waterworks
1801 Burek Ave
Wausau, WI 54401

Project: Investigative PFAS Testing
Project Number: 2023 WDNR Drinking Water Requirerments
Work Order: CB09517
Received: 08/11/23
PWS ID: 73701023

Enclosed are the results of analyses for samples received by our laboratory on 8/11/2023. If you have any questions concerning this report, please feel free to contact a client service representative at clientservices@nlslab.com.

Sincerely,

Tom Priebe For Client Services
Northern Lake Service, Inc.

Northern Lake Service Inc.

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800-278-1254 • www.nlslab.com

Wausau Waterworks	Project: Investigative PFAS Testing		
1801 Burek Ave	Project Number: 2023 WDNR Drinking Water Requirerments	**Reported:**	**Work Order:**
Wausau, WI 54401	Project Manager: Scott Boers	8/24/23 8:41	CB09517

Sample Summary

Descriptions of all qualifiers listed throughout this report can be found on the Qualifiers and Definitions Page.

Lab ID	Sample	Matrix	Sample Type	Qualifiers	Date Sampled	Date Received
CB09517-01	Lab	DW			8/10/23 11:42	8/11/23 8:00

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Wausau Waterworks	Project: Investigative PFAS Testing		
1801 Burek Ave	Project Number: 2023 WDNR Drinking Water Requirerments	**Reported:**	**Work Order:**
Wausau, WI 54401	Project Manager: Scott Boers	8/24/23 8:41	CB09517

Sample Results

Sample: Lab

CB09517-01 (DW) Sampled: 08/10/23 11:42

Analyte	Result	Qualifier	LOD	LOQ	MCL	Units	Date Prepared	Date Analyzed	Analyst	Method	Lab Cert Code
Semi-Volatiles											
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.31	1.0		ng/L	8/16/23 5:27	8/17/23 16:22	RAW	EPA 537.1, Rev 2.0	2
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.34	1.1		ng/L	8/16/23 5:27	8/17/23 16:22	RAW	EPA 537.1, Rev 2.0	2
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.37	1.2		ng/L	8/16/23 5:27	8/17/23 16:22	RAW	EPA 537.1, Rev 2.0	2
hexafluoropropylene oxide dimer acid (HFPO DA)	ND		0.41	1.4		ng/L	8/16/23 5:27	8/17/23 16:22	RAW	EPA 537.1, Rev 2.0	2
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	4.7		0.47	1.6		ng/L	8/16/23 5:27	8/17/23 16:22	RAW	EPA 537.1, Rev 2.0	2
n-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.40	1.3		ng/L	8/16/23 5:27	8/17/23 16:22	RAW	EPA 537.1, Rev 2.0	2
perfluorobutanesulfonic acid (PFBS)	0.36	J	0.30	1.0		ng/L	8/16/23 5:27	8/17/23 16:22	RAW	EPA 537.1, Rev 2.0	2
perfluorodecanoic acid (PFDA)	ND		0.33	1.1		ng/L	8/16/23 5:27	8/17/23 16:22	RAW	EPA 537.1, Rev 2.0	2
perfluorododecanoic acid (PFDoA)	ND		0.23	0.77		ng/L	8/16/23 5:27	8/17/23 16:22	RAW	EPA 537.1, Rev 2.0	2
perfluoroheptanoic acid (PFHpA)	2.3		0.44	1.5		ng/L	8/16/23 5:27	8/17/23 16:22	RAW	EPA 537.1, Rev 2.0	2
perfluorohexanoic acid (PFHxA)	2.5		0.47	1.6		ng/L	8/16/23 5:27	8/17/23 16:22	RAW	EPA 537.1, Rev 2.0	2
perfluorohexanesulfonic acid (PFHxS)	ND		0.34	1.1		ng/L	8/16/23 5:27	8/17/23 16:22	RAW	EPA 537.1, Rev 2.0	2
perfluorononanoic acid (PFNA)	ND		0.46	1.5		ng/L	8/16/23 5:27	8/17/23 16:22	RAW	EPA 537.1, Rev 2.0	2
perfluorooctanoic acid (PFOA)	6.1		0.49	1.6		ng/L	8/16/23 5:27	8/17/23 16:22	RAW	EPA 537.1, Rev 2.0	2
perfluorooctanesulfonic acid (PFOS)	1.1		0.31	1.0		ng/L	8/16/23 5:27	8/17/23 16:22	RAW	EPA 537.1, Rev 2.0	2
perfluorotetradecanoic acid (PFTA)	ND		0.34	1.1		ng/L	8/16/23 5:27	8/17/23 16:22	RAW	EPA 537.1, Rev 2.0	2
perfluorotridecanoic acid (PFTrDA)	ND		0.43	1.4		ng/L	8/16/23 5:27	8/17/23 16:22	RAW	EPA 537.1, Rev 2.0	2
perfluoroundecanoic acid (PFUnA)	ND		0.30	1.0		ng/L	8/16/23 5:27	8/17/23 16:22	RAW	EPA 537.1, Rev 2.0	2
Surrogate: (SURR) C13-PFHxA	*95%*		*Limits:*	*70-130%*			*8/16/23 5:27*	*8/17/23 16:22*	*RAW*	*EPA 537.1, Rev 2.0*	2
Surrogate: (SURR) C13-HFPODA	*90%*		*Limits:*	*70-130%*			*8/16/23 5:27*	*8/17/23 16:22*	*RAW*	*EPA 537.1, Rev 2.0*	2
Surrogate: (SURR) C13-PFDA	*98%*		*Limits:*	*70-130%*			*8/16/23 5:27*	*8/17/23 16:22*	*RAW*	*EPA 537.1, Rev 2.0*	2
Surrogate: (SURR) d5-NEtFOSAA	*93%*		*Limits:*	*70-130%*			*8/16/23 5:27*	*8/17/23 16:22*	*RAW*	*EPA 537.1, Rev 2.0*	2

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Wausau Waterworks	Project: Investigative PFAS Testing		
1801 Burek Ave	Project Number: 2023 WDNR Drinking Water Requirerments	**Reported:**	**Work Order:**
Wausau, WI 54401	Project Manager: Scott Boers	8/24/23 8:41	CB09517

List of Certifications

Code	Description	Number	Expires
2	NLS (Crandon) WDNR Laboratory ID No.	721026460	8/31/23

Northern Lake Service Inc.

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Wausau Waterworks	Project: Investigative PFAS Testing		
1801 Burek Ave	Project Number: 2023 WDNR Drinking Water Requirerments	**Reported:**	**Work Order:**
Wausau, WI 54401	Project Manager: Scott Boers	8/24/23 8:41	CB09517

Qualifiers and Definitions

Item	Definition
J	Result is between LOD and LOQ and considered to be within a region of less-certain quantitation.
ND	Analyte NOT DETECTED at or above the LOD or MRL.
LOD	Limit of Detection.
LOQ	Limit of Quantitation.
NA	Not Applicable.
Dry	Dry Weight Basis.
Wet	Wet Weight Basis.
% Dry	Equal to: (mg/kg dry) / 10000.
1000 ug/L	Equal to: 1 mg/L.
MCL	Maximum Contaminant Levels for Drinking Water Samples. Shaded results indicate >MCL.
RPD	Relative Percent Difference.
%REC	Percent Recovery.
Source	Sample that was matrix spiked or duplicated.

All LOD/LOQs adjusted to reflect preparation volumes, dilutions, and/or solids content.

SAMPLE COLLECTION AND CHAIN OF CUSTODY RECORD

CB09517

Wisconsin Lab Cert. No. 721026460
WI DATCP 105-000330

CLIENT: Wausau Water Works	
ADDRESS: 1801 Burek Ave	
CITY: Wausau STATE: WI ZIP: 54401	
PROJECT DESCRIPTION / NO.	QUOTATION NO.
DNR FID #	DNR LICENSE #
CONTACT	PHONE
PURCHASE ORDER NO.	FAX

MATRIX:
SW = surface water
WW = waste water
GW = groundwater
DW = drinking water
TIS = tissue
AIR = air
SOIL = soil
SED = sediment
PROD = product
SL = sludge
OTHER

...BELOW: Indicate Y or N if GW Sample is field filtered.
Indicate G or C if WW Sample is Grab or Composite.

PARAMETER

NO.

ONE SAMPLE PER LINE

ITEM NO.	NLS LAB. NO.	SAMPLE ID	COLLECTION DATE	COLLECTION TIME	MATRIX (See above)	ANALYZE PER ORDER OF ANALYSIS	Perfluorinated Compounds											COLLECTION REMARKS (i.e. DNR Well ID #)
1.	PFAS	Lab	8-10-23	1142 Am	DW		X											
2.																		
3.																		
4.																		
5.																		
6.																		
7.																		
8.																		
9.																		
10.																		

COLLECTED BY (signature): Tim M[signature]	CUSTODY SEAL NO. (IF ANY)	DATE/TIME: 8-10-23 - 1142 Am
RELINQUISHED BY (signature)	RECEIVED BY (signature)	DATE/TIME
DISPATCHED BY (signature)	METHOD OF TRANSPORT: [mark]	DATE/TIME

REPORT TO

INVOICE TO

RECEIVED AT NLS BY (signature): [signature]	DATE/TIME: 8/11/23 800	CONDITION: On ice	TEMP. .1 ①
COOLER #	REMARKS & OTHER INFORMATION		
	WDNR FACILITY NUMBER	E-MAIL ADDRESS	

PRESERVATIVE:
NP = no preservative
S = sulfuric acid
N = nitric acid
Z = zinc acetate
M = methanol
OH = sodium hydroxide
HA = hydrochloric & ascorbic acid
H = hydrochloric acid

IMPORTANT:
1. TO MEET REGULATORY REQUIREMENTS, THIS FORM MUST BE COMPLETED IN DETAIL AND INCLUDED IN THE COOLER CONTAINING THE SAMPLES DESCRIBED.
2. PLEASE USE ONE LINE PER SAMPLE, NOT PER BOTTLE.
3. RETURN THIS FORM WITH SAMPLES - CLIENT MAY KEEP PINK COPY.
4. PARTIES COLLECTING SAMPLE, LISTED AS REPORT TO AND LISTED AS INVOICED TO AGREE TO STANDARD TERMS & CONDITIONS ON REVERSE.

Katie Rosenberg - Mayor
City of Wausau

Eric Lindman, P.E.
Director of Public Works and Utilities

August 29, 2023 – PRESS RELEASE

Drinking Water PFAS Rules – Recent WDNR Evaluation Changes

Wausau Water Works has been and continues to manage and monitor PFAS levels in our drinking water. The City established a goal of keeping the PFAS levels in drinking water less than 20 ppt combined of PFOA/PFOS suggested by WI Department of Health Services (WDHS) in 2022 and our interim treatment process continues to meet this goal.

Recently the WI Department of Natural Resources (WDNR) notified the City they are now monitoring additional PFAS compounds as suggested by WDHS. These additional PFAS compounds (FOSA, NEtFOSA, NEtFOSAA, NEtFOSE) are now being added to the overall goal of staying below 20 ppt.

Now that the WDNR is requesting reporting on the additional four PFAS compounds, a recent City sample test was slightly above the WDHS suggested limit of 20 ppt -- at 22.7 ppt. The City has retested and our most recent result is a total of 11.9 ppt including the additional compounds now being monitored, well under the 20ppt.

These new additions to be included in the overall total number will continue to be monitored moving forward and we continue to monitor our test results against the proposed USEPA rule, which is different than what WDNR is monitoring. Any required formal notice by the WDNR will be forthcoming as required but it is important the public understands these changing rules, our testing results, and our unwavering commitment of reducing PFAS in drinking water to non-detectable levels.

Wausau Water Works continues to test more frequently than required and will be monitoring these new additions of PFAS compounds. Our interim strategy of managing PFAS continues to work well and lower PFAS levels in our drinking water. Our long-term strategy for PFAS removal using Granule Activated Carbon is still on schedule for completion in late 2024.

Once the USEPA finalizes their proposed PFAS drinking water standard the WDNR will use the USEPA PFAS standard and not use WDHS suggested rules which are significantly different. We know this may be confusing and we are continuing to move forward and keep track of all the different rule makings and requirements from various agencies.

Sample Date	Measured Amount
NETFOSAA	
1/17/2023	6.1
1/17/2023	6.2
4/12/2023	3.9
4/12/2023	4.5
7/18/2023	8.4
11/28/2023	0.52
11/29/2023	0.54
3/7/2024	2.1
3/7/2024	2.1
4/16/2024	2.6
4/16/2024	2.8
9/25/2024	3.9
9/26/2024	4.9
PFBS	
1/17/2023	0.34
4/12/2023	0
4/12/2023	0.31
7/18/2023	0.56
11/28/2023	0
11/29/2023	0
3/7/2024	0
3/7/2024	0
4/16/2024	0
4/16/2024	0
9/25/2024	0
9/26/2024	0
PFHxS	
1/17/2023	0.35
4/12/2023	0
4/12/2023	0
7/18/2023	0.54
11/28/2023	0
11/29/2023	0
3/7/2024	0
3/7/2024	0
4/16/2024	0
4/16/2024	0
9/25/2024	0
9/26/2024	0

Sample Date	Measured Amount
PFNA	
4/12/2023	0
4/12/2023	0
7/18/2023	0.67
11/28/2023	0
11/29/2023	0
3/7/2024	0
3/7/2024	0
4/16/2024	0
4/16/2024	0
9/25/2024	0
9/26/2024	0
PFOA	
1/17/2023	7.4
1/17/2023	8
4/12/2023	5
4/12/2023	6.1
7/18/2023	12
11/28/2023	1
11/29/2023	1.1
3/7/2024	3.9
3/7/2024	3.9
4/16/2024	4.3
4/16/2024	4.6
9/25/2024	5.2
9/26/2024	6.4
PFOS	
1/17/2023	1.5
1/17/2023	1.9
4/12/2023	0.66
4/12/2023	0.68
7/18/2023	2.3
11/28/2023	0
11/29/2023	0
3/7/2024	0
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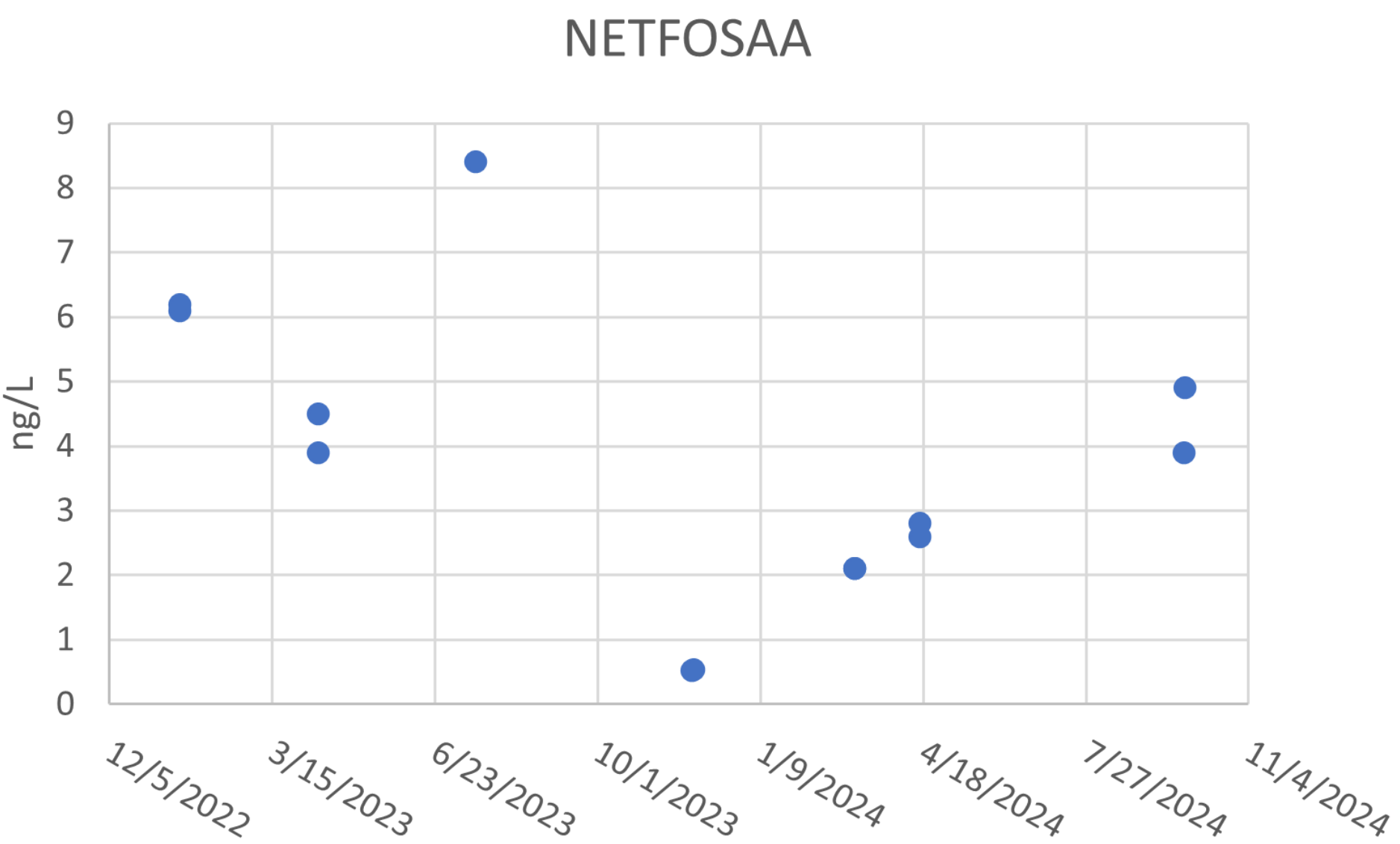
4/16/2024	0
4/16/2024	0
9/25/2024	0.7
9/26/2024	0.86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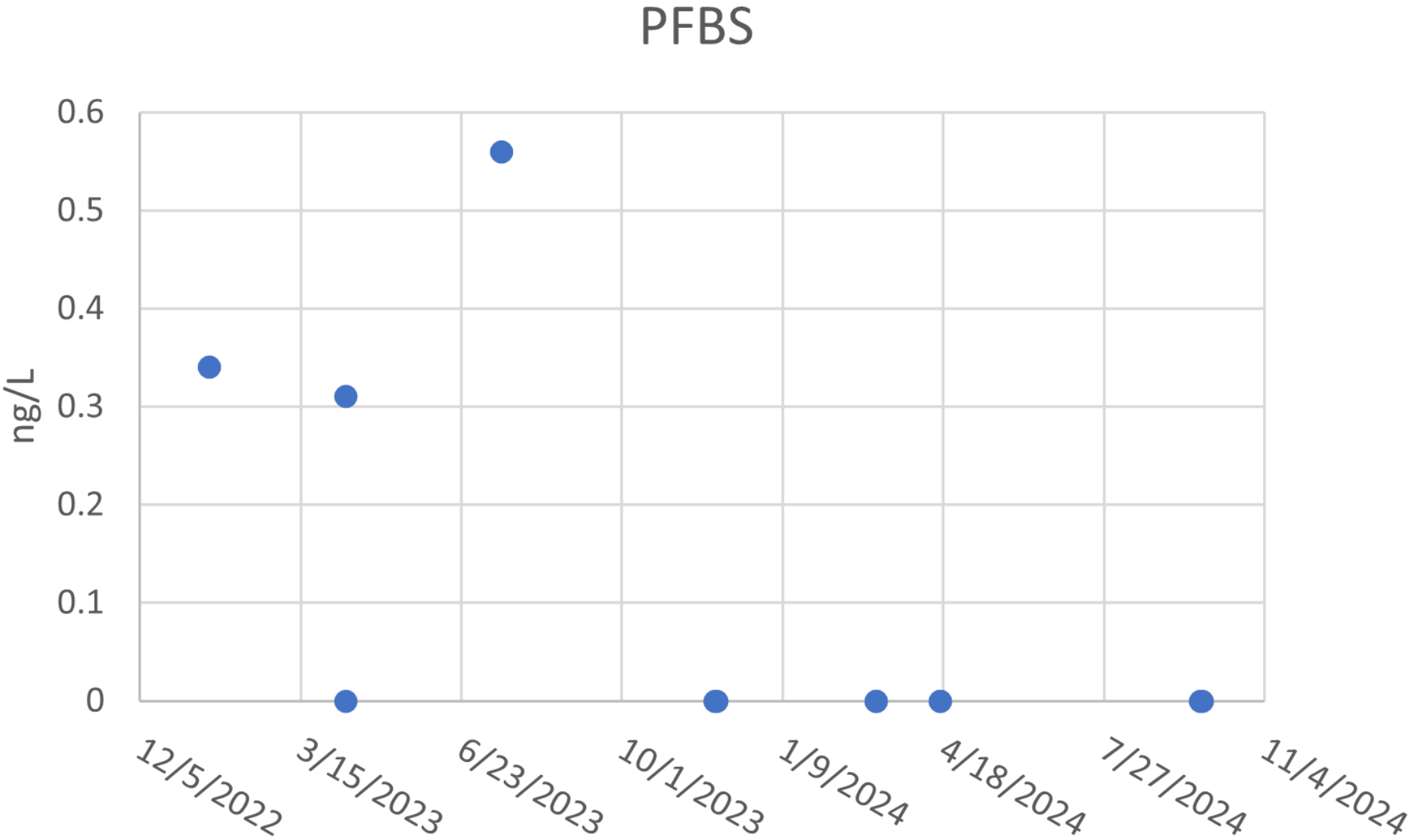
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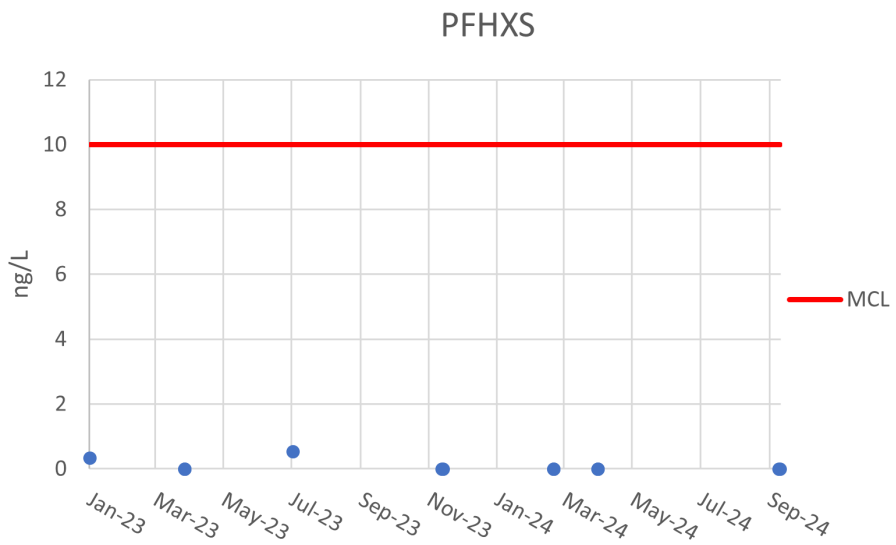
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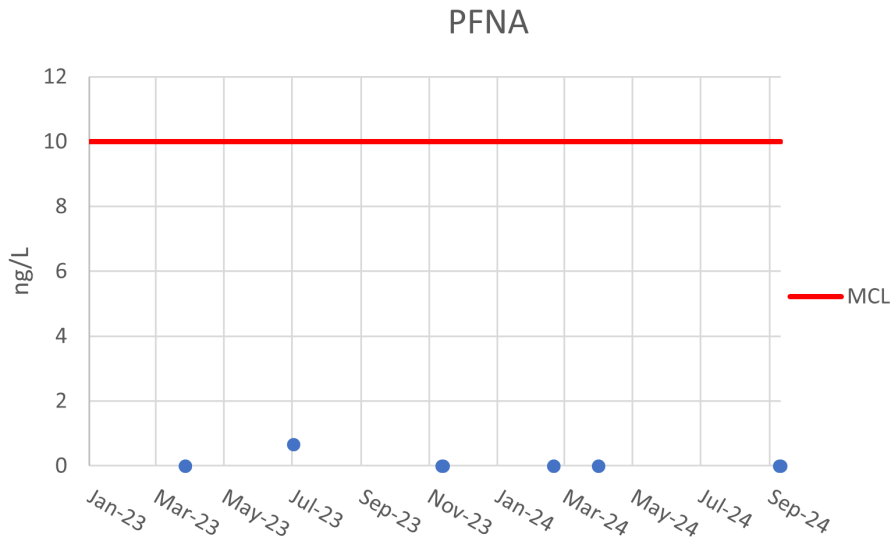
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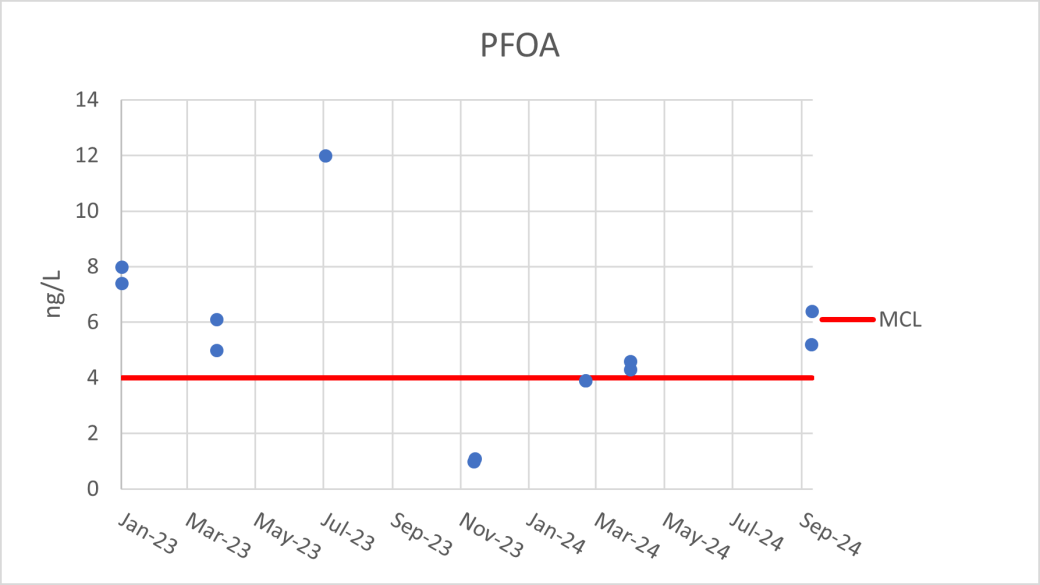
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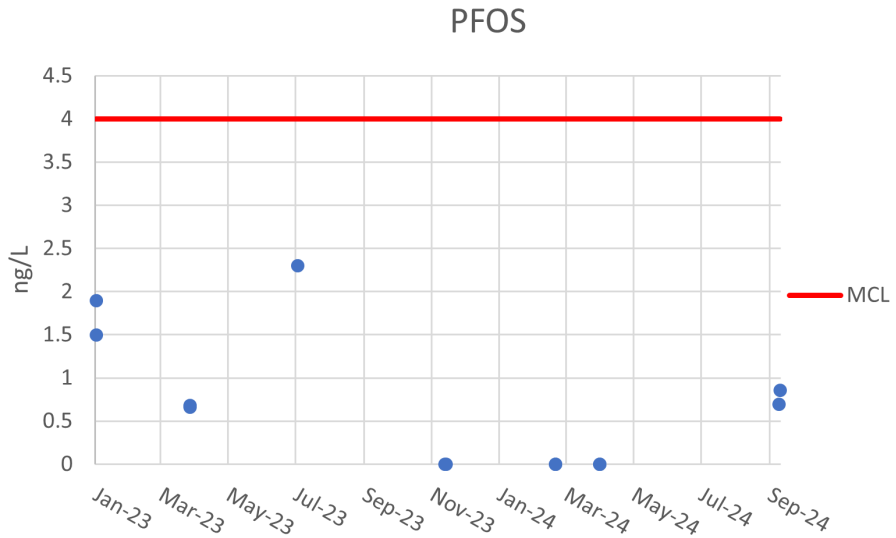
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APPENDIX E – SITE INSPECTION CHECKLIST

Site Inspection Checklist

I. SITE INFORMATION	
Site name: **Wausau Groundwater Contamination Site**	**Date of inspection:** **8/12/2024**
Location and Region: **Wausau, WI; Region 5**	**EPA ID:** **WID980993521**
Agency, office, or company leading the FYR: USEPA	**Weather/temperature:** Sunny 70

Remedy Includes: (Check all that apply)

☒ Landfill cover/containment	☐ Monitored natural attenuation
☒ Access controls	☒ Groundwater containment
☒ Institutional controls	☐ Vertical barrier walls
☒ Groundwater pump and treatment	☒ Other: Treatment via Air Strippers
☐ Surface water collection and treatment	

Attachments:

☐ Inspection team roster attached	☐ Site map attached

II. INTERVIEWS (Check all that apply)

1. **O&M Site Manager** **Daniel (OJ) Ojinaga ,** **Project Manager,** **8/12/2024**

   Interviewed: ☒ at site ☐ at office ☐ by phone Phone Number: 520-603-1923

   Problems, suggestions: ☐ Report attached

   Standard fall annual groundwater monitoring has been conducted every year. Vapor intrusion work has started, and step-out sampling has been completed at the site. He is working to ensure employees are protected and to ensure that indoor air exposures to VOCs are minimized. He is also seeking to abandon some existing monitoring wells as well as CW3.

2. **O&M Staff** **Ryan Aamot,** **Project Geologist,** **8/12/2024**

   Interviewed: ☒ at site ☐ at office ☐ by phone Phone Number: 612

   Problems, suggestions: ☐ Report attached

   GHD does annual groundwater sampling, yearly inspections of groundwater monitoring wells, and maintenance of wells as necessary. GHD also ensures that monitoring wells are accessible for sampling etc. Inspection of vapor pins for damage and repairs is occurring as needed. No work has been done to maintain the landfill cap as it is not required by any decision documents.

3. **Local regulatory authorities and response agencies** (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.) Fill in all that apply.

   Agency: Wisconsin Department of Natural Resources (WDNR)

   Contact: Jane Gray, Project Manager, 8/27/2024, P: (414) 435-8021

   Problems, suggestions: ☒ Report attached

   See Attached

   Agency: City of Wausau

   Contact: Kevin Fabel, Environmental Enngineer, 8/12/2024, P: 715-261-6743

   Problems, suggestions: ☐ Report attached

   The city has hopes to redevelop the East bank of the Site. The city also would like the EPA to consider if CW3 could be decomminssioned. CW3 is costly for the city to operate and maintain, and only remains in use due to the requirement listed in previous decision documents.

   Agency: Click or tap here to enter text.

   Contact: Name , Title , Click or tap to enter a date., P: Phone Number

   Problems, suggestions: ☐ Report attached

   Click or tap here to enter text.

   Agency: Click or tap here to enter text.

Contact: Name , Title , Click or tap to enter a date., P: Phone Number

Problems, suggestions:

Click or tap here to enter text.

4. **Other Interviews (optional):** ☐ Report attached

Marathon Electric: Jacob Holty, jacob.hotly@regalrexnord.com, 715-675-8104

Marathon Electric continues to monitor the condition of the landfill cap and has conducted indoor air sampling, Marathon says they are taking measures to prevent possible exposure by employees to VOCs. Marathon continues to communicate with WDNR and EPA.

III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)

1. O&M Documents

☒ O&M manual	☒ Readily available	☒ Up to date	☐ N/A
☐ As-built drawings	☐ Readily available	☐ Up to date	☐ N/A
☒ Maintenance logs	☒ Readily available	☒ Up to date	☐ N/A

Remarks: Click or tap here to enter text.

2. Site-Specific Health and Safety Plan ☒ Readily available

☒ Contingency Plan/Emergency Response Plan ☒ Readily available

Remarks: Click or tap here to enter text.

3. O&M and OSHA Training Records

☐ Readily available ☐ Up to date ☒ N/A

Remarks: Click or tap here to enter text.

4. Permits and Service Agreements

☒ Air discharge permit	☒ Readily available	☒ Up to date	☐ N/A
☐ Effluent discharge	☐ Readily available	☐ Up to date	☒ N/A
☐ Waste disposal, POTW	☐ Readily available	☐ Up to date	☒ N/A

☐ Other permits: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

5. Gas Generation Records

☐ Readily available ☐ Up to date ☒ N/A

Remarks: Click or tap here to enter text.

6. Settlement Monument Records

	☐ Readily available	☐ Up to date	☒ N/A
Remarks: Click or tap here to enter text.			
7. Groundwater Monitoring Records			
	☒ Readily available	☐ Up to date	☐ N/A
Remarks: Click or tap here to enter text.			
8. Leachate Extraction Records			
	☐ Readily available	☐ Up to date	☒ N/A
Remarks: Click or tap here to enter text.			
9. Discharge Compliance Records			
☐ Air	☐ Readily available	☐ Up to date	☐ N/A
☒Water (effluent)	☒ Readily available	☐ Up to date	☐ N/A
Remarks: Click or tap here to enter text.			
10. Daily Access/Security Logs			
	☐ Readily available	☐ Up to date	☒ N/A
Remarks: Click or tap here to enter text.			
IV. O&M COSTS			
1. O&M Organization			
☐ State in-house	☐ Contractor for State		
☐ PRP in-house	☒ Contractor for PRP		
☐ Federal Facility in-house	☐ Contractor for Federal Facility		
Remarks: Click or tap here to enter text.			
2. O&M Cost Records			

☒Readily available ☒ Up to date ☐ Funding mechanism/agreement in place

Original O&M cost estimate Click or tap here to enter text. ☐ Breakdown attached

Total annual cost by year for review period if available

From	To	Total cost	
Click or tap to enter a date.	Click or tap to enter a date.	Click or tap here to enter text.	☐ Breakdown attached
From	To	Total cost	
Click or tap to enter a date.	Click or tap to enter a date.	Click or tap here to enter text.	☐ Breakdown attached
From	To	Total cost	
Click or tap to enter a date.	Click or tap to enter a date.	Click or tap here to enter text.	☐ Breakdown attached
From	To	Total cost	
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From	To	Total cost	
Click or tap to enter a date.	Click or tap to enter a date.	Click or tap here to enter text.	☐ Breakdown attached

3. Unanticipated or Unusually High O&M Costs During Review Period

Describe costs and reasons:

VI work at Site has increased costs for PRPs. CW3 has been quite expensive for the city to keep ooperational. Annual O&M for CW3 is ~$45,000. A complete redevelopment of CW3 would have costs in the millions of dollars to bring it up to current code according to the PRP.

V. ACCESS AND INSTITUTIONAL CONTROLS

☒ Applicable ☐ N/A

1. Fencing Damaged ☐ Location shown on site map ☐ Gates secured ☒ N/A

Remarks: Click or tap here to enter text.

2. Other Access Restrictions ☐ Location shown on site map ☐ Gates secured

Remarks: Click or tap here to enter text.

3. Institutional Controls (ICs)

A. Implementation and Enforcement

Site conditions imply ICs not properly implemented ☐ Yes ☒ No ☐ N/A

Site conditions imply ICs not being fully enforced ☒ Yes ☐ No ☐ N/A

Type of monitoring (*e.g.*, self-reporting, drive by) Click or tap here to enter text.

Frequency Click or tap here to enter text.

Responsible party/agency Click or tap here to enter text.

Contact: Name , Title , Click or tap to enter a date., P: Phone Number

Reporting is up-to-date	☐ Yes	☐ No	☐ N/A
Reports are verified by the lead agency	☐ Yes	☐ No	☐ N/A
Specific requirements in deed or decision documents have been met	☐ Yes	☐ No	☐ N/A
Violations have been reported	☐ Yes	☐ No	☐ N/A

Other problems or suggestions:

ICIAP needs to be completed

B. Adequacy ☐ ICs are adequate ☒ ICs are inadequate ☐ N/A

Remarks: **Multiple ICs need to be implemented on site**

4. General

A. Vandalism/Trespassing ☐ Location shown on site map ☒ No vandalism evident

Remarks: Click or tap here to enter text.

B. Land use changes on site ☒ N/A

Remarks: Click or tap here to enter text.

C. Land use changes off site ☒ N/A

Remarks: Click or tap here to enter text.

VI. GENERAL SITE CONDITIONS

1. Roads ☐ Applicable ☒ N/A

A. Roads damaged ☐ Location shown on site map ☐ Roads adequate ☐ N/A

Remarks: Click or tap here to enter text.

B. Other Site Conditions

Remarks: Click or tap here to enter text.

VII. LANDFILL COVERS

1. Landfill Surface ☒ Applicable ☐ N/A

A. Settlement (Low Spots) ☒ Location Shown on Site Map ☐ Settlement Not Evident

Areal Extent: Click or tap here to enter text. Depth: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

B. Cracks ☒ Location Shown on Site Map ☐ Cracking Not Evident

Lengths: Click or tap here to enter text. Widths: Click or tap here to enter text. Depths: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

C. Erosion ☐ Location Shown on Site Map ☒ Erosion Not Evident

Areal Extent: Click or tap here to enter text. Depth: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

D. Holes ☐ Location Shown on Site Map ☒ Holes Not Evident

Areal Extent: Click or tap here to enter text. Depth: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

E. Vegetative Cover ☒ Grass ☐ Cover Properly Established

☐ Tress/Shrubs (indicate size and locations on a diagram ☐ No Signs of Stress

Remarks: Landfill cover/cap is in poor shape.

F. Alternative Cover (armored rock, concrete, etc.) ☐ N/A

Remarks: Click or tap here to enter text.

G. Bulges ☐ Location Shown on Site Map ☒ Bulges Not Evident

Areal Extent: Click or tap here to enter text. Height: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

H. Wet Areas/Water Damage ☐ Wet Areas/Water Damage Not Evident

☐ Wet Areas	☐ Location Shown on Site Map	Areal Extent: Click or tap here to enter text.
☒ Ponding	☒ Location Shown on Site Map	Areal Extent: Click or tap here to enter text.
☐ Seeps	☐ Location Shown on Site Map	Areal Extent: Click or tap here to enter text.
☐ Soft Subgrade	☐ Location Shown on Site Map	Areal Extent: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

I. Slope Instability ☐ Location Shown on Site Map ☒ Slope Instability Not Evident

☐ Slides Areal Extent: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

2. Benches ☐ Applicable ☒ N/A

(Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in

order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)

A. Flows Bypass Bench ☐ Location Shown on Site Map ☐ N/A or Okay

Remarks: Click or tap here to enter text.

B. Bench Breached ☐ Location Shown on Site Map ☐ N/A or Okay

Remarks: Click or tap here to enter text.

C. Bench Overtopped ☐ Location Shown on Site Map ☐ N/A or Okay

Remarks: Click or tap here to enter text.

3. Letdown Channels ☐ Applicable ☒ N/A

(Channel lined with erosion control mats, riprap, grout bags, or gabions that descend down the steep side slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)

A. Settlement ☐ Location Shown on Site Map ☐ Settlement Not Evident

Areal Extent: Click or tap here to enter text. Depth: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

B. Material Degradation ☐ Location Shown on Site Map ☐ Degradation Not Evident

Material Type: Click or tap here to enter text. Areal Extent: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

C. Erosion ☐ Location Shown on Site Map ☐ Erosion Not Evident

Areal Extent: Click or tap here to enter text. Depth: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

D. Undercutting ☐ Location Shown on Site Map ☐ Undercutting Not Evident

Areal Extent: Click or tap here to enter text. Depth: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

E. Obstructions ☐ Location Shown on Site Map ☐ Undercutting Not Evident

Type: Click or tap here to enter text.

Areal Extent: Click or tap here to enter text. Size: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

F. Excessive Vegetative Growth ☐ Location Shown on Site Map ☐ Excessive Growth Not Evident

Areal Extent: Click or tap here to enter text. ☐ Vegetation in channels does not obstruct flow

Remarks: Click or tap here to enter text.

4. Cover Penetrations ☒ Applicable ☐ N/A

A. Gas Vents ☐ Active ☐ Passive

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled

☐ Good condition ☐ Evidence of leakage at penetration

☐ Needs Maintenance ☒ N/A

Remarks: Click or tap here to enter text.

B. Gas Monitoring Probes

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled

☐ Good condition ☐ Evidence of leakage at penetration

☐ Needs Maintenance ☒ N/A

Remarks: Click or tap here to enter text.

C. Monitoring Wells

☒ Properly secured/locked ☒ Functioning ☒ Routinely sampled

☒ Good condition ☐ Evidence of leakage at penetration

☐ Needs Maintenance ☐ N/A

Remarks: Click or tap here to enter text.

D. Leachate Extraction Wells

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled

☐ Good condition ☐ Evidence of leakage at penetration

☐ Needs Maintenance ☒ N/A

Remarks: Click or tap here to enter text.

E. Settlement Monuments ☐ Located ☐ Routinely Surveyed ☒ N/A

Remarks: Click or tap here to enter text.

5. Gas Collection and Treatment ☐ Applicable ☒ N/A

A. Gas Treatment Facilities

☐ Flaring ☐ Thermal Destruction ☐ Collection for Reuse

☐ Good condition ☐ Needs Maintenance

Remarks: Click or tap here to enter text.

B. Gas Collection Wells, Manifolds, and Piping

☐ Good condition	☐ Needs Maintenance	☐ N/A
Remarks: Click or tap here to enter text.		
C. Gas Monitoring Facilities (e.g. gas monitoring of adjacent homes or buildings)		
☐ Good condition	☐ Needs Maintenance	☐ N/A
Remarks: Click or tap here to enter text.		
6. Cover Drainage Layer	☐ Applicable	☒ N/A
A. Outlet Pipes Inspected	☐ Functioning	☐ N/A
Remarks: Click or tap here to enter text.		
B. Outlet Rock Inspected	☐ Functioning	☐ N/A
Remarks: Click or tap here to enter text.		
7. Detention/Sediment Ponds	☐ Applicable	☒ N/A
A. Siltation	☐ Siltation Not Evident	☐ N/A
Areal Extent: Click or tap here to enter text.	Depth: Click or tap here to enter text.	
Remarks: Click or tap here to enter text.		
B. Erosion	☐ Erosion Not Evident	
Areal Extent: Click or tap here to enter text.	Depth: Click or tap here to enter text.	
Remarks: Click or tap here to enter text.		
C. Outlet Works	☐ Functioning	☐ N/A
Remarks: Click or tap here to enter text.		
D. Dam	☐ Functioning	☐ N/A
Remarks: Click or tap here to enter text.		
8. Retaining Walls	☐ Applicable	☒ N/A
A. Deformations	☐ Location Shown on Site Map	☐ Deformation Not Evident
Horizontal Displacement: Click or tap here to enter text.		
Vertical Displacement: Click or tap here to enter text.		
Rotational Displacement: Click or tap here to enter text.		
Remarks: Click or tap here to enter text.		
B. Degradation	☐ Location Shown on Site Map	☐ Deformation Not Evident
Remarks: Click or tap here to enter text.		
9. Perimeter Ditches/Off-Site Discharge	☐ Applicable	☒ N/A

A. Siltation ☐ Location Shown on Site Map ☐ Siltation Not Evident

Areal Extent: Click or tap here to enter text. Depth: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

B. Vegetative Growth ☐ Location Shown on Site Map ☐ N/A

☐ Vegetation Does Not Impede Flow

Areal Extent: Click or tap here to enter text. Type: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

C. Erosion ☐ Location Shown on Site Map ☐ Erosion Not Evident

Areal Extent: Click or tap here to enter text. Depth: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

D. Discharge Structure ☐ Functioning ☐ N/A

Remarks: Click or tap here to enter text.

VIII. VERTICAL BARRIER WALLS

☐ Applicable	☒ N/A

1. Settlement ☐ Location Shown on Site Map ☐ Settlement Not Evident

Areal Extent: Click or tap here to enter text. Depth: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

2. Performance Monitoring Type of Monitoring: Click or tap here to enter text.

☐ Performance Not Monitored ☐ Evidence of Breaching

Frequency: Click or tap here to enter text. Head Differential: Click or tap here to enter text.

Remarks: Click or tap here to enter text.

IX. GROUNDWATER/SURFACE WATER REMEDIES

☒ Applicable	☐ N/A

1. Groundwater Extraction Wells, Pumps, and Pipelines ☒ Applicable ☐ N/A

A. Pumps, Wellhead Plumbing, and Electrical ☐ N/A

☒ Good Condition ☐ All Required Wells Properly Operating ☒ Needs Maintenance

Remarks: CW3 requires frequent maintenance.

B. Extraction System Pipelines, Valves, Valve Boxes, and Other Appurtenances

☒ Good Condition ☐ Needs Maintenance

Remarks: Click or tap here to enter text.

C. Spare Parts and Equipment ☐ Needs to be Provided

☒ Readily Available ☒ Good Condition ☐ Requires Upgrade

Remarks: Click or tap here to enter text.

2. Surface Water Collection Structures, Pumps, and Pipelines ☐ Applicable ☒ N/A

A. Collection Structures, Pumps, and Electrical

☐ Good Condition ☐ Needs Maintenance

Remarks: Click or tap here to enter text.

B. Surface Water Collection System Pipelines, Valves, Valve Boxes, and Other Appurtenances

☐ Good Condition ☐ Needs Maintenance

Remarks: Click or tap here to enter text.

C. Spare Parts and Equipment ☐ Needs to be Provided

☐ Readily Available ☐ Good Condition ☐ Requires Upgrade

Remarks: Click or tap here to enter text.

3. Treatment System ☒ Applicable ☐ N/A

A. Treatment Train (Check components that apply)

☒ Metals removal ☐ Oil/Water Separation ☐ Bioremediation

☒ Air Stripping ☐ Carbon Absorbers

☒ Filters Click or tap here to enter text.

☒ Additive (e.g. chelation agent, flocculent) Click or tap here to enter text.

☐ Others Click or tap here to enter text.

☒ Good Condition ☐ Needs Maintenance

☒ Sampling ports properly marked and functional

☒ Sampling/maintenance log displayed and up to date

☒ Equipment properly identified

☒ Quantity of groundwater treated annually : about1.5 billion gallons

☐ Quantity of surface water treated annually Click or tap here to enter text.

Remarks: Municipal/ City water treatment plant used for treatment was built in 2022. GAC for PFAS will be added to the system in 2024.

B. Electrical Enclosures and Panels (properly rated and functional)

☒ N/A ☐ Good Condition ☐ Needs Maintenance

Remarks: Click or tap here to enter text.

C. Tanks, Vaults, Storage Vessels ☒ N/A

☐ Proper Secondary Containment ☐ Good Condition ☐ Needs Maintenance

Remarks: Click or tap here to enter text.

D. Discharge Structure and Appurtenances

☒ N/A ☐ Good Condition ☐ Needs Maintenance

Remarks: Click or tap here to enter text.

E. Treatment Building(s)

☐ N/A ☒ Good condition (esp. roof and doorways)

☐ Needs repair ☒ Chemicals and equipment properly stored

Remarks Click or tap here to enter text.

F. Monitoring Wells (Pump and Treatment Remedy) ☐ N/A

☒ Properly secured/locked ☒ Functioning

☒ Routinely sampled ☒ All required wells located

☐ Good condition ☒ Needs Maintenance

Remarks CW3 requires frequent maintenance

4. Monitoring Data

A. Monitoring Data:

☒ Is Routinely Submitted on Time ☒ Is of Acceptable Quality

B. Monitoring Data Suggests:

☐ Groundwater plume is effectively contained ☒ Contaminant concentrations are declining

5. Monitored Natural Attenuation

A. Monitoring Wells (natural attenuation remedy) ☐ N/A

☒ Properly secured/locked ☒ Functioning ☒ Routinely sampled

☐ All required wells located ☐ Needs Maintenance ☒ Good condition

Remarks: Wells are located during the monitoeinng events and documented.

X. OTHER REMEDIES

If there are remedies applied at the site which are not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

XI. OVERALL OBSERVATIONS

1. Implementation of the Remedy

Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.).
Landill cap/cover is in poor condition. Previous FYR noted this as an issue since the cap would not prevent infiltration.

2. Adequacy of O&M

Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.

O&M is satisfactory, barring the improperly maintained landfill cap.

3. Early Indicators of Potential Remedy Problems

Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs that suggest that the protectiveness of the remedy may be compromised in the future.
Repair costs for CW3 are quite high according to the city of Wausau. CW3 is required to remain in operation per the ROD and CD.

4. Early Indicators of Potential Remedy Problems

Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.

Click or tap here to enter text.

VII. Landfill Covers

Figure: Map provided by the PRP to show areas of landfill cap with ponding, cracks, and settlement.

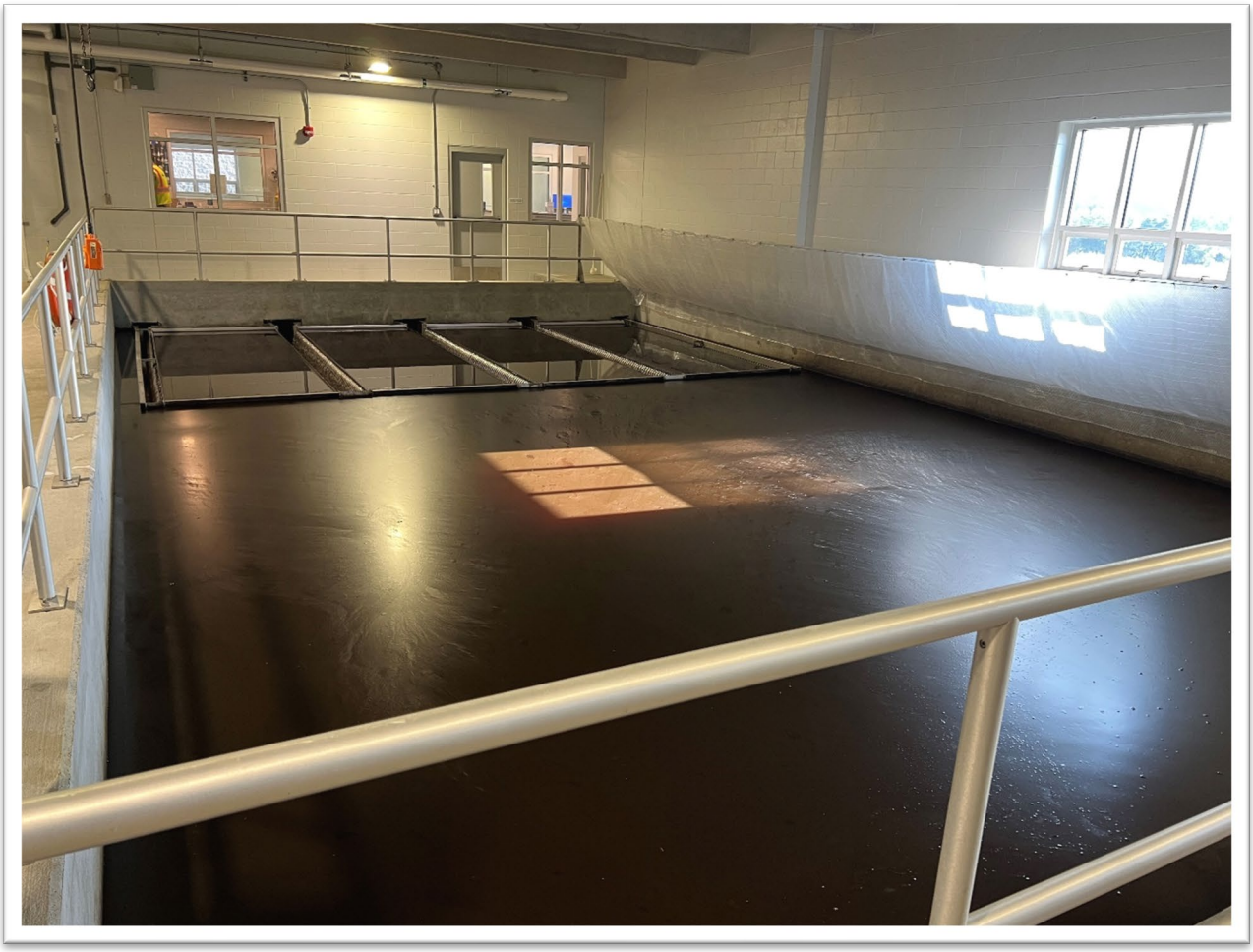

Image 1: Flocculation tank at Wausau Water Works which was recently constructed in 2022

Image 2: Area on West Bank with improperly maintained cap/asphalt barrier

Image 3: Area inside facility where the old foundry was located and potential VI sampling may occur

Image 4: Photo of landfill cap taken facing south

Image 5: Wausau Chemical building and MW WC5A (overgrown) on the East Bank facing south

Image 6: Interior of the Wausau Chemical building showing that it is clean and maintained

Image 7: Air strippers used at Wausau Water Works to remove VOCs from water

Image 8: Area north of old foundry area where drums had historically been stored

Image 9: View inside of pump house for City Well 3 (CW3)

APPENDIX F – PUBLIC NOTICE AND INTERVIEW

Your Source Public Notices for the latest...

Foreclosure/Sheriff Sales

STATE OF WISCONSIN
CIRCUIT COURT
Marathon COUNTY
Case No. 24-CV-487
Hon. Gregory J. Strasser, Br. 4

CLOVERBELT CREDIT UNION
PO Box 659
Wausau WI 54402-0659
Plaintiff,
vs.
KEVIN J. HUSNICK
533 S. Hudson Street
Antigo, WI 54409
Defendant.
SUMMONS FOR PUBLICATION
THE STATE OF WISCONSIN TO:
KEVIN J. HUSNICK
You are hereby notified that the Plaintiff named above has filed a lawsuit or other legal action against you.
Within forty (40) days after September 6, 2024, you must respond with a written demand for a copy of the Complaint. The demand must be sent or delivered to:
Marathon County Clerk of Circuit Court,
Marathon County Courthouse
500 Forest Street
Wausau, WI 54403-5568
and to Plaintiff's attorney, whose address is:
Weld Riley, S.C.
500 Third Street, Suite 800
P.O. Box 479
Wausau, Wisconsin 54402-0479
You may have an attorney help or represent you.
If you do not demand a copy of the Complaint within forty (40) days, the Court may grant judgment against you for the award of money or other legal action requested in the Complaint, and you may lose your right to object to anything that is or may be incorrect in the Complaint. A judgment may be enforced as provided by law. A judgment awarding money may become a lien against any real estate you own now or in the future, and may also be enforced by garnishment or seizure of property.
WELD RILEY, S.C.
Attorneys for Plaintiff
JOHN A. CRAVENS
State Bar #1001261
PLEASE DIRECT ALL CORRESPONDENCE,
INQUIRIES AND PLEADINGS TO:
Amy L. Unertl
Weld Riley, S.C.
500 Third Street, Suite 800
P. O. Box 479
Wausau, WI 54402-0479
(715) 845-8234
WNAXLP
September 6, 13, 20 2024
LWIX0151951

Govt Public Notices

EPA Issues Explanation of Significant Differences for Wausau Groundwater Contamination Superfund Site
Wausau, Wisconsin

In March 2024, the U.S. Environmental Protection Agency (EPA) formalized a change to the existing cleanup plan at the Wausau Groundwater Contamination Superfund site in Wausau, WI.
The EPA is implementing additional legal restrictions in contaminated areas of the site in order to protect human health and the environment. This modification to the site remedy is documented in the Explanation of Significant Differences (ESD) report. The EPA prepares an ESD when changes to the original selected remedy are significant, but do not fundamentally alter the original remedy's scope, performance, or cost.
New legal restrictions include a local municipal ordinance that restricts installation of wells and access to the groundwater plumes, a deed restriction on the former Wausau Chemical facility, and restrictions on groundwater use and potential soil exposure.
The ESD document and more information are available online at www.epa.gov/superfund/wausau-groundwater and at the Marathon County Public Library, 300 N. First St., Wausau.

EPA Begins 7th Review of Wausau Groundwater Contamination Superfund Site

The U.S. Environmental Protection Agency is conducting its 7th five-year review of the Wausau Groundwater Contamination Superfund site in Wausau, Wisconsin. The Superfund law requires regular checkups of sites that have been cleaned up – with waste managed on-site – to make sure the cleanup continues to protect people and the environment. This review is expected to be completed in April 2025.
The site consists of two contaminant source areas separated by the Wisconsin River. The eastern portion of the site is related to solvent spills from the former Wausau Chemical facility, and the western portion is related to the former City of Wausau landfill.
EPA's cleanup of volatile organic compounds at the site consisted of several extraction wells and treatment systems, two soil vapor extraction systems, a landfill cover over the waste area, land and groundwater-use restrictions, and groundwater monitoring.
In 2020 during the previous five-year review, the EPA deferred protectiveness of the remedy due to a lack of vapor intrusion data. The EPA expects to make a protectiveness determination in 2028 after testing.
In 2023 and 2024, the EPA oversaw vapor intrusion sampling at commercial buildings which were identified as potential vapor intrusion risks based on their proximity to source areas or elevated groundwater concentrations. Results did not show any health risks related to vapor intrusion, except for one indoor air exceedance.
In March 2024, the EPA released a significant modification to the existing site remedy in order to protect human health and the environment. The change imposes additional municipal ordinances and land use restrictions, which are documented in an Explanation of Significant Differences.
The five-year review is an opportunity for you to tell EPA about site conditions and any concerns you have. Contact:

Karen Chen
Community Involvement Coordinator
312-886-6009
chen.karen01@epa.gov
Michael Holt
Remedial Project Manager
312-353-6704
holt.michael@epa.gov
You may also call EPA toll-free at 800-621-8431, 8:30 a.m. to 4:30 p.m., weekdays.
Run: September 13, 2024 WNAXLP

Request for Proposals (RFP) - Rib Mountain Sign Design & Replacement Project
The Village of Rib Mountain is seeking proposals from qualified firms for the replacement of entry and park signage at various locations within our community (11 total signs). Further information regarding the RFP can be found on the Village website at www.ribmountainwi.gov or by contacting the Municipal Center at 715-842-0983.
WNAXLP
September 13 2024
LWIX0157978

TOWN OF TEXAS
APPLICATION FOR A BOARD OF APPEALS HEARING

Daniel Preibe requested a hearing before the TOWN OF TEXAS BOARD OF APPEALS for the property located and described as: 242602 County Road J, Wausau WI located in Section 24 T30N R8E PTOF THE N ½ OF THE SE ¼ LOT 1 CSMVOL63 PG 96 (#14269) (DOC #1440445) 53.68 ACRES.
The appeal is to build a structure within 10' of the abutting property line due to wetland limitations on the west side of the location. The Zoning Ordinance 17.49(5)(f) allows existing lots to request a variance to less than allowed 25' in side yard of an existing parcel. All property owners that are within 300 feet of the parcel are being notified per ordinance.
September 23, 2024 at 7:00 PM a Special Meeting of the Board of Appeal will hear this appeal.
Town of Texas Clerk
WNAXLP
September 13, 17 2024
LWIX0158000

Minutes

CITY OF SCHOFIELD
Regular Council Proceedings
August 13, 2024
The City Council of the City of Schofield met in Regular Meeting on the above date at 6:00 PM with Mayor Kregg Hoehn presiding.
ROLL CALL
Members Present:Ward 1 Mike Steele, Ward 1 Kevin Fabel, Ward 2 Jeffrey Pansch, Ward 2 Joan Joss, Ward 3 Scott Dunst, Ward 4 Kari Carroll, Ward 4 Fern Alvarez
Also Present:Kregg Hoehn Mayor, Nick Aldrich Sergeant -Everest Metro, Mark Thuot Public Works Admin, Vincent Bonino Assisstant City Attorney, Paula Brummond Clerk
Member Excused:Ward 3 Tony Sherfinski
AUDIENCE REMARKS (Public Comment not to exceed 3 minutes per speaker)
There was no public comment.
MAYORAL COMMENTS:Discussed taking pictures of 2 of the alder person before the next September Council meeting.
Discussed having an open house in October.
CONSENT AGENDA:
RESULT: CARRIED [UNANIMOUS]
MOVER: Scott Dunst, Ward 3 SECONDER: Joan Joss, Ward 2 AYES: Steele, Fabel, Pansch, Joss, Dunst, Carroll, Alvarez EXCUSED: Tony Sherfinski
Approval of Minutes
1. City Council - Regular Meeting - Jun 11, 2024 6:00 PM
Approval of Licenses and Permit Applications
1. Fence Permit - 1822 Grand Avenue
Approval of Vouchers and Checks
ITEMS MOVED FROM CONSENT AGENDA
BUSINESS AGENDA:
A. Disbursement Request No. 2 - $275,970 for Purchase of Street Sweeper
RESULT: CARRIED [UNANIMOUS]
MOVER: Kari Carroll, Ward 4 SECONDER: Fern Alvarez, Ward 4 AYES: Steele, Fabel, Pansch, Joss, Dunst, Carroll, Alvarez EXCUSED: Tony Sherfinski
B. Written Municipal Advisor Client Disclosure W/The City of Schofield("Client") for 2024 Financial Management Plan Update
With change to the financial management plan from 2024-2029 to 2025-2030
RESULT: CARRIED [UNANIMOUS]
MOVER: Kari Carroll, Ward 4 SECONDER: Joan Joss, Ward 2 AYES: Steele, Fabel, Pansch, Joss, Dunst, Carroll, Alvarez EXCUSED: Tony Sherfinski
C. 2025 Schofield Budget Timeline
Spoke about the 2025 budget time line.
RESULT: NO ACTION
D. MSA Professional Service Agreement-Business 51 Trail and Bridge RESULT: CARRIED [UNANIMOUS] MOVER: Scott Dunst, Ward 3 SECONDER: Fern Alvarez, Ward 4 AYES: Steele, Fabel, Pansch, Joss, Dunst, Carroll, Alvarez EXCUSED: Tony Sherfinski
E. St. Therese Discontinuation Letter Request RESULT: NO ACTION
F. Resolution No. 2024-16 Discontinuance of Paved Alley Ways in Block 2 of C.A. Barwig's First Addition RESULT: CARRIED [UNANIMOUS] MOVER: Kevin Fabel, Ward 1 SECONDER: Kari Carroll, Ward 4 AYES: Steele, Fabel, Pansch, Joss, Dunst, Carroll, Alvarez EXCUSED: Tony Sherfinski
G. City of Schofield/Discontinuance of Greenheck Drive, F/K/A Industrial Drive RESULT: CARRIED [UNANIMOUS] MOVER: Scott Dunst, Ward 3 SECONDER: Mike Steele, Ward 1 AYES: Steele, Fabel, Pansch, Joss, Dunst, Carroll, Alvarez EXCUSED: Tony Sherfinski
H. Certified Survey Map(CSM) -122 Summer Street-Correction
RESULT: CARRIED [UNANIMOUS] MOVER: Kari Carroll, Ward 4 SECONDER: Joan Joss, Ward 2 AYES: Steele, Fabel, Pansch, Joss, Dunst, Carroll, Alvarez EXCUSED: Tony Sherfinski
I. US Cellular City of Schofield Water Tower Agreement RESULT: CARRIED [UNANIMOUS] MOVER: Scott Dunst, Ward 3 SECONDER: Mike Steele, Ward 1 AYES: Steele, Fabel, Pansch, Joss, Dunst, Carroll, Alvarez EXCUSED: Tony Sherfinski
J. AT&T Final Document Approval for Water Tower and Building Space Lease Agreement RESULT: CARRIED [UNANIMOUS] MOVER: Kari Carroll, Ward 4 SECONDER: Kevin Fabel, Ward 1 AYES: Steele, Fabel, Pansch, Joss, Dunst, Carroll, Alvarez EXCUSED: Tony Sherfinski
K. Central States Teamcare Participation Agreements for Bargaining and Non-Bargaining Units RESULT: CARRIED [UNANIMOUS] MOVER: Joan Joss, Ward 2 SECONDER: Mike Steele, Ward 1 AYES: Steele, Fabel, Pansch, Joss, Dunst, Carroll, Alvarez EXCUSED: Tony Sherfinski
L. Appointment of Riverside Fire District Commission-Abby Klein RESULT: CARRIED [UNANIMOUS] MOVER: Scott Dunst, Ward 3 SECONDER: Joan Joss, Ward 2 AYES: Steele, Fabel, Pansch, Joss, Dunst, Carroll, Alvarez EXCUSED: Tony Sherfinski
STAFF REPORTS
July 2024 Report
Mountain Bay Metro Police Department
July 2024 Report
1. Mountain Bay Metro Police Department July Report
July 2024 Report RESULT: NO ACTION
Fire Chief
July 2024 Report
1. Riverside Fire Department Reports
City Clerk
July 2024 Report
1. July Operator's Licenses RESULT: NO ACTION
City Treasurer
July 2024 Report
1. July 2024 Budget to Actual RESULT: NO ACTION
Public Works Director
July 2024 Report
COMMITTEE/COMMISSION REPORTS
County Board Report- Bill Conway
July 2024 Report
Public Works/Personnel Committee-Dunst & Joss
MSA Agreement and Summer help leaving
Finance/Economic Redevelopment Committee- Carroll & Steele-None
Judiciary/Health & Sanitation Committee-Fabel & Sherfinski-None
Public Property/Parks & Recreation - Pansch & Alvarez-None
Riverside Fire District-Dunst
Discussed information on the new Fire Department Ladder Truck purchase.
Water & Sewer Commission- Carroll-None
CDA-Hoehn-None
Area Transit Report-Joss-None
SET FUTURE MEETING DATES
September 10, 2024
ADJOURNMENT
The meeting was adjourned at 6:40 PM.
RESULT: CARRIED [UNANIMOUS]
MOVER: Kevin Fabel, Ward 1 SECONDER: Scott Dunst, Ward 3 AYES: Steele, Fabel, Pansch, Joss, Dunst, Carroll, Alvarez EXCUSED: Tony Sherfinski
Minutes submitted by Paula Brummond-Clerk
WNAXLP
September 13 2024
LWIX0158323

Notice To Creditors

CLAIMS DEADLINE NOTICE
IN THE MATTER OF KJK FAMILY TRUST DATED APRIL 1, 2022
Pursuant to Section 701.0508, Wisconsin Statutes, Kenneth S. Kramer, as successor trustee of KJK Family Trust dated April 1, 2022, with power to pay the debts of Jodi L. Kraft, D.O.D. November 24, 2021, hereby provides notice that the deadline for the filing claims for payment of debts of Jodi L. Kraft with Kenneth S. Kramer, as Trustee of the KJK Family Trust dated April 1, 2022, is January 6, 2025, being the date four (4) months after the date of the first insertion of the Notice.
By: /s/Kenneth S. Kramer
651 Hoganwood Circle
Sobieski, WI 54171
WNAXLP
September 6,13,20 2024
LWIX0152669

CLAIMS DEADLINE NOTICE
IN THE MATTER OF BETTY L. FELLENZ REVOCABLE TRUST DATED JANUARY 20, 2006
Pursuant to Section 701.0508, Wisconsin Statutes, Jackie L. Karau, as successor trustee of Betty L. Fellenz Revocable Trust dated January 20, 2006, with power to pay the debts of Betty L. Fellenz, D.O.D. April 13, 2024, hereby provides notice that the deadline for the filing claims for payment of debts of Betty L. Fellenz with Jackie L. Karau, as Trustee of the Betty L. Fellenz Revocable Trust dated January 20, 2006, is January 13, 2025, being the date four (4) months after the date of the first insertion of the Notice.
By: /s/Hougum Law Firm, LLC
305 S 18th Avenue, Suite 200
P.O. Box 1516
Wausau, WI 54402
WNAXLP
September 13,20,27 2024
LWIX0156011

Public Notices

NOTICE FOR ANNUAL DISTRICT MEETING
Section 120.08(1)

Pursuant to Section 120.08(1) notice is hereby given to qualified electors of the Wausau School District, that the annual meeting for the transaction of business, will be held in the Nicholson Board Room, Longfellow Administration Center, 415 Seymour Street, on the 23rd day of September, 2024, at 6 p.m. A budget hearing will be conducted as part of the annual meeting.
Jennifer Paoli, Clerk
Wausau School District
Run: Sep 13 & 19, 2024 WNAXLP

STATE OF WISCONSIN
CIRCUIT COURT
MARATHON COUNTY
IN THE MATTER OF THE ESTATE OF MARK R. LENAKER
NOTICE TO CREDITORS
(Informal Administration)
Case No. 24-IN-95
PLEASE TAKE NOTICE:
1. An application for informal administration was filed.
2. The decedent, with a date of birth 07/30/1971 and date of death 09/06/2023, was domiciled in Dakota County, State of Minnesota, with a mailing address of 11018 Rich Valley Blvd., Inver Grove Heights, MN 55077.
3. All interested persons waived notice.
4. The deadline for filing a claim against the decedent's estate is December 5, 2024.
5. A claim may be filed at the Marathon County Courthouse, Wausau, Wisconsin, Room Probate.
BY THE COURT:
DATE SIGNED: August 29, 2024
Electronically signed by Kim Uttech, Register in Probate, Probate Registrar
Michael B. Winter
835 Fifth Avenue
Antigo, WI 54409
(715) 623-2905
Bar Number 1025676
Run: September 06, 13, 20, 2024 WNAXLP

STATE OF WISCONSIN
CIRCUIT COURT
MARATHON COUNTY
IN THE MATTER OF THE NAME CHANGE OF:
NATASHA MARIE WRIGHT
BY NATASHA MARIE WRIGHT
Notice and Order for Name Change Hearing
Case No. 24CV514
NOTICE IS GIVEN:
A petition was filed asking to change the name of the person listed above:
From: Natasha Marie Wright
To: Natasha Marie Dunphy
Birth Certificate: Natasha Marie Dunphy
IT IS ORDERED:
This petition will be heard in the Circuit Court of Marathon County, State of Wisconsin:
Judge's Name: Honorable Rick Cveykus
Place: Br 2
500 Forest Street
Wausau, WI 54403
Date: September 19, 2024
Time: 11:00 AM
IT IS FURTHER ORDERED:
Notice of this hearing shall be given by publication as a Class 3 notice for three (3) weeks in a row prior to the date of the hearing in the Wausau Daily Herald a newspaper published in Marathon County County, State of Wisconsin.
BY THE COURT:
DATE SIGNED BY: August 8, 2024
Electronically signed by Rick Cveykus Circuit Court Judge
WNAXLP
August 30,September 6,13 2024
LWIX0151470

STATE OF WISCONSIN
CIRCUIT COURT
MARATHON COUNTY COUNTY
IN THE MATTER OF THE NAME CHANGE OF:
DEMERI GOVEA TAX
BY BELEN TAX-SANDOVAL
Notice and Order for Name Change Hearing
Case No. 24CV543
NOTICE IS GIVEN:
A petition was filed asking to change the name of the person listed above:
From: Demeri Govea-Tax
To: Demeri Tax
Birth Certificate: Demeri Tax
IT IS ORDERED:
This petition will be heard in the Circuit Court of Marathon County County, State of Wisconsin:
Judge's Name: Gregory J Strasser
Place: Room 4
500 Forest Street Wausau, WI 54403
Date: October 1, 2024
Time: 9:15am
IT IS FURTHER ORDERED:
Notice of this hearing shall be given by publication as a Class 3 notice for three (3) weeks in a row prior to the date of the hearing in the Wausau Daily Herald a newspaper published in Marathon County County, State of Wisconsin.
BY THE COURT:
DATE SIGNED BY: September 3, 2024
Electronically signed by Gregory Strasser, Circuit Court Judge
WNAXLP
September 6,13,20 2024
LWIX0153689

STATE OF WISCONSIN
CIRCUIT COURT
MARATHON COUNTY
IN THE MATTER OF THE NAME CHANGE OF:
DAVID CHRISTOPHER HASKIN
BY DAVID CHRISTOPHER HASKIN
Notice and Order for Name Change Hearing
Case No. 24CV565
NOTICE IS GIVEN:
A petition was filed asking to change the name of the person listed above:
From: David Christopher Haskin
To: David Christopher Budnik
Birth Certificate: David Christopher Budnik
IT IS ORDERED:
This petition will be heard in the Circuit Court of Marathon County, State of Wisconsin:
Judge's Name: Michael Moran
Place: Branch 5
500 Forest Street Wausau WI 54401
Date: October 8, 2024
Time: 3:45PM
IT IS FURTHER ORDERED:
Notice of this hearing shall be given by publication as a Class 3 notice for three (3) weeks in a row prior to the date of the hearing in the Wausau Daily Herald a newspaper published in Marathon County County, State of Wisconsin.
BY THE COURT:
DATE SIGNED BY: August 28, 2024
Electronically signed by Michael Moran
WNAXLP
September 13,20,27 2024
LWIX0155896

STATE OF WISCONSIN
CIRCUIT COURT
MARATHON COUNTY
IN THE MATTER OF THE NAME CHANGE OF:
ANDREW MICHAEL KRATWELL
BY ANDREW MICHAEL KRATWELL
Notice and Order for Name Change Hearing
Case No. 24CV585
NOTICE IS GIVEN:
A petition was filed asking to change the name of the person listed above:
From: Andrew Michael Kratwell
To: Andrew Michael Kohl
Birth Certificate: Andrew Michael Kratwell
IT IS ORDERED:
This petition will be heard in the Circuit Court of Marathon County, State of Wisconsin:
Judge's Name: Marathon County Circuit Court
Place: Branch 1
500 Forest Street Wausau WI 54403
Date: October 8, 2024
Time: 09:10AM
IT IS FURTHER ORDERED:
Notice of this hearing shall be given by publication as a Class 3 notice for three (3) weeks in a row prior to the date of the hearing in the Wausau Daily Herald a newspaper published in Marathon County, State of Wisconsin.
BY THE COURT:
DATE SIGNED BY: September 10, 2024
Electronically signed by Andrew Kratwell
WNAXLP
September 13,20,27 2024
LWIX0158017

Summons

STATE OF WISCONSIN, CIRCUIT COURT, MARATHON COUNTY
Case No. 2024SC001424

Plaintiff(s):
Salander Enterprises, LLC
225 S. Executive Dr.
Brookfield WI 53005
VS.
Defendant(s):
KEVIN RIEGEL
1401 ELM ST APT 113
WAUSAU WI 54401-4697

TO THE PERSON(S) NAMED ABOVE AS DEFENDANT(S):

Summons

You are being sued by the person(s) named above as Plaintiff(s). A copy of the claim has been sent to you at your address as stated in the caption above. The lawsuit will be heard in the following small claims court:
MARATHON County Courthouse
Telephone Number of clerk of court: 715-261-1000
Courtroom/Room Number:
Address: 500 Forest Street
Address:
City: Wausau, WI 54403
on the following date and time:
Date: 10/9/2024 Time: 10:00 AM

If you do not attend the hearing, the court may enter a judgment against you in favor of the person(s) suing you. A copy of the claim has been sent to you at your address as stated in the caption above. A judgment may be enforced as provided by law. A judgment awarding money may become a lien against any real estate (property) you own now or in the future, and may also be enforced by garnishment or seizure of property.
You may have the option to Answer without appearing in court on the court date by filing a written Answer with the clerk of court before the court date. You must send a copy of your Answer to the Plaintiff(s) named above at their address. You may contact the clerk of court at the telephone number above to determine if there are other methods to answer a Small Claims complaint in that county.

Your Source Public Notices for the latest...

Summons

Electronically Signed by JACOB L. HAMS
State Bar # 1118647
9/11/2024
Dobberstein Law Firm, LLC
225 S. Executive Dr. Suite 201
Brookfield, WI. 53005
262-641-3715
WNAXLP
September 13 2024
LWIX0158176

Find what you want in CLASSIFIED!

Public Sale

NOTICE OF PUBLIC SALE:

Notice is hereby given that the undersigned intends to sell the personal property described below to enforce a lien imposed on said property under the Wisconsin Self Storage Facility Act Statues (325704.90 Sections 1-35). The undersigned will sell at a public sale by competitive bidding on October 1st, 2024, at 12:00 PM on www.Lockerfox.com. Said property is at:
Stor-In-Dor, 200 S 18th Ave, Wausau, WI 54401

The following:

Name:	Unit:	Contents:
D. Hoeye	115	Furniture
Elizabeth Cappel	294	Full House

Purchases must be paid for at the time of purchase by cash only. All purchased items are sold as is, where is, and must be removed at the time of sale. Sale is subject to cancellation in the event of settlement between owner and obligated party.

Dated: 09-06-2024

Run: Sep 13, 2024 WANXLP

Public Sale

Your Source Public Notices for the latest...

Your Source Public Notices for the latest...

NOTICE OF BUDGET HEARING

Section 65.90(4)

Notice is hereby given to the qualified electors of the Wausau School District that the budget hearing on the proposed 2024-25 budget for the Wausau School District will be held in the Nicholson Board Room, Longfellow Administration Center, 415 Seymour Street, on Monday, September 23, 2024 at 6 p.m. in conjunction with the Annual School Meeting. The summary of the budget is printed below. Detailed copies of the proposed budget are available for inspection in the District's Business Office located at 415 Seymour Street between the hours of 8:00 a.m. and 3:00 p.m.

	AUDITED 2022-2023	UNAUDITED 2023-2024	BUDGET 2024-2025
FUND 10 - GENERAL FUND			
Beginning Fund Balance	33,263,864	32,280,272	30,250,202
Ending Fund Balance	32,280,272	30,250,202	28,762,771
REVENUES & OTHER FINANCING SOURCES			
General(Source 100)	0	0	0
Local Sources (Source 200)	29,185,515	25,515,111	21,418,089
Interdistrict Payments (Source 300 + 400)	2,196,786	2,210,758	2,214,407
Intermediate Sources (Source 500)	104,468	1,897	35,000
State Sources (Source 600)	73,560,135	79,756,593	86,217,175
Federal Sources (Source 700)	8,640,979	7,857,601	5,746,919
All Other Sources (Source 800 + 900)	1,154,503	858,111	1,510,000
TOTAL REVENUES & OTHER FINANCING SOURCES - FUND 10	114,842,386	116,200,071	117,141,590
EXPENDITURES & OTHER FINANCING USES			
Instruction (Function 100 000)	53,915,100	54,998,332	55,202,117
Support Services (Function 200 000)	43,767,188	43,512,457	43,673,684
Non-Program Transactions (Function 400 000)	7,178,693	8,226,657	8,257,139
Operating Transfer Out	10,964,997	11,492,676	11,496,081
TOTAL EXPENDITURES & OTHER FINANCING USES - FUND 10	115,825,978	118,230,122	118,629,021
FUND 27 - SPECIAL PROJECTS FUND: SPECIAL EDUCATION			
Beginning Fund Balance	0	0	0
Ending Fund Balance	0	0	0
REVENUES & OTHER FINANCING SOURCES	8,412,321	8,639,835	8,272,876
Operating Transfer In	10,883,132	11,407,536	11,407,536
EXPENDITURES & OTHER FINANCING USES	19,295,453	20,047,371	19,680,412
OTHER FUND 20 - SPECIAL PROJECTS FUND			
Beginning Fund Balance	1,558,054	1,625,962	1,635,274
Ending Fund Balance	1,625,962	1,635,274	1,635,274
REVENUES & OTHER FINANCING SOURCES	2,378,763	2,354,261	2,300,000
EXPENDITURES & OTHER FINANCING USES	2,310,855	2,344,949	2,300,000
FUND 30 - DEBT SERVICE FUND			
Beginning Fund Balance	11,792,418	14,560,765	8,554,640
Ending Fund Balance	14,560,765	8,554,640	8,102,024
REVENUES & OTHER FINANCING SOURCES	23,022,941	24,964,889	24,285,220
Operating Transfer In	81,865	85,140	88,545
EXPENDITURES & OTHER FINANCING USES	20,336,459	31,056,154	24,826,381
FUND 40 - Capital Projects			
Beginning Fund Balance	0	83,388,710	65,256,925
Ending Fund Balance	83,388,710	65,256,925	0
REVENUES & OTHER FINANCING SOURCES	102,153,562	23,504,940	1,500,000
EXPENDITURES & OTHER FINANCING USES	18,764,852	41,636,725	66,756,925
FUND 46 - Capital Projects			
Beginning Fund Balance	2,083,282	2,250,517	2,371,747
Ending Fund Balance	2,250,517	2,371,747	2,376,747
REVENUES & OTHER FINANCING SOURCES	167,235	121,230	5,000
Operating Transfer In	0	0	0
FUND 50 - FOOD-SERVICE FUND			
Beginning Fund Balance	2,133,761	2,484,131	2,486,162
Ending Fund Balance	2,484,131	2,486,162	2,419,325
REVENUES & OTHER FINANCING SOURCES	5,136,263	5,106,632	5,139,500
EXPENDITURES & OTHER FINANCING USES	4,785,893	5,104,601	5,206,337
FUND 73 - EMPLOYEE BENEFIT TRUST FUND			
Beginning Fund Balance	3,982,656	4,313,190	4,723,791
Ending Fund Balance	4,313,190	4,723,791	4,723,791
REVENUES & OTHER FINANCING SOURCES	3,287,422	2,619,719	2,269,997
EXPENDITURES & OTHER FINANCING USES	2,956,888	2,209,118	2,269,997
FUND 80 - COMMUNITY SERVICE FUND			
Beginning Fund Balance	542,602	538,874	487,619
Ending Fund Balance	538,874	487,619	0
REVENUES & OTHER FINANCING SOURCES	662,200	662,200	792,200
EXPENDITURES & OTHER FINANCING USES	665,928	713,455	1,279,819
TOTAL EXPENDITURES AND OTHER FINANCING USES			
GROSS TOTAL EXPENDITURES - ALL FUNDS	184,942,306	221,342,495	240,948,892
Interfund Transfers (Source 100) - ALL FUNDS	-10,964,997	-11,492,676	-11,496,081
Refinancing Expenditures - FUND 30	0	0	0
NET TOTAL EXPENDITURES - ALL FUNDS	173,977,309	209,849,819	229,452,811
PERCENTAGE INCREASE - NET TOTAL FUND EXPENDITURES FROM PRIOR YEAR	29.79%	20.62%	9.34%
PROPOSED PROPERTY TAX LEVY			
Fund 10 - General Fund	28,545,714	24,550,622	20,597,589
Fund 30 - Referendum Debt Service Fund	16,924,407	22,275,000	22,275,000
Fund 30 - Non-Referendum Debt Service Fund	2,102,619	2,104,070	2,098,765
Fund 80 - Community Service	662,200	662,200	792,200
TOTAL TAX LEVY	48,234,940	49,591,892	45,763,554
PERCENT CHANGE FROM PRIOR YEAR	1.93%	2.81%	-7.72%
EQUALIZED PROPERTY VALUE**	5,160,532,708	5,617,078,411	6,177,521,343
EQUALIZED TAX RATE PER THOUSAND	9.36	8.83	7.41

**Assumes 9.08% Change In Equalized Valuation for the 2023-24 Budget

ENERGY EFFICIENCY EXEMPTION - Phase 2
§ 121.91 (4) (o) Revenue Limit Exemption for Energy Efficiencies - Evaluation of the Energy Performance Indicators

Name of Qualified Contractor	Nexus Solutions		
Performance Contract Length (years)			10
Total Project Cost (including financing)			$11,512,434
Total Project Payback Period			8.8
Years of Debt Payments			10
Remaining Useful Life of the Facility			40
Prior Year Planned Expense Amount	Fiscal Year	2024	$1,040,675
Prior Year Related Expense Amount or CY debt levy	Fiscal Year	2024	$984,494
applied in	Fiscal Year	2024	$56,181
reported			$58,428

	Savings Reported for 2024		
Specific Energy Efficiency Measure or Products	**Project Cost Including Financing**	**Utility Cost Savings**	**Non - Utility Cost**
Controls Improvements - East High School	$55,055	$7,075	$141,956
Controls Improvements - Elementary Schools	$731,567	$7,344	$26,949
HVAC and Controls Improvements - Elementary Schools	$5,415,376	$20,852	$423,022
Controls Improvements - Horace Mann MS	$538,577	$3,848	$59,145
HVAC and Controls Improvements - John Muir MS	$164,565	$4,415	$36,201
Controls Improvements - Maintenance Building	$73,306	$392	$17,175
HVAC and Controls Improvements - West High School	$1,254,323	$9,645	$125,456
Electrical Infastructure Improvements	$3,279,666	$4,857	$546,546
Entire Energy Efficiency Totals	$11,512,434	$58,428	$1,376,448

ENERGY EFFICIENCY EXEMPTION - Phase 3
§ 121.91 (4) (o) Revenue Limit Exemption for Energy Efficiencies - Evaluation of the Energy Performance Indicators

Name of Qualified Contractor	Nexus Solutions		
Performance Contract Length (years)			10
Total Project Cost (including financing)			$11,677,838
Total Project Payback Period			12.0
Years of Debt Payments			10
Remaining Useful Life of the Facility			40
Prior Year Planned Expense Amount	Fiscal Year	2024	$1,146,935
Prior Year Related Expense Amount or CY debt levy	Fiscal Year	2024	$1,117,975
Utility Savings applied in Prior Year to Debt	Fiscal Year	2024	$28,960
Sum of reported Utility Savings to be applied to Debt			$30,118

	Savings Reported for 2024		
Specific Energy Efficiency Measure or Products	**Project Cost Including Financing**	**Utility Cost Savings**	**Non - Utility Cost**
Building Envelope Improvements	$ 1,526,742	$ 3,303	$ 88,048
Heating System Upgrades	$ 801,304	$ 10,538	$ 36,174
Technology and Controls Upgrades	$ 3,785,895	$ 8,898	$ 490,409
Ventilation and IAQ Improvements	$ 5,563,898	$ 7,379	$ 302,665
Entire Energy Efficiency Project Totals	$ 11,677,838	$ 30,118	$ 917,297

Jennifer Paoli, Clerk
Wausau School District
WI-40245432
WNAXLP

WDNR FYR Site Inspection Interview Response

“Generally, it appears that the site is adequately responding to EPA and DNR's feedback regarding assessing potential migration pathways and receptors to work to protect human health and the environment. Specifically, the DNR is supportive of the ongoing vapor assessment work within the Marathon Electric (west bank) buildings. The DNR has concerns about increasing contaminant trends in groundwater post decommissioning of extraction well (EW) 1. Additionally, the DNR understands that there have been security concerns around access to the stairwell adjacent to EW-1. The DNR understands that the City of Wausau is considering potential redevelopment of the east bank portion of the site and is supportive of redevelopment and will provide feedback as needed on maintaining protective conditions for any future redevelopment that may occur. The DNR looks forward to collaborating with the EPA to request PFAS evaluation and/or assessment at the site. The DNR has been kept informed and updated as necessary and participates in monthly site update calls between EPA, the responsibly parties and their applicable consultants. The DNR has not been contacted by the community with any concerns about the project.”