From:	Dombrowski, Frank J <frank.dombrowski@wecenergygroup.com>
Sent:	Thursday, June 29, 2023 10:50 AM
To:	Werner, Leah
Cc:	Krueger, Sarah E - DNR; Lauridsen, Keld B - DNR; 'adrienne.korpela@jacobs.com'; 'staci.goetz@ramboll.com'; Abigail Small (ASMALL@ramboll.com); Julie A Zimdars (Julie.Zimdars@ramboll.com); Luke, Glenn R; Klatt, David/CHC; DNR RR NER
Subject:	Green Bay SSWP Addendum Rev 1 and RTC for your review
Attachments:	2023-06-29 SSWP Addendum Green Bay MGP Rev 1.pdf; 2023-06-29 SSWP Addendum Green Bay MGP Rev 1_Redline Text.pdf

Good Morning Leah,

Attached please find WPSC's response to comments and Rev 1 of the RI SSWP Addendum for the former Green Bay, WI MGP site. We have also included a redline/strike out version of the document for your convenience. Please feel free to contact me if there are any questions or if additional information may be needed.

Thanks and have a great Holiday weekend.

Frank Dombrowski
Principal Environmental Consultant

WEC Energy Group – Business Services
Environmental Dept. - Land Quality Group
333 W. Everett St., A231
Milwaukee, WI 53203
Office: (414) 221-2156
Cell: (414) 587-4467
Fax: (414) 221-2022

Serving WEC Energy Group, We Energies, Wisconsin Public Service, Michigan Gas Utilities, Minnesota Energy Resources, Peoples Gas and North Shore Gas

Wisconsin Public Service Corporation
P.O. Box 19001
Green Bay, WI 54307-9001
www.wisconsinpublicservice.com

June 29, 2023

Ms. Leah Werner
Project Manager
United States Environmental Protection Agency
77 W. Jackson Boulevard
Chicago, Illinois 60604-3590

RE: Response to Comments and Transmittal of Site Specific Work Plan Addendum No. 1, Revision 1
Green Bay Former Manufactured Gas Plant
Green Bay, Wisconsin
Wisconsin Public Service Corporation
CERCLA Docket No. V-W-06-C-847, CERCLIS ID – WIN000509948

Dear Ms. Werner:

Wisconsin Public Service Corporation (WPSC) is providing this letter response to the United States Environmental Protection Agency (USEPA) comments received on June 21, 2023 on the Site Specific Work Plan Addendum No. 1, Revision 0, submitted to USEPA on May 16, 2023 for the Former Green Bay Manufactured Gas Plant, Green Bay, Wisconsin.

For ease of review, USEPA comments are presented below in italics, followed by responses developed for WEC Business Services (WBS). A revised Site Specific Work Plan Addendum No. 1, Revision 1 (Work Plan) dated June 30, 2023 is also included.

SPECIFIC COMMENTS

1. *Soil Vapor Sampling, Page 6, 1st Paragraph: EPA recognizes that the building is currently unoccupied, has no operational HVAC system, and the current conditions may not be representative of future building redevelopment plans. Future investigation work related to the VI pathway is required once there's an operational HVAC system and the final building redevelopment plans are known, regardless of the results of the proposed sampling.*

WPSC Response: Given that work performed at this time will not close out data gaps related to the VI pathway and future investigation work will be needed to address the VI pathway once redevelopment plans and construction/engineering/renovation specifications are known, WPSC recommends detailed assessment of the VI pathway would most effectively be performed at that time and has removed the soil vapor and indoor air sampling from the existing work plan.

2. *Soil Vapor Sampling, Page 6, 2nd paragraph: If the existing sub-slab and soil gas sampling ports are found to not pass the chemical leak test or found to be otherwise non-functional, they should be properly repaired or abandoned and new ports shall be installed as close to the existing ports as possible, and then sampling activities should be completed as specified.*

WPSC Response: See Response to Comment 1. Sub-slab and soil gas sampling have been deferred to a later date and therefore removed from the work plan so this comment is no longer applicable.

3. *Soil Boring Locations, Page 7: Consideration should be given to an additional step out location southeast of proposed boring SB-718. If SB-718 shows impacts, an additional soil boring at the southeast corner of the intersection of N. Madison and Elm would be required to achieve a lateral delineation in this area.*

WPSC Response: Upon further review of utilities in the southeast corner of the parking lot, the location of boring SB-718 has been moved into the roadway to allow for appropriate utility offsets for the safe installation of the boring. Further, WPSC acknowledges that if impacts are identified at SB-718, additional step-out boring(s) would be needed. However, the utility network is dense at this intersection, and WPSC does not own the parcels to the south and east of the roadways. Access agreement(s) would need to be negotiated to install borings on those parcels. WPSC intends to proceed with the initial boring in the roadway. If contingent borings are required, USEPA will be notified, and access agreements will be negotiated at that time. Installation of contingent boring(s), if necessary, will be performed as part of a second drilling mobilization.

Note that minor adjustments were made to the location of two other borings (SB-716 and SB-717) between Revision 0 and Revision 1 due to a refined understanding of the utilities in N. Madison Street. Minor adjustments were also made to the location of borings SB-708, SB-710, and SB-713 between Revision 0 and Revision 1 so that the borings are installed on WPSC-owned property and not on third-party (Harbinger Corporation) property. Installation on WPSC-owned property reduces installation constraints, including work hours and restoration requirements imposed by the third-party property owner. Boring locations may be field modified as needed based on the field-identified locations of utilities.

4. *Well Installation, Page 8, 3rd bullet: Each well should be constructed with a sump that is a minimum of 2 feet long to allow for the accumulation of mobile NAPL if present. The top of the sump (base of the screen) should be placed at the capillary barrier where additional downward migration of NAPL is likely impeded and the sump should extend below this and the annular space around the sump should not be sand packed, but seated with grout or bentonite. For example, cross-section D-D' suggests the surface of the "clay" beneath the "fissured clay" may represent such a barrier in some areas.*

WPSC Response: The text has been modified to indicate that the deeper well pairs will be installed with two-foot sumps with the top of the sump at the fissured and competent clay interface. However, WPSC does not support installing two-foot sumps at the capillary interface between the fill unit and the fissured clay unit in the shallow wells for the following reasons:

- The fill thickness (<8 feet) limits the available space for placing the well with an appropriate annular seal.
- A two-foot sump would require drilling into the clay unit which may potentially cause cross-contamination/screening between the fill and clay units. The primary goal of the groundwater investigation is to determine if the contaminant mass contributing to groundwater impacts is predominantly related to principal threat waste in clay fractures or remaining principal threat waste in the fill unit. The inclusion of sumps with the shallow groundwater wells poses too much of a risk of spreading contamination across hydrostratigraphic units in the shallow wells. However, sumps may be installed on shallow

wells if field observations of oil-wetted/oil-coated material above the unit interface indicate that sumps can be installed without risking cross-contamination of the two units.

- Adjacent to locations SB-712 and SB-706, existing wells (MW-401AR and MW-403R) are currently screened across both hydrostratigraphic units. At these locations, if oil-wetted/oil-coated material is observed near the fill-clay interface, the existing adjacent monitoring well that is screened across both units will be used to monitor DNAPL accumulation. If the adjacent deep clay well with a sump (which is hydraulically isolated from the fill) accumulates DNAPL as well, then it will be inferred that the fractured clay is a source of the DNAPL. These results, in combination with the well screened in the overlying fill, the cross-unit well, and the visual logging of the soil boring to document the presence of oil-wetted/oil-coated material will be considered collectively to evaluate the source of groundwater impacts.

5. *Groundwater Sampling, Page 9: Please include a plan for the regular gauging of newly installed monitoring wells for the presence and thickness of any LNAPL and DNAPL that may accumulate within these installations. Please indicate how long these new installations are anticipated to remain in place.*

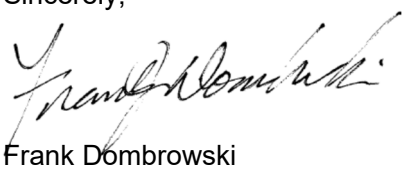
WPSC Response: A section on Observation of DNAPL Accumulation has been added to page 8 of the Work Plan. Following installation and development of new wells, the thickness of DNAPL in the wells (if present) will be measured on a consistent monthly basis for three months, using a weighted cotton string or interface probe. After three months, the gauging frequency will be reduced to semi-annually to coordinate with the planned semi-annual groundwater monitoring events. A minimum of four semi-annual monitoring events are anticipated to take place before a decision is made regarding the long term needs for any additional monitoring wells.

6. *Table 4, Sample Type – Soil Gas: Add naphthalene to the list of analytes in the Parameter column to be consistent with the text, Section "Soil Vapor Sampling," that indicates sub-slab and soil gas samples are to be analyzed for BTEX, naphthalene, and 1,2.4-trimethylbenzene.*

WPSC Response: See Response to Comment 1. Sub-slab and soil gas sampling have been removed from the Work Plan so this comment is no longer applicable.

If you have any questions, please don't hesitate to contact me at (414) 221-2156 or via email at frank.dombrowski@wecenergygroup.com.

Sincerely,



Frank Dombrowski
Principal Environmental Consultant
WEC Business Services – Environmental Dept.

Enclosures: Site Specific Work Plan Addendum No. 1, Revision 1

For distribution to:
Ms. Sarah Krueger, WDNR (via email)
Mr. Keld Lauridsen, WDNR (via email)
WDNR Northeast Region (via email to DNRRRNER@wisconsin.gov)
Ms. Adrienne Korpela, Jacobs (via email)
Mr. Dave Klatt, Jacobs (via email)
Dr. Staci Goetz, Ramboll (via email)

RAMBOLL

ENVIRONMENT
& HEALTH

MEMO

To: Glenn Luke – WEC Energy Group

From: Abby Small and Staci Goetz – Ramboll

cc: Frank Dombrowski - WEC Energy Group

Re: Site Specific Work Plan Addendum No. 1, Revision 1
Green Bay Former Manufactured Gas Plant, Green Bay, Wisconsin
Wisconsin Public Service Corporation

June 29, 2023

Ramboll
234 W. Florida Street
Fifth Floor
Milwaukee, WI 53204
USA

T 414-837-3607
F 414-837-3608
www.ramboll.com

Ref. 1940103365

BACKGROUND AND OBJECTIVE

Ramboll has prepared this Site Specific Work Plan, Addendum 1 (SSWP Addendum) on behalf of Wisconsin Public Service Corporation (WPSC) for a portion of the upland operable unit (OU1) of the Green Bay Former Manufactured Gas Plant (MGP) (Figure 1). This investigation is to augment information collected under the USEPA-approved Site-Specific Work Plan (SSWP) Revision 2 (NRT, 2015a and NRT, 2015b) and the USEPA-approved VI Technical Memorandum Revision 1 (NRT, 2016b) to support delineation of the nature and extent of MGP impacts at the Site.

The former WPSC Green Bay MGP (Site) is one of six former MGP sites addressed through the Administrative Order on Consent (AOC) and Statement of Work (SOW), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Docket No. V-W-06-C-847, dated May 5, 2006. The Site is currently enrolled in the United States Environmental Protection Agency (USEPA) Superfund Alternative Approach (SAA) program. Under the AOC/SOW, a generic approach to addressing the six sites is to be developed (the Multi-Site approach), describing the procedures and tasks to be followed to complete the Remedial Investigation/Feasibility Study (RI/FS) at the former Green Bay MGP facility, which, in turn, may be modified to account for site-specific differences that may exist at a particular location.

To facilitate project progress, the site has been divided into a sediment operable unit (OU) and an upland OU. The upland OU (OU1) extends from the top slope of the East River riverbank, landward and includes soil, groundwater, and potential vapor. The sediment OU (OU2) extends from the top slope of the East River riverbank, riverward and includes channel sediments, underlying clay, and surface water. The upland OU1 consists of three parcels, the largest of which is owned by WPSC. The former MGP structures were primarily located on the southern part of this parcel (Figure 2). In relation to the upland OU1, the WPSC General Office and Annex Buildings are located northwest, the KI Convention center is located southwest, the Associated Bank Office Building is located south and parking areas owned by Harbinger Development LLC and Associated Bank National Association adjoin the Site to the south and east, respectively (Figure 3). For the purposes of this document, "Site" refers to areas where contamination related to the former MGP has been discovered through investigation activities completed to-date and nearby areas necessary for implementation of the response

action inclusive of both the upland OU1 and the sediment OU2. For the purposes of this work plan, the upland OU1 has been further subdivided into two areas as follows:

- "North Parking Lot" refers to the portion of the Site located north of Utility Street/Utility Court. This portion of the site is bounded by the WPSC Annex Building to the west, Utility Court/Utility Street to the south, and the Fox River and East River to the north and east. The North Parking Lot is currently undergoing an Early Removal Action (ERA) as described below.
- "South Parking Lot" refers to the portion of the Site south of Utility Street/Utility Court inclusive of the roadways. The South Parking lot consists of two parcels and the adjacent roadways. The largest parcel is owned by WPSC and used for parking while the smaller parcel is owned by Harbinger Corporation and is used as parking for the Associated Bank Office Building to the south This portion of the Site is bounded by North Jefferson Street to the west, Utility Court/Utility Street to the north, North Madison Street to the East and Elm Street to the south. The former MGP structures were primarily located in this area (Figure 3).

The USEPA-approved SSWP Revision 2 was implemented in October 2015 and February 2016 to characterize the extent of MGP impacts in the subsurface soil and groundwater; and, evaluate vapor intrusion pathways. Supplemental vapor intrusion and indoor air sampling were implemented between August and December 2016 in accordance with the USEPA-approved VI Technical Memorandum Revision 1. An RI data summary package was submitted to USEPA for discussion on February 10, 2017 (NRT, 2017). An Upland Remedial Investigation Data Summary Report (Ramboll, 2020b) was submitted to USEPA in September 2020. USEPA provided comments on December 7, 2020.

In September 2022, an Early Removal Action Work Plan (Ramboll, 2022) was submitted to USEPA to address soil impacts in the North Parking Lot in preparation for potential redevelopment for residential use to expedite the RI/FS process. The ERA construction consists of removal and off-site disposal of soil identified as principal threat waste, removal and off-site disposal of the top four feet of surface soil in the main parking lot, and removal and off-site disposal of the top two feet of surface soil in the Riverwalk area. All areas will be backfilled and clean soil will be imported to address the direct contact pathway. Work began November 2022 and is ongoing with an anticipated completion date of July 2023.

Based on a review of site data collected to date, , supplemental RI activities are proposed to address remaining data gaps for the site and close out the RI phase of work. Remaining data gaps are further described below and include uncertainty regarding principal threat waste potentially remaining in place in the South Parking Lot.

CURRENT DATA GAPS

In addition to the 2023 ERA, soil remediation was undertaken in 2003 with the objective of removing significant soil impacts and source areas. The selected remedy was source area excavation with medium temperature thermal desorption. Details of the remedial work were summarized in Section 4 of the Completion Report (NRT, 2014).

Excavation and decommissioning of former MGP structures and piping removed approximately 30,075 tons of soil and debris from four areas (Figure 3) that included the following:

- Area 1 (South Parking Lot) - included the 300,000 ft^3 gas holder near Elm Street
- Area 2 (South Parking Lot) - included the former tar well, oil tanks, purifiers, and small gas holders

- Area 3 (North Parking Lot) – included the suspected discharge area of the former concrete channel to the river
- Area 4 (North Parking Lot) – included an area along the East River bank near well MW-410 (elevated cyanide)

In addition, former MGP and sewer piping was also excavated and disposed as shown on Figure 3.

Excavation limits were determined by visual inspection because this was a source area removal effort. The main purpose for excavation was to remove former MGP structures (pipes, channels, tar well, etc.) considered to be sources of the tar impacted material. The extent of the excavation areas is shown on Figure 3. Figures 4a through 4c show the South Parking Lot and remediated areas in cross-section view. Areas 3 and 4 in the North Parking Lot were re-excavated as part of the 2023 ERA and are not further described below. A summary of the South Parking Lot 2003 remedial excavation (Area 1, Area 2, and the former piping) is provided below.

Table A. Excavation Volumes and Disposal Summary

Site Area/Feature	Depth Excavated ft. bgs (approx.)	Tons Excavated	Backfill Material	Final Disposal
Area 1	6-8	3,484	Imported Sand; Treated Soil	Excess soil thermally treated and debris disposed at Hickory Meadows
Area 2 & Tar Well	Tar Well: 16-22, Other: 8-14	14,461	Treated Soil	

Area 1

Excavation depths ranged from 6 to 8 feet bgs around the former 300,000 ft^3 gas holder near Elm Street and approximately 3,484 tons of MGP impacted soil was excavated from Area 1 (Figure 3) and thermally treated. Approximately 90 to 95 percent of the concrete base of the gas holder was removed. Due to existing utilities and structures, a small portion of the base was left in place but other MGP conveyance piping, sewers, and impacted soil were excavated.

Area 2

The former tar well and subsurface foundations/structures of oil tanks, purifiers, small gas holders, and additional MGP conveyance piping and sewers were excavated from Area 2 (Figure 3). The former 50-foot diameter tar well extended approximately 16 - 20 feet bgs and was filled with tar-impacted soil and debris. An additional gas holder (possibly the remains of a 15,000 ft^3 gas holder) filled with similar material was also encountered. These structures, the material within them, and adjacent soils were excavated and thermally treated or transported for landfill disposal. Former MGP piping or structures and areas of impacted soils were excavated south of the tar well. More than 14,460 tons of MGP impacted soil was excavated from Area 2 and thermally treated. Excavation depths ranged from 16 - 22 feet bgs within the tar well, 10 - 12 feet bgs in the 15,000 ft^3 gas holder area, and 8 - 14 feet bgs in surrounding areas.

Former Piping

Former MGP piping, abandoned gas lines, and sewer piping were excavated to depths of 5 to 10 feet bgs. Many former MGP conveyance pipes and sewers were excavated according to plan but others were excavated as encountered during excavation (Figure 3). All MGP related piping, sewers, and structures were excavated as part of the remediation effort as discussed in the Completion Report (NRT, 2014). Where inaccessible or at excavation extents, pipes were abandoned in place and filled with concrete grout to

prevent preferential migration of groundwater. Tar-impacted conveyance piping, sewers, and structures were removed and segregated for disposal at an off-site landfill while the surrounding soils were thermally treated.

Excavations did not proceed laterally or vertically to remove tar or tar staining that observed in clay fractures or silt seams as agreed upon with Wisconsin Department of Natural Resources (WDNR) in the 2003 Remedial Action Work Plan (NRT, 2003). The USEPA noted in the May 29, 2020 comments on the Pre-Design Investigation Work Plan – Revision 0 (Ramboll, 2020a), that:

> *The extent of subsurface NAPL in the area of the former MGP structures south of the Utility Court are not known. Based on a review of Table 12 from the 2003 Remedial Action Documentation Report, the side wall and bottom samples from the four excavation areas still have exceedances of screening levels. For example, Sample EW 2-4 (7 ft) has detections of benzene at 8,900 ppb, benzo(a)pyrene at 11,000 ppb, and naphthalene at 95,000 ppb all of which are above screening levels. Additionally, the statement on page 15 of the 2020 PDI WP that excavations did not proceed laterally or vertically to remove tar that occurred in clay fractures or "silt seams", indicates there may be NAPL that extends laterally from the excavation areas in silt seams. The extent of NAPL does not appear to be defined.*

This work plan aims to address the aforementioned comment and define the horizontal and vertical limits of potential principal threat waste beyond the previous removal areas.

Additionally, following the 2003 excavation, three monitoring wells (MW-401AR, MW-402R, and MW-403R, Figure 5) were re-installed within the backfilled areas with screens that partially span the remedial excavation backfill and partially span the clay unit. Existing monitoring wells MW-405A and MW-404 are also sampled on a semi-annual basis to monitor groundwater in the South Parking Lot (Figure 5) and are screened across the fill and clay. Figure 4a through Figure 4c depict the remedial excavation, lithology and monitoring wells in the South Parking Lot in cross-section view. Since the 2003 remedial action, dense non-aqueous phase liquid (DNAPL) has been periodically detected in wells MW-401AR and MW-405A. Groundwater concentrations in the cross-unit screened wells MW-402R, MW-403R, and MW-404 have shown ongoing benzene and naphthalene groundwater concentrations exceeding Risk Assessment Framework SLs (Table 1). It is unknown whether the source of the contaminant mass contributing to groundwater impacts and the ongoing DNAPL in wells is predominantly related to principal threat waste in clay fractures below the remedial excavation backfill or principal threat waste outside the excavation areas that has re-affected the backfill. This work plan aims to better define the source of the ongoing groundwater impacts in the South Parking Lot.

Based on these identified data gaps, the primary objectives of this SSWP is to delineate the extent of remaining principal threat waste in the South Parking Lot including:

- Determine the horizontal and vertical limits of principal threat waste beyond the previous removal areas, including in Elm Street and Madison Street.
- Determine if principal threat waste remains within Excavation Area 1 and 2 or if principal threat waste has re-affected the backfill placed during the 2003 remedial action.
- Better define the source of the ongoing groundwater impacts in the South Parking Lot. Determine if the contaminant mass contributing to groundwater impacts is predominantly related to principal threat waste in clay fractures or remaining principal threat waste in the fill unit.

PROPOSED SUPPLEMENTAL SAMPLING ACTIVITIES

Based on the discussion above, additional investigation will be performed to complete delineation of the nature and extent of principal threat waste in the South Parking Lot. The supplemental RI activities described below will be performed in accordance with the site-specific information included in the SSWP Revision 2 and the Multi-Site Field Sampling Plan (FSP) – Revision 4 (IBS, 2008), except where noted.

Soil Boring and Sampling

For the purposes of this investigation, a definition of principal threat waste consistent with the definition used in the North Parking Lot Early Removal Action Work Plan (Ramboll, 2022) will be utilized and will be defined as soil that meets one or more of the following metrics:

- Non-aqueous phase liquid (NAPL) identified as separated liquid.
- Oil-coated or oil-wetted soil.
- Highly adsorbed phase concentrations of constituents of concern (COCs) exceeding a lifetime incremental cancer risk (CR) of 10^{-3} or a hazard index (HI) of 10 under applicable, residential land use assumptions.

Soil Boring Locations

Soil borings will be installed at the 18 primary soil boring locations shown on Figure 5. Contingent soil boring (SB-714) will only be installed if principal threat waste (as defined above) is identified at primary boring SB-717. USEPA will be notified if the contingent boring is needed based on field observations or laboratory analytical results. Seven primary boring locations are located within the 2003 excavation area to vertically delineate the potential presence of principal threat waste in clay fractures and determine if present, whether the principal threat waste has re-affected the backfill placed during the 2003 remedial action. Eleven primary boring locations and the single contingent boring location are located exterior to the previous excavation area to laterally delineate the horizontal limits of principal threat waste beyond the previous removal areas. Soil boring locations were also limited by the presence of utilities throughout the parking lot and streets and shown on Figure 5. Locations may be field modified as needed based on the field-identified locations of utilities.

If principal threat waste is identified at SB-718, additional step-out boring(s) may be needed. However, the utility network is dense at the intersection of Elm Street and N. Madison Street, and WPSC does not own the parcels to the south and east of the roadways. Access agreement(s) will need to be negotiated to install borings on those parcels. WPSC intends to proceed with the initial boring in the roadway. If contingent borings are required, USEPA will be notified, and access agreements will be negotiated at that time. Installation of contingent boring(s) will be performed as part of a second drilling mobilization.

Soil borings will be advanced using a direct-push method. Unless otherwise noted, sampling will be continuous, to define the presence/absence and vertical extent of affected soil at each boring location and extend a minimum of 5-ft into the confining clay layer. For the purpose of guiding investigation fieldwork, the vertical and horizontal extent of principal threat waste will be considered delineated if:

- no oil-coated or oil-wetted observations are present for two consecutive sample intervals (e.g., 4-feet); and
- for the evaluation of risk criteria, a Residential CR is less than 10^{-3} and Residential HI is less than 10 within one sample interval.

All borings advanced as part of the investigation will be continuously logged, following Multi-Site standard SOP SAS-05-02, the presence of fill material, moisture content, photoionization detector readings, the nature of each geologic unit encountered, and visual and olfactory observations indicating the presence of NAPL (e.g., oil-coated, or oil-wetted). Soil boring locations will be recorded per Multi-Site SOP SAS-03-03, and will be abandoned following the methods described in Multi-Site SOP SAS-05-05. Field equipment will be calibrated prior to use, as required by Multi-Site SOP SAS-02-01 from the Multi-Site FSP.

Subsurface soil samples will be collected from all delineation borings as follows:

- For borings that show no visual, olfactory, or PID indication of impacts, one sample will be collected in the upper four feet to characterize direct contact risks, one sample will be collected within the 2-foot interval above the clay confining layer, and one sample will be collected from the 2-foot interval within the clay confining layer immediately below the fill unit.
- For borings that indicate the presence of contamination (through visual, olfactory, or PID indication), a sample of impacted material will be collected. A second sample will also be collected below the interval(s) of potential MGP impacts, to document vertical extent. Soils will be collected in both fill and clay units as encountered. A third sample will be collected from the upper four feet to characterize direct contact risks.

All soil samples will be submitted to a Wisconsin certified laboratory (Pace Analytical of Green Bay, Wisconsin or EurofinsTest America, Chicago, IL) for COPCs identified in the SSWP Revision 2 including:

- Petroleum volatile organic compounds (PVOCs) via USEPA Method 8260 (Benzene, Ethylbenzene, Toluene, Total Xylenes, 1,2,4-Trimethylbenzene)
- Polycyclic aromatic hydrocarbons (PAHs) via USEPA Method 8270 (1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenz(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene)
- Total Metals via USEPA Method 6020A (Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver) and total Mercury via USEPA Method 7471.
- Total cyanide via USEPA Method 9012B

A sampling and analysis plan summary is presented in Table 2. Data will undergo data validation by a third-party data validator.

Quality control (QC) samples will be collected as required by Multi-Site FSP SOP SAS-04-03. Samples will be labeled and packaged in accordance with Multi-Site FSP SOP SAS-03-01 and shipped using chain-of-custody procedures described in Multi-Site FSP SOP SAS-03-02. Equipment will be decontaminated after use in accordance with Multi-Site FSP SOP SAS-04-04.

Well Installation and Groundwater Sampling

Well installation

Following soil boring installation, five pairs of monitoring wells will be installed as shown on Figure 5. At each well pair, one well will be fully screened within the clay unit just below the fill and one well will be fully screened within the fill unit. The objective of positioning well screens specific to each unit is to understand

contaminant mass and potential migration within each of the hydrostratigraphic/lithologic units[1]. Groundwater samples will be collected from both wells to determine if the contaminant mass contributing to groundwater impacts observed to date in the cross-unit screened wells is predominantly related to principal threat waste in clay fractures or residual principal threat waste in the fill unit. Two well pairs will be located to the south and west of the previous remedial area, two well pairs will be located within the previous remedial area, and one well pair will be located adjacent to the former piping removal area.

Wells will be constructed according to Multi-Site SOP SAS-05-03, and threaded joints will be tightened per manufacturer requirements. A 2-inch inner diameter poly vinyl chloride well with a 0.01-inch factory slotted screen will be installed, and the annular space around the wells will be backfilled with filter pack, bentonite seal, and finished with a steel flush mount cover. The overall depth of the well and the corresponding length of well screen will be determined in the field by the Ramboll field personnel, based on subsurface information collected during soil boring advancement. The following guidelines will be considered when selecting screen placement and length:

- A minimum 3-foot annular seal is preferred; however, a shorter seal length (minimum 2-feet) is acceptable if dictated by field conditions.
- Monitoring well screens will be 5 feet in length. Shorter screens may be considered if dictated by field conditions.
- In each well pair, the bottom of the effective screen interval (i.e., lowermost sand pack) for the shallow well shall be placed approximately 1 foot above the fill-clay interface to limit the potential for cross contamination between the two lithological units. In each well pair, the top of the effective screen (i.e., uppermost sand pack) for the deep well shall be placed approximately 2 feet below the fill-clay interface.
- Each deep well where oil-wetted/oil-coated clay was observed will be constructed with a sump that is a minimum of 2 feet long to allow for the accumulation of mobile DNAPL if present. The top of the sump (base of the screen) will be placed at the interface of the fissured clay (if present) and competent clay. The annular space around the sump will be seated with grout or bentonite. A minimum of 6” of filter pack will be placed between the bentonite and well screen to prevent smearing of bentonite near the well screen. Locations without oil-wetted/oil-coated observations will not have a sump installed.
- Sumps will not be installed at the capillary interface between the fill unit and the fissured clay unit in the shallow wells for the following reasons:
    - The expected fill thickness (<8 feet) limits the available space for placing the well with an appropriate annular seal.
    - A two-foot sump would require drilling into the clay unit which may potentially cause cross-contamination/screening between the fill and clay units. The primary goal of the groundwater investigation is to determine if the contaminant mass contributing to groundwater impacts is predominantly related to principal threat waste in clay fractures or residual principal threat waste in the fill unit. The inclusion of sumps with the shallow groundwater wells poses a risk of cross contaminating across hydrostratigraphic units in the shallow wells. However, sumps may be installed on shallow wells if field observations of oil-wetted/oil-coated material above the unit interface indicate that sumps can be installed without causing cross-contamination of the two units.

- Adjacent to locations SB-712 and SB-706, existing wells (MW-401AR and MW-403R) are currently screened across both hydrostratigraphic units. At these locations, if oil-wetted/oil-coated material is observed near the fill-clay interface, the existing adjacent monitoring well that is screened across both units will be used to monitor DNAPL accumulation. If the adjacent deep clay well with a sump (which is hydraulically isolated from the fill) accumulates DNAPL as well, then it will be inferred that the fractured clay is a source of the DNAPL. These results in combination with the fill well, the cross-unit well, and the visual logging of the soil boring will be considered to evaluate the source of groundwater impacts.

Well Development

Following installation, wells will be developed in accordance with Multi-Site SOP SAS-05-04. Wells will be developed using an electric submersible pump for surging and pumping. Field parameters—specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential, and turbidity—will be measured during development. Wells will be considered developed when field parameters meet the stabilization criteria detailed in Multi-Site SOP SAS-05-04.

Groundwater Sampling

Each well will be sampled for groundwater COPCs, using low-flow sample techniques, in accordance with Multi-Site SOP SAS-08-02. Groundwater sampling will be conducted within two months following well installation. Field parameters—specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential, and turbidity—will be measured using a flow-through cell. Samples will be submitted to Pace of Green Bay, Wisconsin for groundwater COPCs identified in the SSWP Revision 2 including:

- PVOCs including BTEX, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene via USEPA Method 8260
- PAHs via USEPA Method 8270 (1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenz(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene)
- Total Metals via USEPA Method 6020A (Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver) and total mercury via USEPA Method 7471.
- Nitrate and Nitrite via USEPA method 353.2
- Sulfate via USEPA Method 300

A sampling and analysis plan summary is presented in Table 2. Data will undergo data validation by a third-party data validator.

If the schedule allows, sampling of the newly installed wells will be conducted at the same time as semi-annual sampling of existing wells.

Quality control (QC) samples will be collected as required by Multi-Site FSP SOP SAS-04-03. Samples will be labeled and packaged in accordance with Multi-Site FSP SOP SAS-03-01 and shipped using chain-of-custody procedures described in Multi-Site FSP SOP SAS-03-02. Equipment will be decontaminated after use in accordance with Multi-Site FSP SOP SAS-04-04.

The need for additional sampling at these wells will be evaluated once the results of the initial round of sampling have been received. A minimum of four semi-annual groundwater sampling events is anticipated. A recommendation for either abandonment or incorporation into the long-term monitoring network will be provided in the Remedial Investigation Report.

Observation of DNAPL Accumulation

Following installation and development of new wells, the thickness of DNAPL in the wells (if present) will be measured on a consistent monthly basis for three months, using a weighted cotton string or interface probe. After three months, the gauging frequency will be reduced to semi-annually to coordinate with the planned semi-annual groundwater monitoring events.

Schedule and Reporting

Soil boring and monitoring well installation is proposed to be completed in late July 2023 following USEPA-approval of this work plan. Results of the investigation will be incorporated into a Remedial Investigation Report, which will be submitted by the end of 2023.

References

Integrys Business Support, 2008. Multi-Site Field Sampling Plan, Revision 4, Remedial Investigation/Feasibility Study, Former Manufactured Gas Plant Sites, CERCLA V-W-06-C-847. September.

ITRC, 2007 *Vapor Intrusion Pathway: A* Practical Guideline. January.

NRT, 2003. Remedial Work Plan, Former Manufactured Gas Plant Site, Green Bay, Wisconsin, February.

NRT, 2014. Completion Report (Revision 0), Former Green Bay MGP, Green Bay, Wisconsin. June 17.

NRT, 2015a, Site Specific Work Plan Revision 2, Green Bay Former MGP, Green Bay, Wisconsin. March 20.

NRT, 2015b, Site Specific Work Plan Revision 2, Modified October 2015, Green Bay Former MGP, Green Bay, Wisconsin. October 9.

NRT, 2016a, Vapor Intrusion Investigation Decision Matrix. January 15.

NRT, 2016b, Technical Memorandum No. 1 – Rev1, Supplemental RI Activities – VI Evaluation, Green Bay Former MGP, Green Bay, Wisconsin. July 15.

Ramboll, 2020a. Pre-Design Investigation Work Plan, Former green Bay Manufactured Gas Plant. March 16.

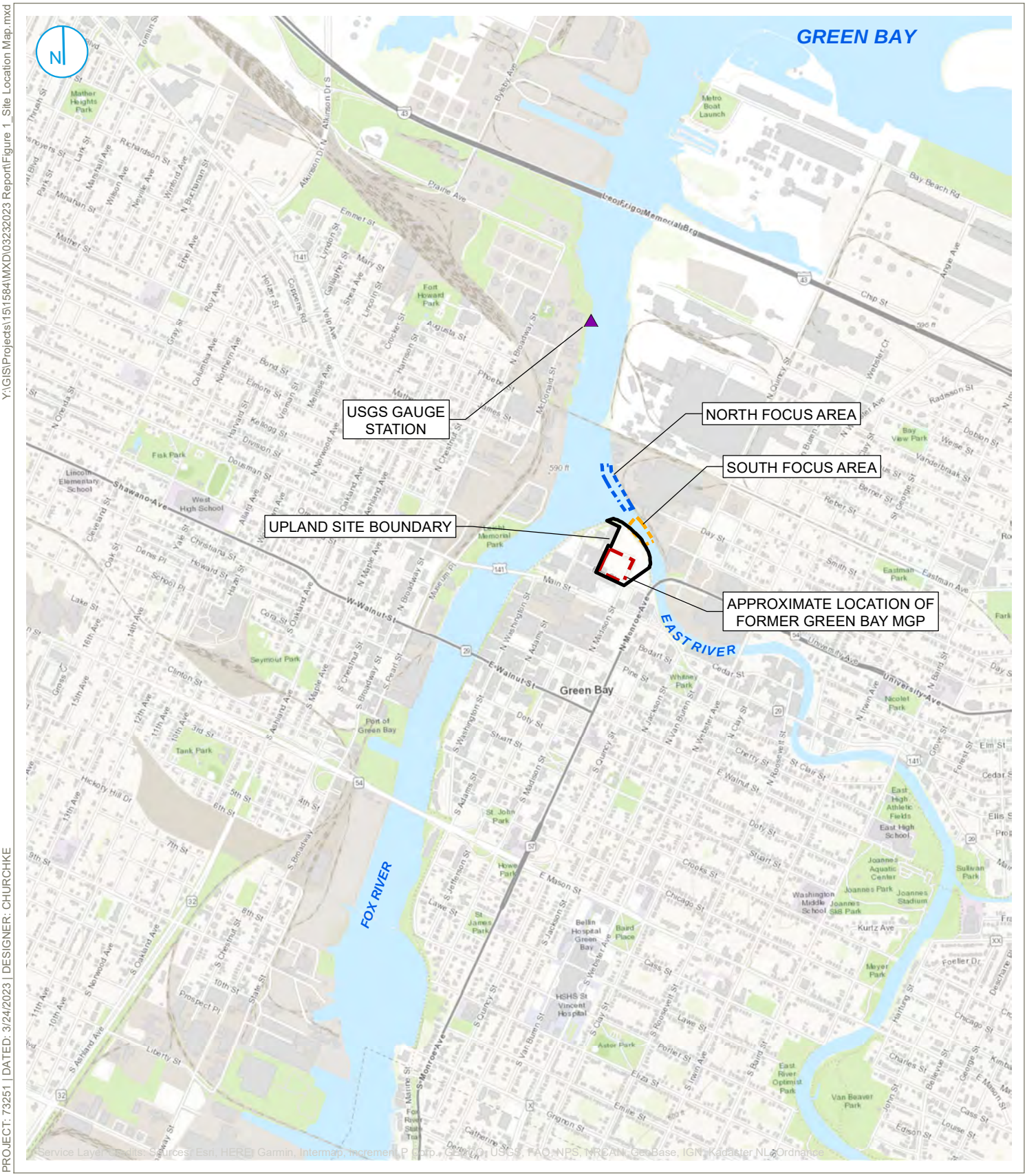
Ramboll, 2020b. Upland Remedial Investigation Data Summary Report, Former Green Bay Manufactured Gas Plant Site Operable Unit 1. September 18.

Ramboll, 2022. Early Removal Action Work Plan, Former Green Bay Manufactured Gas Plant, Revision 2. September 26.

Attachments

Figure 1 – Site Location Map
Figure 2 – Site Layout Map
Figure 3 – Soil Remediation Excavation Areas
Figure 4a – Geologic Cross Section D-D'
Figure 4b – Geologic Cross Sections E-E' and F-F'
Figure 4c – Geologic Cross Section G-G' and H-H'
Figure 5 – Proposed Soil Borings and Monitoring Wells
Table 1 – 2018-2022 Groundwater Analytical Results Compared to the Groundwater SL, the PAL, and Tap Water Criteria
Table 2 – Sampling and Analysis Plan

FIGURES



Y:\GIS\Projects\151584\MXD\03232023 Report\Figure 1_Site Location Map.mxd

PROJECT: 73251 | DATED: 3/24/2023 | DESIGNER: CHURCHKE

KEY MAP

0 1,000 2,000 Feet

Map Scale: 1:1:24,000;
Map Center: 88°0'52"W 44°31'3"N

SITE LOCATION MAP

FIGURE 1

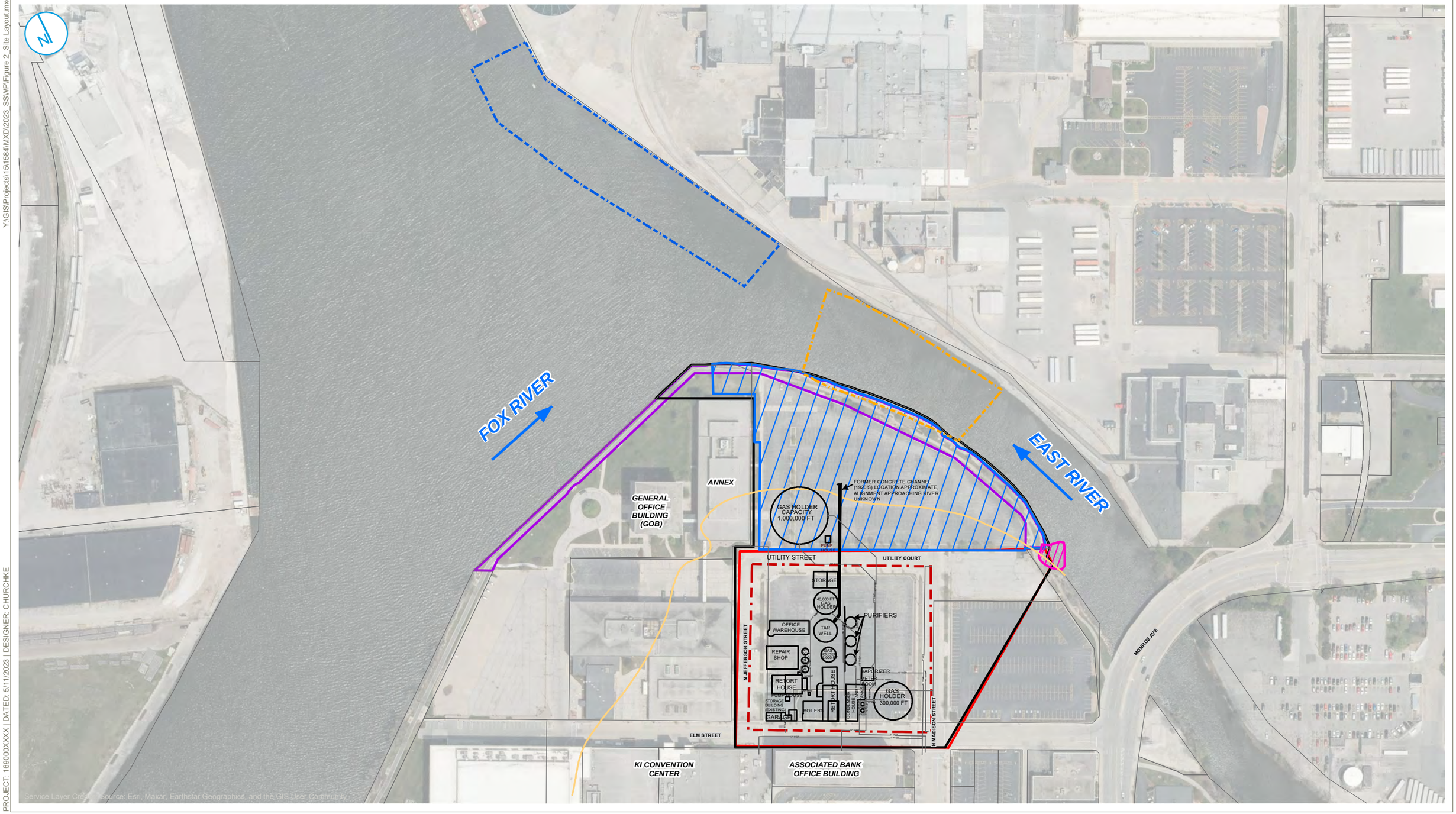
SITE SPECIFIC WORK PLAN ADDENDUM NO.1
FORMER GREEN BAY MANUFACTURED GAS PLANT
WISCONSIN PUBLIC SERVICE CORPORATION
CITY OF GREEN BAY, WISCONSIN

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

RAMBOLL

Y:\GIS\Projects\151584\MXD\2023_SSWP\Figure 2_Site Layout.mxd

PROJECT: 1690000XXXX | DATED: 5/11/2023 | DESIGNER: CHURCHKE



- BUILDING FOOTPRINT
- APPROXIMATE SHORELINE (1835)
- RIVER FLOW DIRECTION
- PARCEL BOUNDARY
- EARLY REMOVAL ACTION OU2 EXTENTS

0 100 200 Feet

- UPLAND SITE BOUNDARY (OU1)
- SOUTH PARKING LOT
- RIVERWALK EASEMENT AREA
- NORTH PARKING LOT - EARLY REMOVAL ACTION OU1 ONGOING 2023
- FORMER MGP SITE
- NORTH FOCUS AREA (OU2)- EARLY REMOVAL ACTION COMPLETED 2019
- SOUTH FOCUS AREA (OU2) - EARLY REMOVAL ACTION COMPLETED 2018

SITE LAYOUT

SITE SPECIFIC WORK PLAN ADDENDUM NO. 1
FORMER GREEN BAY MANUFACTURED GAS PLANT
WISCONSIN PUBLIC SERVICE CORPORATION
GREEN BAY, WISCONSIN

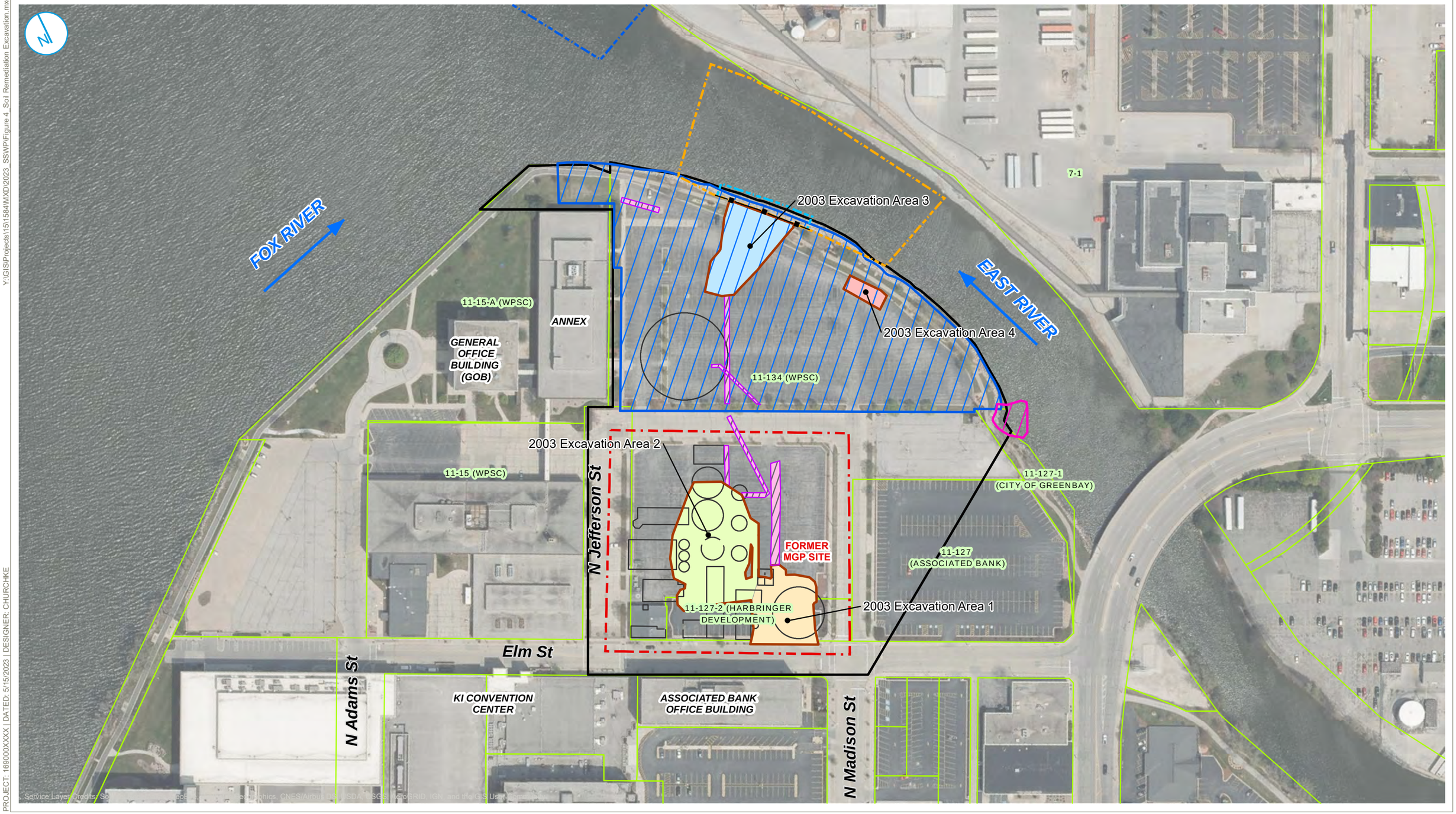
FIGURE 2

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

RAMBOLL

Y:\GIS\Projects\151\584\MXD\2023_SSWP\Figure 4_Soil Remediation Excavation.mxd

PROJECT: 169000XXXX | DATED: 5/15/2023 | DESIGNER: CHURCHKE



UPLAND SITE BOUNDARY
FORMER MGP SITE
SHEET PILE WALL
SHORELINE EXCAVATION EXTENT (REMEDIAL ACTION COMPLETED IN 2018)

TAX PARCEL (OWNER)
FORMER STRUCTURE
SOIL REMEDIATION EXCAVATION AREAS (2003)
SOIL REMEDIATION MGP PIPING RUNS (2003)

EXCAVATION AREA 1 (6-8
EXCAVATION AREA 2 (8-14 FT) *TAR WELL (12-22 FT)
EXCAVATION AREA 3 (8-12
EXCAVATION AREA 4 (7
EXCAVATED PIPING RUN
EARLY REMOVAL ACTION OU2 EXTENTS 2023 IN PROGRESS

NORTH FOCUS AREA (OU2)
SOUTH FOCUS AREA (OU2)
EARLY REMOVAL ACTION OU1 EXTENTS 2023 IN PROGRESS

0 75 150 Feet

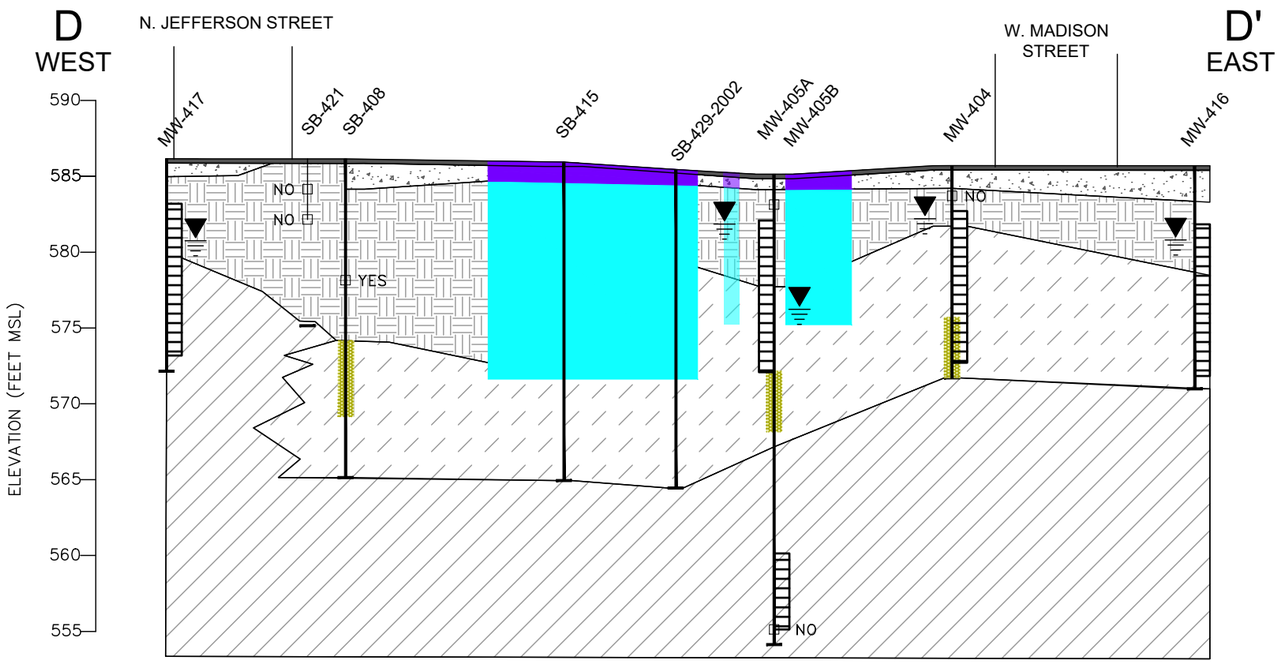
SOIL REMEDIATION EXCAVATION AREAS

SITE SPECIFIC WORK PLAN ADDENDUM NO. 1
FORMER GREEN BAY MANUFACTURED GAS PLANT
WISCONSIN PUBLIC SERVICE CORPORATION
GREEN BAY, WISCONSIN

FIGURE 3

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

RAMBOLL



VERTICAL SCALE IN FEET: 10

HORIZONTAL SCALE IN FEET: 80

VERTICAL EXAGGERATION = 8

LEGEND

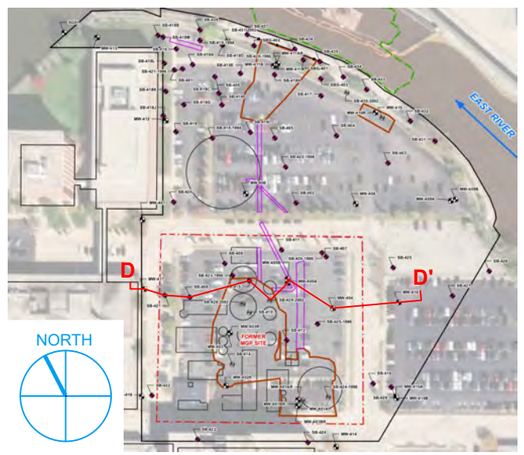
- ASPHALT
- SANDS/GRAVEL (ASPHALT BASE COURSE)
- FILL
- SAND
- SILT
- CLAY
- FISSURED CLAY
- SCREENED INTERVAL
- WATER LEVEL ELEVATION (5/26/2020)
- SOIL SAMPLE EXCEEDS CUMULATIVE CR>10-5 OR HI>1 RESIDENTIAL (YES/NO)

LEGEND (BACKFILL MATERIALS)

- THERMALLY TREATED BACKFILL
- BASE COURSE/ASPHALT CAP

LEGEND (NAPL IMPACTS)

- STAINING
- OIL COATED/OIL WETTED MATERIAL WITHIN FRACTURES IN NATIVE CLAY.



NOTES

1. CROSS SECTION REPRESENTS A GENERALIZED INTERPRETATION OF SUBSURFACE CONDITIONS. STRATUM LINES ARE BASED ON INTERPOLATION BETWEEN BORINGS AND MAY NOT REPRESENT ACUTAL SUBSURFACE CONDITIONS. FOR DETAILED DESCRIPTION OF INDIVIDUAL BORINGS, REFER TO SOIL BORING LOGS.
2. FORMER STURCTURES SHOWN WHERE BASE WAS FIELD CONFIRMED BY INVESTIGATION.

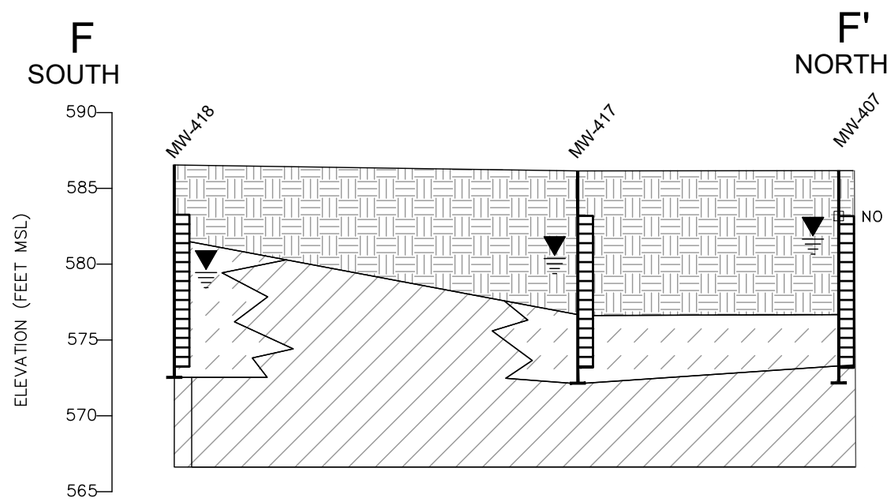
GEOLOGIC CROSS SECTIONS D-D'

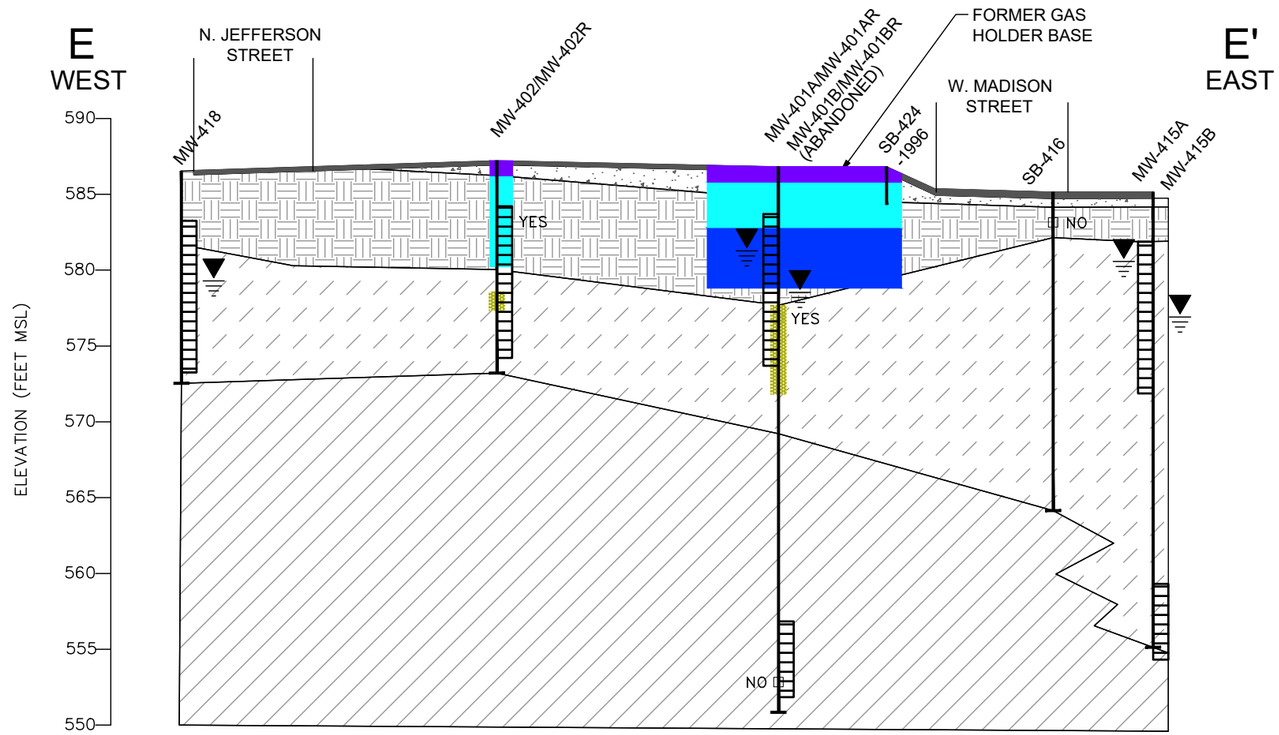
SITE SPECIFIC WORK PLAN ADDENDUM NO. 1
FORMER GREEN BAY MANUFACTURED GAS PLANT SITE
WISCONSIN PUBLIC SERVICE CORPORATION
GREEN BAY, WISCONSIN

FIGURE 4A

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

RAMBOLL





VERTICAL EXAGGERATION = 8

LEGEND

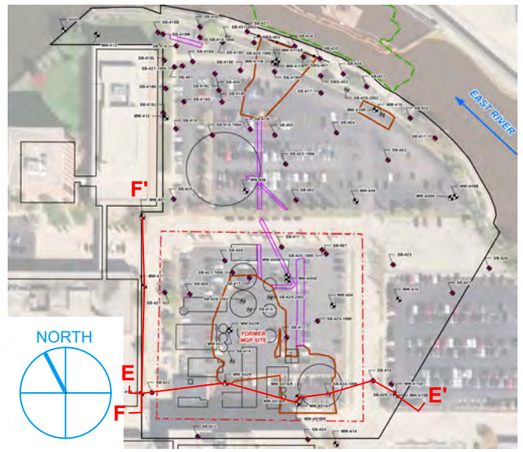
- ASPHALT
- SANDS/GRAVEL (ASPHALT BASE COURSE)
- FILL
- SAND
- CLAY
- FISSURED CLAY
- SCREENED INTERVAL
- WATER LEVEL ELEVATION (5/26/2020)
- SOIL SAMPLE EXCEEDS CUMULATIVE CR>10-5 OR HI>1 RESIDENTIAL (YES/NO)

LEGEND (BACKFILL MATERIALS)

- THERMALLY TREATED BACKFILL
- BASE COURSE/ASPHALT CAP
- IMPORTED SAND (EXC 1)

LEGEND (NAPL IMPACTS)

- STAINING
- OIL COATED/OIL WETTED MATERIAL WITHIN FRACTURES IN NATIVE CLAY.



NOTES

1. CROSS SECTION REPRESENTS A GENERALIZED INTERPRETATION OF SUBSURFACE CONDITIONS. STRATUM LINES ARE BASED ON INTERPOLATION BETWEEN BORINGS AND MAY NOT REPRESENT ACUTAL SUBSURFACE CONDITIONS. FOR DETAILED DESCRIPTION OF INDIVIDUAL BORINGS, REFER TO SOIL BORING LOGS.
2. FORMER STURCTURES SHOWN WHERE BASE WAS FIELD CONFIRMED BY INVESTIGATION.

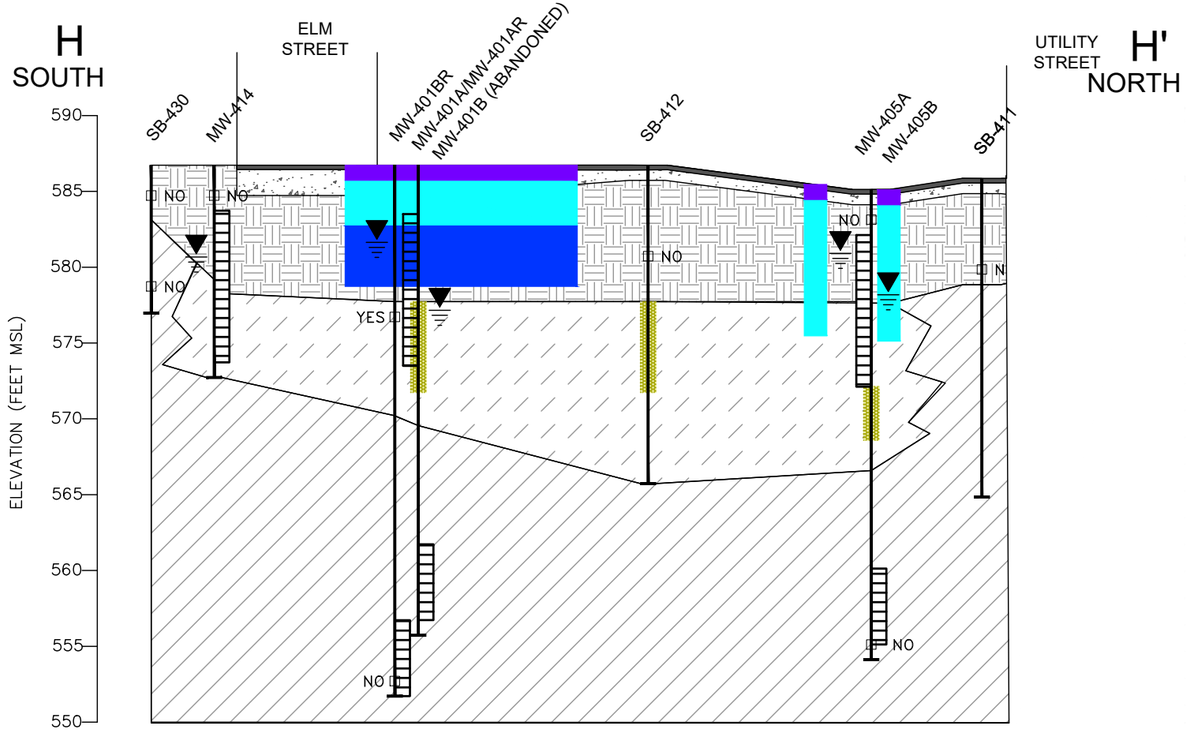
GEOLOGIC CROSS SECTIONS E-E' AND F-F'

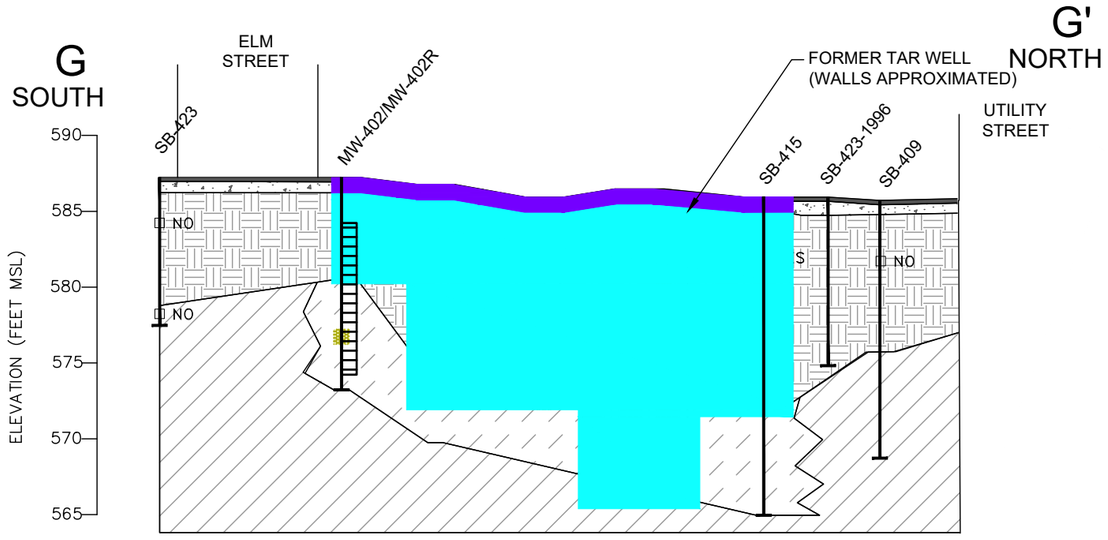
SITE SPECIFIC WORK PLAN ADDENDUM NO. 1
FORMER GREEN BAY MANUFACTURED GAS PLANT SITE
WISCONSIN PUBLIC SERVICE CORPORATION
GREEN BAY, WISCONSIN

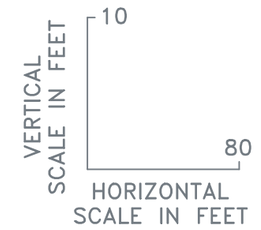
FIGURE 4B

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

RAMBOLL







VERTICAL EXAGGERATION = 8

LEGEND

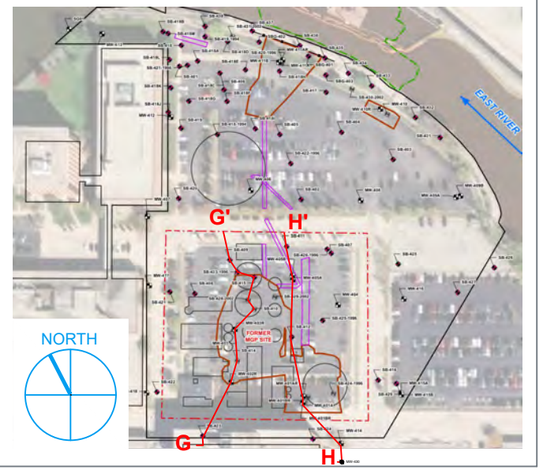
- ASPHALT
- SANDS/GRAVEL (ASPHALT BASE COURSE)
- FILL
- SAND
- SILT
- CLAY
- FISSURED CLAY
- SCREENED INTERVAL
- WATER LEVEL ELEVATION (5/26/2020)
- SOIL SAMPLE EXCEEDS CUMULATIVE CR>10-5 OR HI>1 RESIDENTIAL (YES/NO)

LEGEND (BACKFILL MATERIALS)

- THERMALLY TREATED BACKFILL
- BASE COURSE/ASPHALT CAP
- IMPORTED SAND (EXC1)

LEGEND (NAPL IMPACTS)

- SHEEN
- STAINING
- OIL COATED/OIL WETTED MATERIAL WITHIN FRACTURES IN NATIVE CLAY.



NOTES

1. CROSS SECTION REPRESENTS A GENERALIZED INTERPRETATION OF SUBSURFACE CONDITIONS. STRATUM LINES ARE BASED ON INTERPOLATION BETWEEN BORINGS AND MAY NOT REPRESENT ACUTAL SUBSURFACE CONDITIONS. FOR DETAILED DESCRIPTION OF INDIVIDUAL BORINGS, REFER TO SOIL BORING LOGS.
2. FORMER STURCTURES SHOWN WHERE BASE WAS FIELD CONFIRMED BY INVESTIGATION.

GEOLOGIC CROSS SECTIONS G-G' AND H-H'

SITE SPECIFIC WORK PLAN ADDENDUM NO. 1
FORMER GREEN BAY MANUFACTURED GAS PLANT SITE
WISCONSIN PUBLIC SERVICE CORPORATION
GREEN BAY, WISCONSIN

FIGURE 4C

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

RAMBOLL

Y:\GIS\Projects\15\1584\MXD\2023_SSWP\Figure X_Working Figure.mxd

PROJECT: 169000XXXX | DATED: 6/28/2023 | DESIGNER: GALARNMC

N Jefferson St

HA-414
HA-415
SB-411
SB-426-1996
SB-700
SB-409
SB-407
HA-413
SB-701
SB-423-1996
MW-405B
SB-415
MW-405A
SB-408
SB-429-2002
SB-428-2002
SB-703
SB-421
SB-702
MW-404
SB-410
SB-704
SB-425-1996
SB-707
MW-403R
SB-706
SB-427-2002
SB-705
MW-403
HA-412
SB-413
SB-412
HA-417
SB-717
SB-414
SB-714
SB-708
SB-710
SB-713
MW-402R
SB-416
SB-422
MW-402
SB-429
MW-415A
11-127-2 (HARBRINGER DEVELOPMENT)
MW-401B
SB-709
MW-401A
SB-711
MW-401AR
SB-712
MW-401BR
SB-718
SB-715
SB-423
SB-424
MW-414

HA-416
SB-716
MW-416
SB-425
SB-426
SB-427
11-127-1 (CITY OF GREENBAY
11-127 (ASSOCIATED BANK)
SB-428
MW-415B

Esri, Maxar, Earthstar Geographics, and the GIS User Community

ASSOCIATED BANK

FORMER MGP SITE
BUILDING FOOTPRINT
FORMER STRUCTURE
SOIL REMEDIATION EXCAVATION AREAS (2003)
OIL WETTED-COATED MATERIAL WITHIN FRACTURES OF NATIVE CLAY
SOIL BORING

EXCAVATION AREA 1 (6-8 FT)
EXCAVATION AREA 2 (8-14 FT) *TAR WELL (12-22 FT)
EXCAVATED PIPING RUN
MONITORING WELL LOCATION
PROPOSED CONTINGENT SOIL BORING
PROPOSED PRIMARY SOIL BORINGS

PROPOSED WELL PAIRS
COM — ABOVE GROUND COMMUNICATION
FO — FIBER OPTIC LINE
GAS — GAS LINE
OHE — OVERHEAD ELECTRIC LINE
SAN — SANITARY SEWER LINE

STM — STORM SEWER LINE
TEL — TELEPHONE LINE
COM — UNDERGROUND COMMUNICATION
UEL — UNDERGROUND ELECTRIC LINE
UFO — UNDERGROUND FIBER OPTIC LINE
WAT — WATER LINE

0 25 50 Feet

PROPOSED SOIL BORINGS AND MONITORING WELLS

UPLAND REMEDIAL INVESTIGATION DATA SUMMARY REPORT FORMER GREEN BAY MANUFACTURED GAS PLANT

WISCONSIN PUBLIC SERVICE CORPORATION
GREEN BAY, WISCONSIN

FIGURE 5

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

RAMBOLL

TABLES

Table 1. 2018-2022 Groundwater Analytical Results Compared to the Groundwater SL, the PAL, and Tap Water Criteria

Site-Specific Work Plan Addendum 1
Wisconsin Public Service Corporation
Green Bay Former Manufactured Gas Plant Site
700 N Adams St, Green Bay, Wisconsin
BRRTS#: 02-05-000254 USEPA#: WIN000509948

9-digit Code	Sample Location	Sample Date	PVOC 1,2,4-Trimethylbenzene	PVOC 1,3,5-Trimethylbenzene	PVOC Trimethylbenzenes, Total	PVOC Benzene	PVOC Ethylbenzene	PVOC Toluene	PVOC Xylene, o	PVOC Xylenes, m + p	PVOC Xylenes, Total
Reporting Units:			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
WI Groundwater SL:			**NS**	**NS**	**480**	**5**	**700**	**800**	**NS**	**NS**	**2,000**
WI Groundwater PAL:			NS	NS	96	0.5	140	160	NS	NS	400
Tap Water RSL:			*56*	*60*	*NS*	*0.46*	*1.5*	*1,100*	*190*	*190*	*190*
053018008	MW-401BR	05/30/2018	0.50 U	0.50 U	1.00 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.5 U
052919009	MW-401BR	05/29/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U
110619024	MW-401BR	11/06/2019	3.1	1.5 J	4.6	0.25 U	0.59 J	0.17 U	1.4	0.93 J	2.3 J
052720020	MW-401BR	05/27/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U
110320020	MW-401BR	11/03/2020	8.6	0.87 U	8.6	***106***	*11.5*	2.5	8.0	10.0	18.1
052521021	MW-401BR	05/25/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U
110221021	MW-401BR	11/02/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U
051022021	MW-401BR	05/10/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U
110822021	MW-401BR	11/08/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U
053018019	MW-402R	05/30/2018	48.3	5.0	53.3	***418***	*83.4*	41.4	60.2	64.2	124
110320021	MW-402R	11/03/2020	*81.6*	3.5	85.1	***800***	*94.7*	20.3	74.4	91.6	166
052521020	MW-402R	05/25/2021	15.2	0.71 U	15.2	***167***	*17.0*	3.3	11.3	17.1	28.4
110221020	MW-402R	11/02/2021	*99.7*	2.6 J	102.3	***759***	*204*	21.4	29.1	27.1	56.2
051022020	MW-402R	05/10/2022	21.7	1.8 U	21.7	***285***	*31.8*	2.8 J	19.7	28.6	48.4
110822020	MW-402R	11/08/2022	33.0	1.8 U	33.0	***438***	*51.4*	8.8	16.1	35.1	51.3
053118025	MW-403R	05/31/2018	35.7	4.5	40.2	***1,000***	*112*	41.4	107	121	*228*
110718023	MW-403R	11/07/2018	16.7 J	8.7 U	16.7 J	***854***	*54.5*	12.1 J	47.1	35.3	82.4
052919022	MW-403R	05/29/2019	21.6	4.4 U	21.6	***645***	*69.3*	43.8	62.5	79.5	142
110519022	MW-403R	11/05/2019	34.5	4.2	38.7	***1,030***	*87.0*	29.6	76.8	90.3	167
052720023	MW-403R	05/27/2020	37.1	8.7 U	37.1	***1,120***	*118*	39.1	97.4	133	*230*
110320024	MW-403R	11/03/2020	13.9	2.2 U	13.9	***606***	*45.7*	16.8	40.9	37.7	78.6
052621025	MW-403R	05/26/2021	29.1	3.6 U	29.1	***894***	*76.8*	22.0	55.4	65.8	121
110321025	MW-403R	11/03/2021	17.4 J	8.9 U	17.4	***1,370***	*70.2*	13.6 J	56.0	43.0 J	99.0
051022024	MW-403R	05/10/2022	22.8	2.1	24.9	***546***	*53.6*	21.5	45.0	51.0	96.0
110822024	MW-403R	11/08/2022	5.0	0.36 U	5.00	***259***	*14.7*	2.5	12.8	6.8	19.6
053018020/053018021 (N)	MW-404	05/30/2018	17.9	2.2	20.1	***145***	*75.4*	0.66 J	18.1	8.9	26.6
110618016	MW-404	11/06/2018	3.5	1.4 J	4.9 J	***15.5***	*102*	2.8 J	14.6	2.4	17.0
052919020/052919021 (N)	MW-404	05/29/2019	26.5	2.8 J	29.3	***206***	*248*	1.5 J	33.4	25.1	58.5
110519020	MW-404	11/05/2019	1.6 J	1.3 J	2.9	***16.5***	*112*	2.4 J	15.9	2.4	18.2
052720021	MW-404	05/27/2020	2.2 J	0.87 U	2.2	***78.8***	*227*	1.1	10.5	4.7	15.1
110320022	MW-404	11/03/2020	1.0 J	0.87 U	1.0	***116***	*4.3*	1.1	7.5	1.1 J	8.6
052621023	MW-404	05/25/2021	5.3	1.4	6.7	***77.5***	*213*	0.91 J	12.2	6.4	18.6
110321023	MW-404	11/03/2021	0.98 J	0.36 U	0.98	***9.2***	*19.3*	0.90 J	9.2	2.3	11.5
051022022	MW-404	05/10/2022	4.1	0.52 J	4.62	***49.5***	*36.4*	0.35 J	5.0	5.8	10.8
110822022	MW-404	11/08/2022	0.45 U	6.4	6.40	*0.71* J	1.1	0.29 U	2.2	0.70 U	2.6 J
053018022	MW-405B	05/30/2018	0.50 U	0.50 U	1.00 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.5 U
110718022	MW-405B	11/07/2018	0.84 U	0.87 U	1.71 U	*1.7*	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U
052919019	MW-405B	05/29/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U
110519021	MW-405B	11/05/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U
052720022	MW-405B	05/27/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U
110320023	MW-405B	11/03/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U
052621024	MW-405B	05/26/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U
110321024	MW-405B	11/03/2021	0.45 U	0.36 U	0.81 U	*1.4*	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U
051022023	MW-405B	05/10/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U
110822023	MW-405B	11/08/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U

9-digit Code	Sample Location	Sample Date	PAH 1-Methylnaphthalene	PAH 2-Methylnaphthalene	PAH Acenaphthene	PAH Acenaphthylene	PAH Anthracene	PAH Benzo(a)anthracene	PAH Benzo(a)pyrene	PAH Benzo(b)fluoranthene	PAH Benzo(g,h,i)perylene	PAH Benzo(k)fluoranthene	PAH Chrysene	PAH Dibenz(a,h)anthracene	PAH Fluoranthene	PAH Fluorene	PAH Indeno(1,2,3-cd)pyrene	PAH Naphthalene	PAH Phenanthrene	PAH Pyrene	Metal Aluminum, Total	Metal Antimony, Total	Metal Arsenic, Dissolved	Metal Arsenic, Total	Metal Barium, Dissolved	Metal Barium, Total
Reporting Units:			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
WI Groundwater SL:			**NS**	**NS**	**NS**	**NS**	**3,000**	**NS**	**0.2**	**0.2**	**NS**	**NS**	**0.2**	**NS**	**400**	**400**	**NS**	**100**	**3,000**	**250**	**200**	**6**	**10**	**10**	**2,000**	**2,000**
WI Groundwater PAL:			NS	NS	NS	NS	600	NS	0.02	0.02	NS	NS	0.02	NS	80	80	NS	10	NS	50	40	1.2	1	1	400	400
Tap Water RSL:			*1.1*	*36*	*530*	*530*	*1,800*	*0.03*	*0.025*	*0.25*	*120*	*2.5*	*25*	*0.025*	*800*	*290*	*0.25*	*0.12*	*1,800*	*120*	*20,000*	*7.8*	*0.052*	*0.052*	*3,800*	*3,800*
053018008	MW-401BR	05/30/2018	0.0060 U	0.0050 U	0.0062 U	0.0051 U	0.011 U	0.0077 U	0.011 U	0.029 J	0.024 J	0.015 J	0.036 J	0.010 U	0.053 J	0.0081 U	0.019 J	0.019 U	0.024 J	0.044	--	--	0.56 U	--	25.2	--
052919009	MW-401BR	05/29/2019	0.12	0.027 J	0.025 U	0.050 J	0.24	*0.23*	*0.10* J	**0.23**	0.17	0.14 J	**0.24** J	0.042 U	0.43	0.051 J	0.10 J	0.076 U	0.17 J	0.89	--	--	2.8 U	--	35.7 J	--
110619024	MW-401BR	11/06/2019	0.37	0.28	0.094	0.032	0.030 J	*0.15*	*0.12*	**0.22**	0.14	0.099	**0.27**	0.021 J	0.51	0.15	0.091 J	*0.36*	0.39	0.77	--	--	2.8 U	--	37.4	--
052720020	MW-401BR	05/27/2020	0.0061 J	0.0056 J	0.0067 J	0.0049 U	0.011 J	0.024 J	*0.028* J	0.077	0.035	0.044	0.081	0.0099 U	0.15	0.0079 U	0.028 J	0.018 U	0.056 J	0.12	--	--	*0.81* J	--	93.1	--
110320020	MW-401BR	11/03/2020	0.0061 U	0.0051 U	0.0063 U	0.0057 J	0.029 J	*0.20*	***0.26***	***0.46***	0.24	0.18	**0.40**	*0.039* J	0.63	0.0082 U	0.19	0.019 U	0.15	0.61	--	--	1.4 U	--	80.6	--
052521021	MW-401BR	05/25/2021	0.26	0.30	0.017 J	0.043	0.037 J	*0.094*	*0.099*	0.17	0.11	0.066	0.20	0.016 J	0.32	0.045	0.081 J	*1.9*	0.16	0.30	--	--	--	*0.77* J	--	66.7
110221021	MW-401BR	11/02/2021	0.017 U	0.013 U	0.013 U	0.025 J	0.020 J	*0.14*	***0.25***	***0.34***	0.28	0.17	**0.31**	*0.044* J	0.42	0.022 U	0.19	0.025 J	0.12	0.36	--	--	*0.94* J	--	57.3	--
051022021	MW-401BR	05/10/2022	0.018 U	0.014 U	0.014 U	0.013 U	0.019 U	0.014 U	0.020 U	0.081	0.057	0.039 J	0.084	0.018 U	0.10	0.024 U	0.036 J	0.029 J	0.038 J	0.097	--	--	--	*0.69* J	--	50.9
110822021	MW-401BR	11/08/2022	0.019 U	0.014 U	0.015 U	0.013 U	0.020 J	*0.067*	*0.092*	0.17	0.099	0.074	0.16	0.019 U	0.32	0.025 U	0.075	0.021 J	0.15	0.29	--	--	--	*0.98* J	--	44.1
053018019	MW-402R	05/30/2018	*122*	10.0	22.6	2.6	1.7 J	0.38 U	0.53 U	0.29 U	0.34 U	0.38 U	0.65 U	0.50 U	0.77 J	17.4	0.88 U	**326**	15.7	0.71 J	--	--	*5.9* J	--	**2,270**	--
110320021	MW-402R	11/03/2020	*180*	30.6	30.9	1.5 J	1.1 U	0.78 U	1.1 U	0.59 U	0.70 U	0.78 U	1.3 U	1.0 U	2.4 J	32.1	1.8 U	**678**	32.9	2.4 J	--	--	2.8 U	--	858	--
052521020	MW-402R	05/25/2021	*50.0*	2.6	15.9	0.99	0.67 J	0.16 U	0.23 U	0.12 U	0.15 U	0.16 U	0.28 U	0.22 U	0.45 J	6.6	0.38 U	*77.2*	3.5	0.51 J	--	--	--	*1.7* J	--	762
110221020	MW-402R	11/02/2021	*353*	10.9	78.5	4.0	7.7	0.65 U	0.94 U	0.93 U	1.1 U	1.1 U	1.3 U	0.85 U	3.8	60.6	0.74 U	**267**	56.3	3.7	--	--	*3.1* J	--	868	--
051022020	MW-402R	05/10/2022	*76.6*	8.2	23.9	1.3	1.6	0.27 U	0.39 U	0.39 U	0.47 U	0.45 U	0.53 U	0.36 U	0.96 J	16.9	0.31 U	**116**	9.0	0.81 J	--	--	--	*1.1*	--	500
110822020	MW-402R	11/08/2022	*159*	26.4	35.4	3.0 J	3.6 J	1.1 U	1.1 U	0.77 U	2.0 U	1.9 U	1.1 U	1.5 U	2.2 U	20.1	1.3 U	**476**	26.4	1.9 U	--	--	--	*2.0* J	--	395
053118025	MW-403R	05/31/2018	*69.2*	26.4	14.8	2.7 J	2.1 U	1.5 U	2.1 U	1.1 U	1.4 U	1.5 U	2.6 U	2.0 U	2.1 U	8.2	3.5 U	***1,260***	13.7 J	1.7 J	--	--	*5.7* J	--	88.5	--
110718023	MW-403R	11/07/2018	*28.8*	13.8	7.6	1.4 J	0.83 J	0.42 U	0.58 U	***0.35*** J	0.38 U	0.42 U	**0.80** J	0.56 U	0.68 J	4.1	0.98 U	**600**	4.6	0.98 J	--	--	5.6 U	--	148	--
052919022	MW-403R	05/29/2019	*47.9*	16.6	12.0	1.4 J	4.1 J	0.84 U	1.2 U	0.64 U	0.75 U	0.84 U	1.4 U	1.1 U	1.5 J	7.9	2.0 U	**922**	13.2	1.9 J	--	--	5.6 U	--	138	--
110519022	MW-403R	11/05/2019	*135*	22.9	19.9	8.7	4.0 J	*0.63* J	0.81 U	*1.2* J	0.83 J	0.58 U	**1.6** J	0.77 U	2.1 J	10.7	1.4 U	**782**	13.8	3.4	--	--	5.6 U	--	121	--
052720023	MW-403R	05/27/2020	*59.1*	*37.4*	14.1	2.0 J	2.1 U	1.5 U	2.1 U	1.1 U	1.3 U	1.5 U	2.6 U	2.0 U	2.1 U	8.4	3.5 U	***1,120***	10.2 J	1.5 U	--	--	*3.4* J	--	92.4	--
110320024	MW-403R	11/03/2020	*29.1*	15.6	7.2	1.2 J	1.1 U	*1.4* J	1.1 U	*4.1*	2.8 J	0.76 U	**4.8** J	1.0 U	7.5	4.0 J	*2.0* J	**614**	9.7	7.0	--	--	5.6 U	--	152	--
052621025	MW-403R	05/26/2021	*49.1*	33.4	12.4	2.7	1.4 J	0.68 U	0.95 U	0.52 U	0.61 U	0.68 U	1.2 U	0.90 U	0.96 U	6.9	1.6 U	**788**	8.6	0.69 U	--	--	--	*1.1* J	--	131
110321025	MW-403R	11/03/2021	*92.7*	*64.6*	24.8	5.8 J	3.4 U	2.5 U	3.6 U	3.6 U	4.3 U	4.1 U	4.9 U	3.3 U	4.8 U	15.8	2.9 U	***1,780***	19.0	4.2 U	--	--	*1.9* J	--	241	--
051022024	MW-403R	05/10/2022	*42.1*	27.3	9.6	2.1 J	1.8 U	1.3 U	1.9 U	1.9 U	2.3 U	2.2 U	2.6 U	1.8 U	2.6 U	5.4	1.5 U	**934**	6.5	2.2 U	--	--	--	*1.5* J	--	112
110822024	MW-403R	11/08/2022	*11.7*	2.5	3.3	0.64 J	0.77 U	0.57 U	0.53 U	0.38 U	0.97 U	0.93 U	0.52 U	0.74 U	1.1 U	2.2	0.65 U	**193**	3.6	0.94 U	--	--	--	*1.9* J	--	178
053018020/053018021 (N)	MW-404	05/30/2018	*210*	0.094 U	12.4	10.0	3.0	0.15 U	0.20 U	0.11 U	0.13 U	0.15 U	0.25 U	0.19 U	0.84 J	1.3	0.34 U	*8.3*	10.6	1.2	--	--	2.8 U	--	128	--
110618016	MW-404	11/06/2018	*145*	0.11 U	11.3	8.9	2.1	0.17 U	0.23 U	0.13 U	0.15 U	0.17 U	0.29 U	0.22 U	0.61 J	3.5	0.39 U	*6.1*	6.4	0.77 J	--	--	*1.5* J	--	137	--
052919020/052919021 (N)	MW-404	05/29/2019	*188*	0.13 J	12.3	8.6	3.5	0.16 U	0.22 U	0.12 U	0.14 U	0.16 U	0.27 U	0.21 U	0.78 J	3.5	0.37 U	*11.8*	9.5	0.93	--	--	2.8 U	--	192	--
110519020	MW-404	11/05/2019	*91.9*	0.093 J	9.3	6.9	1.7	*0.054* J	0.050 U	0.052 J	0.032 U	0.036 U	0.091 J	0.047 U	0.60	4.0	0.083 U	*3.4*	6.1	0.79	--	--	2.8 U	--	172	--
052720021	MW-404	05/27/2020	*178*	0.13 J	15.4	9.4	3.0	0.15 U	0.21 U	0.12 U	0.14 U	0.15 U	0.27 U	0.20 U	0.86 J	3.0	0.36 U	*4.1*	10.3	0.92	--	--	*2.1* J	--	178	--
110320022	MW-404	11/03/2020	*36.9*	0.050 U	5.3	2.6	0.49 J	0.077 U	0.11 U	0.059 U	0.069 U	0.077 U	0.13 U	0.10 U	0.21 J	0.19 J	0.18 U	*1.3*	0.56 J	0.34 J	--	--	*1.1* J	--	150	--
052621023	MW-404	05/25/2021	*104*	0.11 U	10.3	4.9	1.6	0.16 U	0.23 U	0.12 U	0.15 U	0.16 U	0.28 U	0.22 U	0.74 J	0.92	0.38 U	*3.7*	8.3	0.79 J	--	--	--	1.4 U	--	136
110321023	MW-404	11/03/2021	*118*	0.26 U	15.5	8.8	2.5	0.25 U	0.36 U	0.36 U	0.43 U	0.41 U	0.49 U	0.33 U	1.1	1.2	0.29 U	*2.6*	8.4	1.1	--	--	*2.1*	--	128	--
051022022	MW-404	05/10/2022	*88.5*	0.27 U	11.7	4.9	1.4	0.27 U	0.39 U	0.38 U	0.46 U	0.44 U	0.53 U	0.35 U	0.60 J	0.74 J	0.31 U	*6.7*	5.8	0.62 J	--	--	--	*0.72* J	--	120
110822022	MW-404	11/08/2022	0.32	0.014 U	2.5	0.45	0.28	0.018 J	0.017 J	0.024 J	0.024 U	0.023 U	0.025 J	0.019 U	0.23	0.099	0.016 U	*0.48*	0.027 U	0.44	--	--	--	*1.6* J	--	110
053018022	MW-405B	05/30/2018	0.0074 J	0.0055 J	0.025 J	0.017 J	0.069	*0.25*	***0.58***	***1.0***	0.58	0.42	**0.92**	*0.077*	1.8	0.050	*0.48*	0.032 J	0.88	1.3	--	--	5.6 U	--	120	--
110718022	MW-405B	11/07/2018	0.026 J	0.018 J	0.11	0.13	0.39	*2.5*	***4.4***	***8.4***	5.3	*3.1*	**5.0**	*0.78*	10.8	0.25	*4.2*	*0.19*	4.2	8.9	--	--	5.6 U	--	96.5 J	--
052919019	MW-405B	05/29/2019	0.0063 U	0.0052 U	0.016 J	0.0053 U	0.15	*0.63*	***0.82***	***1.8***	1.1	0.76	**0.92**	*0.14*	2.1	0.032 J	*0.81*	0.020 U	0.75	1.8	--	--	2.8 U	--	43.7 J	--
110519021	MW-405B	11/05/2019	0.0078 J	0.0080 J	0.022 J	0.033	0.090	*0.54*	***1.2***	***2.0***	1.3	0.77	**1.5**	*0.19*	2.3	0.035 J	*1.1*	0.025 J	0.74	2.3	--	--	2.8 U	--	51.6	--
052720022	MW-405B	05/27/2020	0.0088 J	0.0068 J	0.015 J	0.025 J	0.060	*0.28*	***0.76***	***1.4***	0.93	0.59	**0.93**	*0.11*	1.5	0.021 J	*0.76*	0.022 J	0.48	1.2	--	--	1.4 U	--	36.4	--
110320023	MW-405B	11/03/2020	0.0059 U	0.0049 U	0.011 J	0.028	0.14	*0.48*	***0.85***	***1.7***	1.0	0.68	**1.2**	*0.16*	2.0	0.016 J	*0.81*	0.018 U	0.54	1.7	--	--	*1.5* J	--	42.6	--
052621024	MW-405B	05/26/2021	0.037	0.015 J	0.015 J	0.029	0.076	*0.41*	***0.71***	***1.3***	0.89	0.61	**1.1**	*0.12*	1.8	0.015 J	*0.71*	*0.22*	0.49	1.4	--	--	--	1.4 U	--	21.9
110321024	MW-405B	11/03/2021	0.025 J	0.020 J	0.014 J	0.026 J	0.055	*0.093*	***0.23***	***0.45***	0.40	0.21	**0.35**	*0.051*	0.55	0.035 J	*0.28*	*0.45*	0.12	0.39	--	--	*2.4*	--	26.9	--
051022023	MW-405B	05/10/2022	0.017 U	0.013 U	0.014 U	0.012 U	0.030 J	0.013 U	*0.17*	***0.34***	0.27	0.13	**0.23**	*0.038* J	0.38	0.023 U	0.20	0.019 U	0.15	0.28	--	--	--	*1.7* J	--	27.3
110822023	MW-405B	11/08/2022	0.019 U	0.015 U	0.015 U	0.019 J	0.046 J	*0.095*	*0.18*	***0.36***	0.28	0.14	**0.28**	*0.041* J	0.50	0.033 J	0.20	0.029 J	0.12	0.43	--	--	--	*4.3* J	--	40.9

Table 1. 2018-2022 Groundwater Analytical Results Compared to the Groundwater SL, the PAL, and Tap Water Criteria

Site-Specific Work Plan Addendum 1
Wisconsin Public Service Corporation
Green Bay Former Manufactured Gas Plant Site
700 N Adams St, Green Bay, Wisconsin
BRRTS#: 02-05-000254 USEPA#: WIN000509948

9-digit Code	Sample Location	Sample Date	PVOC 1,2,4-Trimethylbenzene	PVOC 1,3,5-Trimethylbenzene	PVOC Trimethylbenzenes, Total	PVOC Benzene	PVOC Ethylbenzene	PVOC Toluene	PVOC Xylene, o	PVOC Xylenes, m + p	PVOC Xylenes, Total	PAH 1-Methylnaphthalene	PAH 2-Methylnaphthalene	PAH Acenaphthene	PAH Acenaphthylene	PAH Anthracene	PAH Benzo(a)anthracene	PAH Benzo(a)pyrene	PAH Benzo(b)fluoranthene	PAH Benzo(g,h,i)perylene	PAH Benzo(k)fluoranthene	PAH Chrysene	PAH Dibenz(a,h)anthracene	PAH Fluoranthene	PAH Fluorene	PAH Indeno(1,2,3-cd)pyrene	PAH Naphthalene	PAH Phenanthrene	PAH Pyrene	Metal Aluminum, Total	Metal Antimony, Total	Metal Arsenic, Dissolved	Metal Arsenic, Total	Metal Barium, Dissolved	Metal Barium, Total
Reporting Units:			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
WI Groundwater SL:			**NS**	**NS**	**480**	**5**	**700**	**800**	**NS**	**NS**	**2,000**	**NS**	**NS**	**NS**	**NS**	**3,000**	**NS**	**0.2**	**0.2**	**NS**	**NS**	**0.2**	**NS**	**400**	**400**	**NS**	**100**	**3,000**	**250**	**200**	**6**	**10**	**10**	**2,000**	**2,000**
WI Groundwater PAL:			NS	NS	96	0.5	140	160	NS	NS	400	NS	NS	NS	NS	600	NS	0.02	0.02	NS	NS	0.02	NS	80	80	NS	10	NS	50	40	1.2	1	1	400	400
Tap Water RSL:			*56*	*60*	*NS*	*0.46*	*1.5*	*1,100*	*190*	*190*	*190*	*1.1*	*36*	*530*	*530*	*1,800*	*0.03*	*0.025*	*0.25*	*120*	*2.5*	*25*	*0.025*	*800*	*290*	*0.25*	*0.12*	*1,800*	*120*	*20,000*	*7.8*	*0.052*	*0.052*	*3,800*	*3,800*
053018018	MW-406	05/30/2018	0.50 U	0.50 U	1.00 U	*0.62* J	0.50 U	0.50 U	0.50 U	1.0 U	1.5 U	0.025 J	0.0069 J	0.024 J	0.046	0.13	*0.086*	*0.095*	***0.29***	0.13	0.11	**0.35**	0.011 J	1.1	0.025 J	0.11	0.045 J	0.28	0.80	--	--	*2.9* J	--	139	--
110618017	MW-406	11/06/2018	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0063 U	0.0053 U	0.022 J	0.040	0.072	*0.36*	***1.2***	***2.4***	1.7	1.2	**1.5**	*0.18*	2.6	0.028 J	*1.3*	0.032 J	0.83	1.9	--	--	2.8 U	--	143	--
052919012	MW-406	05/29/2019	0.84 U	0.87 U	1.71 U	*0.74* J	0.34 J	0.17 J	0.26 U	0.47 U	1.5 U	0.0066 U	0.0054 U	0.018 J	0.022 J	0.14	*0.88*	***0.95***	***2.2***	1.3	0.89	**1.1**	*0.15*	2.6	0.028 J	*0.98*	0.039 J	0.80	2.1	--	--	5.6 U	--	419	--
110519015	MW-406	11/05/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0069 J	0.0091 J	0.012 J	0.014 J	0.038 J	*0.25*	***0.40***	***0.88***	0.53	0.33	**0.71**	*0.066*	1.2	0.010 J	*0.38*	0.021 J	0.40	1.0	--	--	5.6 U	--	207	--
052720015	MW-406	05/27/2020	0.84 U	0.87 U	1.71 U	*0.81* J	0.49 J	0.27 U	0.26 U	0.47 U	1.5 U	0.025 J	0.0060 J	0.17	0.046	0.097	*0.26*	***0.68***	***1.6***	0.90	0.67	**1.2**	*0.094*	2.8	0.040	*0.69*	0.060 J	0.83	1.7	--	--	2.8 U	--	227	--
110320015	MW-406	11/03/2020	0.84 U	0.87 U	1.71 U	*0.79* J	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.014 J	0.0049 U	0.018 J	0.026	0.033 J	*0.049*	*0.083*	**0.25**	0.14	0.094	0.19	0.014 J	0.61	0.0099 J	0.10	0.021 J	0.097	0.38	--	--	*3.1*	--	229	--
052521013/052521014 (N)	MW-406	05/25/2021	0.45 U	0.36 U	0.81 U	*0.50* J	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.017 J	0.0080 J	0.025 J	0.029	0.022 J	*0.041*	*0.091*	***0.27***	0.17	0.10	**0.22**	0.018 J	0.48	0.012 J	0.12	0.023 J	0.087	0.31	--	--	--	2.8 U	--	163
110221013/110221014 (N)	MW-406	11/02/2021	0.45 U	0.36 U	0.81 U	*1.8*	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.035 J	0.013 U	0.040 J	0.086	0.069	*0.065*	*0.11*	***0.26***	0.17	0.092	**0.24**	0.020 J	0.77	0.022 U	0.12	0.040 J	0.055	0.47	--	--	*6.1*	--	210	--
051022014/051022015 (N)	MW-406	05/10/2022	0.45 U	0.36 U	0.81 U	*2.3*	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.017 U	0.013 U	0.014 J	0.055	0.091	*0.39*	***0.92***	***2.2***	1.4	0.73	**1.3**	*0.20*	2.0	0.023 U	*1.0*	0.054	0.37	1.4	--	--	--	*2.7*	--	77.1
110822014/110822015 (N)	MW-406	11/08/2022	0.45 U	0.36 U	0.81 U	*2.3*	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.024 J	0.015 U	0.015 U	0.038 J	0.051 J	0.019 J	*0.028* J	0.12	0.056	0.040 J	**0.085**	0.019 U	0.22	0.025 U	0.041 J	0.053 J	0.028 U	0.16	--	--	--	*4.8* J	--	51.9
052918003	MW-407	05/29/2018	0.50 U	0.50 U	1.00 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.5 U	0.0059 U	0.0049 U	0.0061 U	0.0050 U	0.010 U	0.0076 U	0.011 U	0.0057 U	0.0068 U	0.0076 U	0.013 U	0.010 U	0.011 U	0.0080 U	0.018 U	0.018 U	0.014 U	0.0081 J	--	--	*1.7* J	--	532	--
110518003	MW-407	11/05/2018	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0067 U	0.0056 U	0.0069 U	0.0057 U	0.012 U	0.0086 U	0.012 U	0.0065 U	0.0077 U	0.0086 U	0.015 U	0.011 U	0.012 U	0.0091 U	0.020 U	0.021 U	0.016 U	0.0095 J	--	--	*4.6* J	--	328	--
052819003	MW-407	05/28/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0077 J	0.0090 J	0.0071 U	0.0058 U	0.012 U	0.0088 U	0.012 U	0.0095 J	0.0079 U	0.011 J	0.015 U	0.012 U	0.016 J	0.0093 U	0.021 U	0.021 U	0.022 J	0.021 J	--	--	2.8 U	--	*412*	--
110419003	MW-407	11/04/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0056 U	0.0047 U	0.0058 U	0.0047 U	0.012 J	0.0072 U	0.010 U	0.0055 U	0.0065 U	0.0072 U	0.012 U	0.0095 U	0.010 U	0.0076 U	0.017 U	0.017 U	0.013 U	0.0097 J	--	--	*4.0* J	--	307	--
052620003	MW-407	05/26/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.0058 U	0.0063 J	0.0060 U	0.0049 U	0.010 U	0.0075 U	0.010 U	0.0057 U	0.0067 U	0.0075 U	0.013 U	0.0099 U	0.011 U	0.0079 U	0.017 U	0.018 U	0.014 U	0.0076 U	--	--	*2.3*	--	238	--
110220003	MW-407	11/02/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.0058 U	0.0049 U	0.0060 U	0.0049 U	0.027 J	0.0094 J	0.010 U	0.0082 J	0.0067 U	0.0075 U	0.013 U	0.0099 U	0.018 J	0.0079 U	0.017 U	0.018 U	0.021 J	0.022 J	--	--	*2.3*	--	310	--
052421003	MW-407	05/24/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.0056 U	0.0048 J	0.0058 U	0.0047 U	0.010 U	0.0072 U	0.010 U	0.0055 U	0.0065 U	0.0072 U	0.012 U	0.0095 U	0.010 U	0.0076 U	0.017 U	0.017 U	0.013 U	0.011 J	--	--	--	*3.0*	--	301
110121003	MW-407	11/01/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.017 U	0.013 U	0.013 U	0.012 U	0.026 J	0.013 U	0.019 U	0.019 U	0.022 U	0.022 U	0.026 U	0.017 U	0.025 U	0.023 U	0.015 U	0.025 J	0.025 U	0.022 U	--	--	*2.6*	--	216	--
050922004	MW-407	05/09/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.017 U	0.013 U	0.013 U	0.012 U	0.019 J	0.013 U	0.019 U	0.019 U	0.023 U	0.022 U	0.026 U	0.017 U	0.025 U	0.023 U	0.015 U	0.019 U	0.025 U	0.022 U	--	--	--	*1.5* J	--	249
110722003	MW-407	11/07/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.041 U	0.031 U	0.032 U	0.029 U	0.042 U	0.031 U	0.029 U	0.021 U	0.053 U	0.051 U	0.029 U	0.040 U	0.059 U	0.053 U	0.035 U	0.045 U	0.058 U	0.051 U	--	--	--	*3.8*	--	197
053018016	MW-408	05/30/2018	0.50 U	0.50 U	1.00 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.5 U	0.023 J	0.0067 J	0.024 J	0.016 J	0.14	*0.20*	***0.39***	***0.78***	0.43	0.32	**0.78**	*0.052*	2.6	0.12	*0.35*	0.018 U	0.77	1.6	--	--	2.8 U	--	581	--
110618015	MW-408	11/06/2018	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.029 J	0.011 J	0.098	0.062	0.31	*1.0*	***2.2***	***3.9***	2.6	2.0	**3.0**	*0.31*	7.9	0.29	*1.9*	0.038 J	2.5	5.4	--	--	*2.8* J	--	350	--
052919010/052919011 (N)	MW-408	05/29/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.011 J	0.0081 J	0.038	0.023 J	0.26	*1.4*	***1.4***	***2.8***	1.6	1.2	**1.7**	*0.20*	4.9	0.10	*1.2*	0.019 U	1.6	4.0	--	--	5.6 U	--	*488*	--
110519013/110519014 (N)	MW-408	11/05/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.015 J	0.0077 J	0.062	0.049	0.22	*0.88*	***1.7***	***3.5***	2.2	1.3	**2.8**	*0.28*	6.2	0.16	*1.7*	0.022 J	1.7	4.6	--	--	5.6 U	--	242	--
052720013/052720014 (N)	MW-408	05/27/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.019 J	0.0082 J	0.040	0.033	0.16	*0.63*	***1.5***	***2.9***	1.6	1.2	**2.3**	*0.19*	5.7	0.12	*1.3*	0.020 J	1.8	3.8	--	--	*3.0* J	--	*431*	--
110320013/110320014 (N)	MW-408	11/03/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.013 J	0.0049 U	0.032	0.034	0.20	*0.47*	***0.87***	***2.1***	1.1	0.74	**1.5**	*0.15*	4.2	0.13	*0.86*	0.019 U	0.84	2.9	--	--	*3.6*	--	361	--
052521015	MW-408	05/25/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.031 J	0.013 J	0.062	0.041 J	0.24	*0.76*	***1.4***	***3.2***	1.9	1.4	**3.0**	*0.24*	6.9	0.19	*1.5*	0.036 U	1.3	4.7	--	--	--	*2.8* J	--	294
110221015	MW-408	11/02/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.027 J	0.013 U	0.065	0.093	0.38	*1.0*	***2.4***	***5.1***	3.3	2.0	**4.4**	*0.47*	9.4	0.30	*2.4*	0.032 J	1.3	5.8	--	--	*3.4*	--	229	--
051022013	MW-408	05/10/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.11 J	0.070 U	0.16 J	0.27	0.94	*3.7*	***8.4***	***19.8***	12.0	*6.3*	**12.9**	*1.8*	25.4	0.45	*9.0*	0.10 U	4.2	16.4	--	--	--	*2.1*	--	247
110822013	MW-408	11/08/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.13	0.014 U	0.022 J	0.027 J	0.25	*0.34*	***0.45***	***0.88***	0.57	0.33	**0.76**	*0.087*	2.5	0.18	*0.42*	0.032 J	0.24	1.7	--	--	--	*3.4* J	--	197
053018015	MW-409A	05/30/2018	0.50 U	0.50 U	1.00 U	*0.57* J	*4.3*	0.50 U	0.50 U	1.0 U	1.5 U	0.014 J	0.0065 J	0.028 J	0.050	0.27	*0.55*	***1.2***	***2.8***	1.4	0.99	**2.6**	*0.17*	7.3	0.055	*1.2*	0.053 J	2.6	4.6	--	--	5.6 U	--	165	--
110618018	MW-409A	11/06/2018	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.017 J	0.0049 U	0.0080 J	0.023 J	0.092	*0.066*	***0.25***	***0.36***	0.30	0.26	**0.36**	*0.036* J	0.60	0.022 J	0.22	0.024 J	0.18	0.52	--	--	5.6 U	--	327	--
052919014	MW-409A	05/29/2019	0.84 U	0.87 U	1.71 U	0.41 J	*6.2*	0.53 J	0.26 U	0.47 U	1.5 U	0.0094 J	0.0053 U	0.0066 U	0.0065 J	0.075	*0.18*	***0.25***	***0.56***	0.37	0.31	**0.38**	*0.047* J	0.67	0.0087 U	*0.27*	0.084 J	0.19	0.60	--	--	5.6 U	--	180	--
110519011	MW-409A	11/05/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.42 J	0.17 U	0.26 U	0.47 U	1.5 U	0.012 J	0.0047 U	0.0066 J	0.011 J	0.047 J	*0.052*	*0.085*	0.20	0.12	0.087	0.20	0.018 J	0.32	0.014 J	0.092	0.018 J	0.089	0.29	--	--	5.6 U	--	375	--
052720011	MW-409A	05/27/2020	0.84 U	0.87 U	1.71 U	0.26 J	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.011 J	0.013 J	0.017 J	0.037	0.083	*0.48*	***1.1***	***2.2***	1.4	0.94	**1.7**	*0.17*	2.7	0.036 J	*1.1*	0.031 J	0.61	1.8	--	--	5.6 U	--	306	--
110220007	MW-409A	11/02/2020	0.84 U	0.87 U	1.71 U	0.30 J	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.019 J	0.0049 U	0.0061 U	0.014 J	0.054	*0.080*	*0.18*	***0.41***	0.25	0.17	**0.31**	*0.030* J	0.47	0.012 J	0.18	0.019 U	0.097	0.40	--	--	5.6 U	--	219	--
052521011	MW-409A	05/25/2021	0.45 U	0.36 U	0.81 U	*0.95* J	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.019 J	0.0075 J	0.015 J	0.039	0.073	*0.17*	***0.32***	***0.75***	0.48	0.32	**0.59**	*0.062*	0.99	0.026 J	*0.38*	0.036 J	0.24	0.81	--	--	--	*3.6* J	--	74.2
110221011	MW-409A	11/02/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.022 J	0.014 U	0.014 U	0.038 J	0.086	*0.036* J	*0.083*	***0.28***	0.20	0.10	0.20	*0.026* J	0.23	0.023 U	0.14	0.024 J	0.031 J	0.20	--	--	*4.9*	--	131	--
051022011	MW-409A	05/10/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.018 J	0.014 U	0.014 U	0.061	0.073	0.013 U	***0.25***	***0.79***	0.47	0.25	**0.52**	*0.042* J	0.46	0.023 U	*0.35*	0.025 J	0.085	0.50	--	--	--	*3.3*	--	121
110822011	MW-409A	11/08/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.019 U	0.015 U	0.015 U	0.049 J	0.090	*0.058*	*0.19*	***0.54***	0.44	0.17	**0.35**	*0.062*	0.38	0.025 U	*0.32*	0.021 U	0.067	0.36	--	--	--	*4.5* J	--	69.7
053118024	MW-409B	05/31/2018	0.50 U	0.50 U	1.00 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.5 U	0.0076 J	0.0072 J	0.0061 U	0.0050 U	0.012 J	0.011 J	*0.098*	0.20	0.13	0.10	**0.22**	0.014 J	0.35	0.0080 U	0.10	0.032 J	0.11	0.28	--	--	*0.78* J	--	33.0	--
110718024	MW-409B	11/07/2018	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0061 U	0.0051 U	0.0084 J	0.015 J	0.011 U	*0.42*	***0.60***	***1.3***	0.81	0.49	**0.83**	*0.12*	1.6	0.015 J	*0.58*	0.019 U	0.42	1.3	--	--	*0.87* J	--	24.8	--
052919013	MW-409B	05/29/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0066 U	0.0054 U	0.0067 U	0.0055 U	0.037 J	*0.14*	*0.19*	***0.44***	0.33	0.28	**0.30**	*0.034* J	0.54	0.0089 U	0.24	0.020 U	0.14	0.45	--	--	*0.72* J	--	23.4	--
110519012	MW-409B	11/05/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0056 U	0.0046 U	0.0057 U	0.0066 J	0.019 J	*0.13*	***0.24***	***0.46***	0.34	0.19	**0.36**	*0.044* J	0.53	0.0075 U	0.24	0.017 U	0.15	0.50	--	--	*0.92* J	--	22.0	--
052720012	MW-409B	05/27/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.0057 U	0.0070 J	0.0059 U	0.0086 J	0.019 J	*0.11*	***0.22***	***0.46***	0.34	0.21	**0.33**	*0.036* J	0.52	0.0077 U	*0.26*	0.020 J	0.12	0.39	--	--	*1.2* J	--	22.6	--
110220008	MW-409B	11/02/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.0060 U	0.0050 U	0.0062 U	0.0051 U	0.011 U	*0.033* J	*0.13*	***0.26***	0.20	0.12	0.20	0.019 J	0.28	0.0081 U	0.13	0.019 U	0.068 J	0.23	--	--	*0.88* J	--	20.5	--
052521012	MW-409B	05/25/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.0060 J	0.0045 J	0.0054 U	0.013 J	0.023 J	*0.078*	*0.14*	***0.30***	0.22	0.13	**0.25**	*0.026* J	0.39	0.0071 U	0.16	0.016 U	0.099	0.31	--	--	--	0.56 U	--	16.8
110221012	MW-409B	11/02/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.017 U	0.013 U	0.013 U	0.012 U	0.018 U	*0.069*	*0.16*	***0.29***	0.26	0.11	**0.23**	*0.028* J	0.33	0.023 U	0.17	0.019 U	0.083	0.25	--	--	*1.0* J	--	15.9	--
051022012	MW-409B	05/10/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.018 U	0.014 U	0.014 U	0.012 U	0.018 U	0.013 U	*0.13*	***0.29***	0.22	0.12	**0.22**	0.022 J	0.31	0.023 U	0.15	0.089	0.076	0.25	--	--	--	0.56 U	--	15.1
110822012	MW-409B	11/08/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.019 U	0.015 U	0.015 U	0.014 U	0.020 J	*0.034* J	*0.066*	0.13	0.11	0.058	0.091	0.019 U	0.12	0.025 U	0.076	0.021 U	0.032 J	0.11	--	--	--	*1.2* J	--	14.8

Table 1. 2018-2022 Groundwater Analytical Results Compared to the Groundwater SL, the PAL, and Tap Water Criteria

Site-Specific Work Plan Addendum 1
Wisconsin Public Service Corporation
Green Bay Former Manufactured Gas Plant Site
700 N Adams St, Green Bay, Wisconsin
BRRTS#: 02-05-000254 USEPA#: WIN000509948

9-digit Code	Sample Location	Sample Date	PVOC 1,2,4-Trimethylbenzene	PVOC 1,3,5-Trimethylbenzene	PVOC Trimethylbenzenes, Total	PVOC Benzene	PVOC Ethylbenzene	PVOC Toluene	PVOC Xylene, o	PVOC Xylenes, m + p	PVOC Xylenes, Total	PAH 1-Methylnaphthalene	PAH 2-Methylnaphthalene	PAH Acenaphthene	PAH Acenaphthylene	PAH Anthracene	PAH Benzo(a)anthracene	PAH Benzo(a)pyrene	PAH Benzo(b)fluoranthene	PAH Benzo(g,h,i)perylene	PAH Benzo(k)fluoranthene	PAH Chrysene	PAH Dibenz(a,h)anthracene	PAH Fluoranthene	PAH Fluorene	PAH Indeno(1,2,3-cd)pyrene	PAH Naphthalene	PAH Phenanthrene	PAH Pyrene	Metal Aluminum, Total	Metal Antimony, Total	Metal Arsenic, Dissolved	Metal Arsenic, Total	Metal Barium, Dissolved	Metal Barium, Total
Reporting Units:			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
WI Groundwater SL:			**NS**	**NS**	**480**	**5**	**700**	**800**	**NS**	**NS**	**2,000**	**NS**	**NS**	**NS**	**NS**	**3,000**	**NS**	**0.2**	**0.2**	**NS**	**NS**	**0.2**	**NS**	**400**	**400**	**NS**	**100**	**3,000**	**250**	**200**	**6**	**10**	**10**	**2,000**	**2,000**
WI Groundwater PAL:			NS	NS	96	0.5	140	160	NS	NS	400	NS	NS	NS	NS	600	NS	0.02	0.02	NS	NS	0.02	NS	80	80	NS	10	NS	50	40	1.2	1	1	400	400
Tap Water RSL:			*56*	*60*	*NS*	*0.46*	*1.5*	*1,100*	*190*	*190*	*190*	*1.1*	*36*	*530*	*530*	*1,800*	*0.03*	*0.025*	*0.25*	*120*	*2.5*	*25*	*0.025*	*800*	*290*	*0.25*	*0.12*	*1,800*	*120*	*20,000*	*7.8*	*0.052*	*0.052*	*3,800*	*3,800*
053018014	MW-410R	05/30/2018	0.50 U	0.50 U	1.00 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.5 U	0.037	0.011 J	0.020 J	0.015 J	0.097	0.0076 U	0.011 U	0.012 J	0.0095 J	0.0076 U	0.013 U	0.010 U	0.011 U	0.0080 U	0.018 U	0.096	0.014 U	0.017 J	--	--	2.8 U	--	414	--
110618007	MW-410R	11/06/2018	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.029 J	0.0053 U	0.024 J	0.022 J	0.17	0.012 J	0.011 U	0.023 J	0.019 J	0.017 J	0.021 J	0.011 U	0.038 J	0.010 J	0.019 U	0.020 U	0.015 U	0.035 J	--	--	1.4 U	--	401	--
052819007	MW-410R	05/28/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0063 U	0.0053 U	0.0065 U	0.0054 U	0.011 U	0.0081 U	0.011 U	0.012 J	0.0092 J	0.016 J	0.015 J	0.011 U	0.015 J	0.0086 U	0.019 U	0.020 U	0.015 U	0.017 J	--	--	3.3 J	--	71.3	--
110419008/110419009 (N)	MW-410R	11/04/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.027 J	0.0052 J	0.020 J	0.018 J	0.15	0.011 J	0.0098 U	0.0089 J	0.0073 J	0.0070 U	0.012 U	0.0093 U	0.017 J	0.0088 J	0.016 U	0.017 U	0.013 U	0.017 J	--	--	2.8 U	--	347	--
052620008/052620009 (N)	MW-410R	05/26/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.022 J	0.015 J	0.025 J	0.0099 J	0.045 J	0.012 J	0.010 U	0.028 J	0.014 J	0.014 J	0.021 J	0.0098 U	0.044 J	0.014 J	0.017 U	0.034 J	0.018 J	0.030 J	--	--	1.7 J	--	404	--
110320011/110320012 (N)	MW-410R	11/03/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.0059 U	0.0049 U	0.015 J	0.0069 J	0.11	0.0076 U	0.011 U	0.0057 U	0.0068 U	0.0076 U	0.013 U	0.010 U	0.011 U	0.0080 U	0.018 U	0.018 U	0.014 U	0.010 J	--	--	0.84 J	--	377	--
052421006/052421007 (N)	MW-410R	05/24/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.047	0.028	0.019 J	0.012 J	0.052	0.0070 U	0.0098 U	0.0075 J	0.0063 U	0.0070 U	0.012 U	0.0093 U	0.011 J	0.0074 U	0.016 U	0.038 J	0.013 U	0.0098 J	--	--	--	1.4 U	--	316
110121006/110121007 (N)	MW-410R	11/01/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.078	0.22	0.022 J	0.022 J	0.13	0.013 U	0.018 U	0.018 U	0.022 U	0.021 U	0.025 U	0.016 U	0.024 U	0.022 U	0.014 U	0.026 J	0.024 U	0.021 U	--	--	3.1	--	296	--
050922008/050922009 (N)	MW-410R	05/09/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.030 J	0.013 U	0.025 J	0.012 U	0.037 J	0.013 U	0.019 U	0.019 U	0.022 U	0.021 U	0.025 U	0.017 U	0.025 U	0.023 U	0.015 U	0.042 J	0.025 U	0.022 U	--	--	--	1.9 J	--	333
110722008/110722009 (N)	MW-410R	11/07/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.018 U	0.014 U	0.014 U	0.013 U	0.073	0.014 U	0.013 U	0.0096 J	0.024 U	0.023 U	0.013 U	0.018 U	0.027 U	0.024 U	0.016 U	0.028 J	0.028 J	0.024 J	--	--	--	3.8 J	--	411
053018013	MW-411AR	05/30/2018	0.50 U	0.50 U	1.00 U	64.2	2.7	0.67 J	0.53 J	1.0 U	1.5 U	1.2	0.68	0.39	0.10	0.094	0.0076 U	0.011 U	0.014 J	0.012 J	0.0076 U	0.026 J	0.010 U	0.11	0.32	0.018 U	4.3	0.62	0.15	--	--	9.7 J	--	233	--
110618008/110618009 (N)	MW-411AR	11/06/2018	8.4 U	8.7 U	17.1 U	1,720	120	2.9 J	3.4 J	4.7 U	15.0 U	8.3	0.42	2.1	1.5	0.24	0.0080 U	0.011 U	0.023 J	0.022 J	0.022 J	0.045 J	0.011 U	0.13	0.97	0.019 U	3.3	0.91	0.17	--	--	41.8	--	131	--
052819006	MW-411AR	05/28/2019	4.4	0.87 U	4.4	857	71.5	1.9 J	2.2	1.3 J	3.6	3.2	0.72	0.98	0.52	0.17	0.048	0.038 J	0.068	0.044	0.038 J	0.059 J	0.011 U	0.16	0.58	0.030 J	4.9	0.71	0.21	--	--	12.1 J	--	102	--
110419006	MW-411AR	11/04/2019	21.0 U	21.8 U	42.8 U	1,860	100	4.3 U	6.5 U	11.6 U	37.5 U	5.3	0.78	1.4	0.90	0.19	0.024 J	0.028 J	0.045	0.032	0.019 J	0.055 J	0.0094 U	0.20	0.76	0.025 J	5.8	1.1	0.25	--	--	5.6 U	--	182	--
052620006	MW-411AR	05/26/2020	0.84 U	0.87 U	1.71 U	67.7	4.4	0.45 J	0.46 J	0.47 U	1.5 U	0.0097 J	0.010 J	0.0077 J	0.0079 J	0.014 J	0.056	0.089	0.20	0.14	0.094	0.16	0.016 J	0.23	0.0078 U	0.098	0.018 U	0.083	0.21	--	--	10.4	--	88.0	--
110220005	MW-411AR	11/02/2020	4.2 U	4.4 U	8.6 U	1,580	105	2.4 J	2.0 J	2.3 U	7.5 U	4.9	0.83	1.4	0.66	0.22	0.014 J	0.015 J	0.041	0.034	0.020 J	0.042 J	0.0098 U	0.17	0.67	0.025 J	6.8	1.0	0.20	--	--	4.6	--	311	--
052521009	MW-411AR	05/25/2021	1.2	0.36 U	1.20	188	11.6	0.60 J	0.62 J	0.70 U	1.3 J	0.96	0.29	0.33	0.11	0.079	0.011 J	0.010 U	0.021 J	0.015 J	0.010 J	0.038 J	0.0095 U	0.090	0.18	0.017 U	2.5	0.35	0.12	--	--	--	67.4	--	62.7
110221009	MW-411AR	11/02/2021	9.0 U	7.1 U	16.1 U	2,060	108	5.8 U	7.0 U	14.0 U	21.0 U	7.1	1.4	2.0	0.99	0.26	0.047	0.060	0.12	0.087	0.064	0.13	0.016 U	0.29	1.0	0.062	8.9	1.4	0.33	--	--	45.1	--	142	--
050922006	MW-411AR	05/09/2022	0.94 J	0.36 U	0.94	108	11.5	0.29 U	0.35 U	0.70 U	1.0 U	0.96	0.097	0.28	0.16	0.092	0.014 U	0.020 U	0.13	0.13	0.076	0.19	0.038 J	0.16	0.10	0.087	0.90	0.23	0.21	--	--	--	39.8	--	3.6 J
110722006	MW-411AR	11/07/2022	0.45 U	0.36 U	0.81 U	7.1	0.44 J	0.29 U	0.35 U	0.70 U	1.0 U	0.15	0.087	0.085	0.052 J	0.034 J	0.044 J	0.032 J	0.070	0.063	0.031 J	0.065	0.019 U	0.087	0.053 J	0.041 J	0.57	0.12	0.12	--	--	--	51.2	--	2.7 J
053118026	MW-411B	05/31/2018	0.50 U	0.50 U	1.00 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.5 U	0.013 J	0.014 J	0.076	0.061	0.36	1.6	2.9	5.6	3.2	2.0	4.6	0.40	9.0	0.15	2.7	0.049 J	3.1	6.5	--	--	2.8 U	--	103	--
110718021	MW-411B	11/07/2018	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0065 U	0.0054 U	0.0067 U	0.0055 U	0.015 J	0.041 J	0.18	0.31	0.24	0.21	0.29	0.026 J	0.45	0.0088 U	0.17	0.020 U	0.15	0.38	--	--	1.4 U	--	57.8	--
053019024	MW-411B	05/30/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0063 U	0.0052 U	0.0065 U	0.0066 J	0.042 J	0.19	0.16	0.52	0.31	0.21	0.32	0.045 J	0.58	0.0085 U	0.23	0.020 U	0.18	0.54	--	--	5.6 U	--	75.2 J	--
110419007	MW-411B	11/04/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.18 J	0.26 U	0.47 U	1.5 U	0.0097 J	0.0045 U	0.0074 J	0.0071 J	0.021 J	0.062	0.11	0.28	0.17	0.10	0.26	0.020 J	0.47	0.017 J	0.12	0.018 J	0.15	0.40	--	--	5.6 U	--	97.5	--
052620007	MW-411B	05/26/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.0057 U	0.0048 U	0.0059 U	0.0077 J	0.023 J	0.11	0.24	0.56	0.41	0.24	0.40	0.038 J	0.72	0.0077 U	0.31	0.018 U	0.20	0.49	--	--	2.8 U	--	68.0	--
110220006	MW-411B	11/02/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.0060 U	0.0049 U	0.016 J	0.0097 J	0.074	0.17	0.34	0.68	0.44	0.30	0.49	0.053	0.73	0.0081 U	0.32	0.019 U	0.24	0.59	--	--	1.9 J	--	51.1	--
052521010	MW-411B	05/25/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.0080 J	0.0051 U	0.0071 J	0.012 J	0.059	0.11	0.20	0.47	0.32	0.19	0.35	0.040 J	0.54	0.0082 U	0.22	0.019 U	0.14	0.43	--	--	--	0.73 J	--	8.7
110221010	MW-411B	11/02/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.017 U	0.013 U	0.013 U	0.015 J	0.029 J	0.096	0.28	0.62	0.51	0.24	0.43	0.052	0.63	0.022 U	0.34	0.029 J	0.15	0.44	--	--	2.6	--	33.5	--
050922007	MW-411B	05/09/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.018 U	0.014 U	0.014 U	0.020 J	0.094	0.014 U	0.24	0.62	0.54	0.21	0.34	0.13	0.52	0.024 U	0.35	0.020 U	0.15	0.40	--	--	--	0.57 J	--	26.8
110722007	MW-411B	11/07/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.019 U	0.015 U	0.015 U	0.019 J	0.034 J	0.11	0.30	0.72	0.60	0.22	0.41	0.071	0.62	0.025 U	0.44	0.021 U	0.17	0.52	--	--	--	3.5 J	--	33.6
052918004/052918005 (N)	MW-412	05/29/2018	0.50 U	0.50 U	1.00 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.5 U	0.0060 U	0.0049 U	0.0061 U	0.0050 U	0.011 U	0.0076 U	0.011 U	0.0058 U	0.0068 U	0.0076 U	0.013 U	0.010 U	0.011 U	0.0081 U	0.018 U	0.019 U	0.014 U	0.0077 U	--	--	4.7 J	--	594	--
110518004	MW-412	11/05/2018	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0072 U	0.0067 J	0.0074 U	0.0061 U	0.015 J	0.0092 U	0.013 U	0.0070 U	0.0083 U	0.0092 U	0.016 U	0.012 U	0.013 U	0.0097 U	0.022 U	0.022 U	0.017 U	0.0093 U	--	--	3.5	--	365	--
052819004	MW-412	05/28/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0069 U	0.011 J	0.0071 U	0.0058 U	0.018 J	0.042 J	0.012 U	0.0094 J	0.012 J	0.015 J	0.015 U	0.012 U	0.012 U	0.0093 U	0.021 U	0.021 U	0.024 J	0.0089 U	--	--	5.6 U	--	865	--
110419004	MW-412	11/04/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0055 U	0.0045 U	0.0056 U	0.0046 U	0.011 J	0.0070 U	0.0098 U	0.0061 J	0.0063 U	0.0070 U	0.012 U	0.0093 U	0.0099 U	0.0074 U	0.016 U	0.017 U	0.013 U	0.0071 U	--	--	5.6 U	--	661	--
052620004	MW-412	05/26/2020	0.84 U	0.87 U	1.71 U	0.32 J	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.0083 J	0.0082 J	0.0077 J	0.0048 U	0.019 J	0.083	0.094	0.19	0.11	0.091	0.18	0.015 J	0.39	0.011 J	0.078 J	0.023 J	0.11	0.27	--	--	3.5 J	--	614	--
110220004	MW-412	11/02/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.020 J	0.020 J	0.0059 U	0.0048 U	0.037 J	0.0073 U	0.010 U	0.0059 U	0.0048 U	0.0056 U	0.0066 U	0.0073 U	0.013 U	0.0097 U	0.010 U	0.0077 U	0.017 U	0.023 J	0.013 U	0.0074 U	--	--	3.2	--	316	--
052421004	MW-412	05/24/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	1.3	1.5	0.15	1.4	1.3	1.4	1.3	1.1	0.67	0.44	1.6	0.21	1.9	1.1	0.50	1.6	4.2	2.6	--	--	--	4.5 J	--	544
110121004	MW-412	11/01/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.032 J	0.019 J	0.022 J	0.012 U	0.052	0.013 U	0.018 U	0.018 U	0.021 U	0.021 U	0.024 U	0.016 U	0.024 U	0.022 U	0.014 U	0.029 J	0.024 U	0.021 U	--	--	4.7	--	568	--
050922003	MW-412	05/09/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.018 U	0.015 J	0.014 U	0.013 U	0.041 J	0.014 U	0.020 U	0.020 U	0.024 U	0.023 U	0.027 U	0.093	0.027 U	0.024 U	0.043 J	0.020 U	0.026 U	0.023 U	--	--	--	3.0	--	472
110722004	MW-412	11/07/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.020 U	0.015 U	0.015 U	0.014 U	0.044 J	0.015 U	0.014 U	0.010 U	0.026 U	0.024 U	0.014 U	0.020 U	0.029 U	0.026 U	0.017 U	0.023 J	0.028 U	0.025 U	--	--	--	3.3 J	--	414
052918006	MW-413	05/29/2018	0.50 U	0.50 U	1.00 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.5 U	0.0061 U	0.0051 U	0.0067 J	0.0052 U	0.011 U	0.0079 U	0.011 U	0.0060 U	0.0071 U	0.0079 U	0.014 U	0.010 U	0.011 U	0.0083 U	0.018 U	0.019 U	0.014 U	0.0080 U	--	--	0.56 U	--	119	--
110618006	MW-413	11/06/2018	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0063 U	0.0052 U	0.016 J	0.0053 U	0.011 U	0.0080 U	0.011 U	0.0061 U	0.0072 U	0.0080 U	0.014 U	0.011 U	0.011 U	0.0085 U	0.019 U	0.020 U	0.015 U	0.0081 U	--	--	0.59 J	--	151	--
052819005	MW-413	05/28/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0064 U	0.0053 U	0.0066 U	0.0054 U	0.011 U	0.0082 U	0.011 U	0.0062 U	0.0074 U	0.0082 U	0.014 U	0.011 U	0.012 U	0.0087 U	0.019 U	0.020 U	0.015 U	0.0083 U	--	--	2.8	--	49.6	--
110419005	MW-413	11/04/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0055 U	0.0045 U	0.0069 J	0.0046 U	0.0097 U	0.0070 U	0.0098 U	0.0053 U	0.0063 U	0.0070 U	0.012 U	0.0093 U	0.0099 U	0.0074 U	0.016 U	0.017 U	0.013 U	0.0071 U	--	--	0.85 J	--	101	--
052620005	MW-413	05/26/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.0058 U	0.0059 J	0.0060 U	0.0049 U	0.010 U	0.026 J	0.019 J	0.042	0.023 J	0.023 J	0.045 J	0.0098 U	0.076	0.0078 U	0.017 U	0.018 U	0.021 J	0.063	--	--	1.1	--	51.2	--
110320010	MW-413	11/03/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.0059 U	0.0049 U	0.0061 U	0.0050 U	0.010 U	0.0076 U	0.011 U	0.0057 U	0.0068 U	0.0076 U	0.013 U	0.010 U	0.011 U	0.0080 U	0.018 U	0.018 U	0.014 U	0.0076 U	--	--	0.56 U	--	100	--
052421005	MW-413	05/24/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.0056 U	0.0049 J	0.0059 J	0.0047 U	0.010 U	0.0072 U	0.010 U	0.0055 U	0.0065 U	0.0072 U	0.012 U	0.0095 U	0.010 U	0.0076 U	0.017 U	0.024 J	0.013 U	0.0073 U	--	--	--	0.87 J	--	112
110121005	MW-413	11/01/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.016 U	0.018 J	0.024 J	0.011 U	0.017 U	0.012 U	0.018 U	0.018 U	0.021 U	0.020 U	0.024 U	0.016 U	0.024 U	0.021 U	0.014 U	0.027 J	0.023 U	0.020 U	--	--	0.56 U	--	182	--
050922005	MW-413	05/09/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.017 U	0.013 U	0.013 U	0.012 U	0.018 U	0.013 U	0.019 U	0.019 U	0.022 U	0.021 U	0.025 U	0.035 J	0.025 U	0.022 U	0.019 J	0.019 U	0.024 U	0.022 U	--	--	--	1.5 J	--	125
110722005	MW-413	11/07/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.020 U	0.015 U	0.015 U	0.014 U	0.020 U	0.015 U	0.014 U	0.0099 U	0.025 U	0.024 U	0.014 U	0.019 U	0.029 U	0.026 U	0.017 U	0.022 U	0.028 U	0.025 U	--	--	--	1.0 J	--	89.3

Table 1. 2018-2022 Groundwater Analytical Results Compared to the Groundwater SL, the PAL, and Tap Water Criteria

Site-Specific Work Plan Addendum 1
Wisconsin Public Service Corporation
Green Bay Former Manufactured Gas Plant Site
700 N Adams St, Green Bay, Wisconsin
BRRTS#: 02-05-000254 USEPA#: WIN000509948

9-digit Code	Sample Location	Sample Date	PVOC 1,2,4-Trimethylbenzene	PVOC 1,3,5-Trimethylbenzene	PVOC Trimethylbenzenes, Total	PVOC Benzene	PVOC Ethylbenzene	PVOC Toluene	PVOC Xylene, o	PVOC Xylenes, m + p	PVOC Xylenes, Total	PAH 1-Methylnaphthalene	PAH 2-Methylnaphthalene	PAH Acenaphthene	PAH Acenaphthylene	PAH Anthracene	PAH Benzo(a)anthracene	PAH Benzo(a)pyrene	PAH Benzo(b)fluoranthene	PAH Benzo(g,h,i)perylene	PAH Benzo(k)fluoranthene	PAH Chrysene	PAH Dibenz(a,h)anthracene	PAH Fluoranthene	PAH Fluorene	PAH Indeno(1,2,3-cd)pyrene	PAH Naphthalene	PAH Phenanthrene	PAH Pyrene	Metal Aluminum, Total	Metal Antimony, Total	Metal Arsenic, Dissolved	Metal Arsenic, Total	Metal Barium, Dissolved	Metal Barium, Total
Reporting Units:			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
WI Groundwater SL:			**NS**	**NS**	**480**	**5**	**700**	**800**	**NS**	**NS**	**2,000**	**NS**	**NS**	**NS**	**NS**	**3,000**	**NS**	**0.2**	**0.2**	**NS**	**NS**	**0.2**	**NS**	**400**	**400**	**NS**	**100**	**3,000**	**250**	**200**	**6**	**10**	**10**	**2,000**	**2,000**
WI Groundwater PAL:			NS	NS	96	0.5	140	160	NS	NS	400	NS	NS	NS	NS	600	NS	0.02	0.02	NS	NS	0.02	NS	80	80	NS	10	NS	50	40	1.2	1	1	400	400
Tap Water RSL:			*56*	*60*	*NS*	*0.46*	*1.5*	*1,100*	*190*	*190*	*190*	*1.1*	*36*	*530*	*530*	*1,800*	*0.03*	*0.025*	*0.25*	*120*	*2.5*	*25*	*0.025*	*800*	*290*	*0.25*	*0.12*	*1,800*	*120*	*20,000*	*7.8*	*0.052*	*0.052*	*3,800*	*3,800*
053018017	MW-414	05/30/2018	0.50 U	0.50 U	1.00 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.5 U	0.0060 U	0.0050 U	0.0062 U	0.0051 U	0.011 U	0.0077 U	0.011 U	0.0072 J	0.0069 U	0.0077 U	0.013 U	0.010 U	0.011 J	0.0081 U	0.018 U	0.019 U	0.014 U	0.013 J	--	--	2.8 U	--	545	--
110618014	MW-414	11/06/2018	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0069 U	0.0057 U	0.0071 U	0.0058 U	0.012 U	0.0088 U	0.012 U	0.0067 U	0.0079 U	0.0088 U	0.015 U	0.012 U	0.012 U	0.0093 U	0.021 U	0.021 U	0.016 U	0.0095 J	--	--	2.8 U	--	399	--
052919015	MW-414	05/29/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0069 U	0.0057 U	0.0071 U	0.0058 U	0.012 U	0.0088 U	0.012 U	0.014 J	0.014 J	0.015 J	0.015 U	0.012 U	0.012 U	0.0093 U	0.021 U	0.021 U	0.016 U	0.012 J	--	--	2.8 U	--	419	--
110519019	MW-414	11/05/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0056 U	0.0050 J	0.0058 U	0.0047 U	0.013 J	0.022 J	0.024 J	0.037	0.021 J	0.020 J	0.043 J	0.0095 U	0.074	0.0076 U	0.017 U	0.017 U	0.058 J	0.080	--	--	2.8 U	--	276	--
052720019	MW-414	05/27/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.0058 U	0.0050 J	0.0060 U	0.0049 U	0.010 U	0.0095 J	0.010 U	0.023 J	0.013 J	0.017 J	0.025 J	0.0098 U	0.060	0.0078 U	0.017 U	0.018 U	0.038 J	0.041	--	--	*0.73* J	--	296	--
110320019	MW-414	11/03/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.0061 U	0.0051 U	0.0063 U	0.0052 U	0.011 U	0.0079 U	0.011 U	0.0060 U	0.0071 U	0.0079 U	0.014 U	0.010 U	0.011 U	0.0083 U	0.018 U	0.019 U	0.014 U	0.0080 U	--	--	2.8 U	--	300	--
052521019	MW-414	05/25/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.0057 U	0.0048 U	0.0059 U	0.0048 U	0.010 U	0.0073 U	0.010 U	0.012 J	0.0066 U	0.0073 U	0.013 U	0.0097 U	0.023 J	0.0077 U	0.017 U	0.018 U	0.013 U	0.017 J	--	--	--	1.4 U	--	279
110221019	MW-414	11/02/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.051	0.015 J	0.014 J	0.012 U	0.017 U	0.013 U	0.018 U	0.018 U	0.022 U	0.021 U	0.025 U	0.017 U	0.024 U	0.022 U	0.014 U	0.049	0.024 U	0.021 U	--	--	1.4 U	--	347	--
051022019	MW-414	05/10/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.018 U	0.014 U	0.014 U	0.013 U	0.019 U	0.014 U	0.020 U	0.039 J	0.024 U	0.023 U	0.050 J	0.018 U	0.070	0.024 U	0.018 J	0.020 U	0.050 J	0.059	--	--	--	*1.0* J	--	181
110822019	MW-414	11/08/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.019 U	0.015 U	0.015 U	0.013 U	0.020 U	0.015 U	0.014 U	0.0097 U	0.025 U	0.024 U	0.013 U	0.019 U	0.028 U	0.025 U	0.017 U	0.021 U	0.027 U	0.024 U	--	--	--	2.8 U	--	311
053018010/053018011 (N)	MW-415A	05/30/2018	0.50 U	0.50 U	1.00 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.5 U	0.0059 U	0.0049 U	0.0061 U	0.0050 U	0.011 J	0.022 J	*0.037* J	0.11	0.064	0.058	0.11	0.011 J	0.18	0.0080 U	0.056 J	0.018 U	0.067 J	0.12	--	--	0.56 U	--	113	--
110618011/110618012 (N)	MW-415A	11/06/2018	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0082 J	0.0099 J	0.0080 J	0.0053 U	0.023 J	0.013 J	*0.057* J	0.12	0.074	0.082	0.11	0.011 J	0.20	0.0089 U	0.064 J	0.020 U	0.12	0.15	--	--	1.4 U	--	129	--
052919017	MW-415A	05/29/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0064 U	0.0053 U	0.0066 U	0.0054 U	0.011 U	*0.039* J	*0.031* J	0.076	0.064	0.074	0.072	0.011 U	0.11	0.0087 U	0.046 J	0.020 U	0.043 J	0.094	--	--	*0.65* J	--	104	--
110519017	MW-415A	11/05/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0055 U	0.0096 J	0.0065 J	0.0047 U	0.0098 U	0.023 J	*0.030* J	0.059	0.037	0.034 J	0.057 J	0.0094 U	0.095	0.0074 U	0.030 J	0.017 U	0.049 J	0.092	--	--	*4.0* J	--	112	--
052720017	MW-415A	05/27/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.0058 U	0.0048 U	0.0060 U	0.0049 U	0.012 J	*0.033* J	*0.038* J	0.091	0.051	0.057	0.098	0.0098 U	0.22	0.0078 U	0.040 J	0.018 U	0.074	0.12	--	--	*0.61* J	--	94.7	--
110320017	MW-415A	11/03/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.0057 U	0.0048 U	0.0059 U	0.0048 U	0.010 U	0.025 J	*0.032* J	0.088	0.048	0.044	0.063 J	0.0097 U	0.11	0.0077 U	0.038 J	0.018 U	0.038 J	0.088	--	--	*1.0* J	--	124	--
052521017	MW-415A	05/25/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.0081 J	0.0063 J	0.0061 U	0.017 J	0.010 U	*0.037* J	*0.058*	0.13	0.079	0.064	0.12	0.011 J	0.20	0.0096 J	0.065 J	0.027 J	0.083	0.15	--	--	--	0.56 U	--	106
110221017	MW-415A	11/02/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.017 U	0.013 U	0.013 U	0.012 U	0.017 U	0.013 U	*0.025* J	*0.053*	0.036 J	0.021 J	*0.042* J	0.017 U	0.081	0.022 U	0.027 J	0.019 U	0.036 J	0.057	--	--	1.4 U	--	105	--
051022017	MW-415A	05/10/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.018 U	0.014 U	0.014 U	0.012 U	0.025 J	0.013 U	*0.086*	0.17	0.12	0.078	0.14	0.018 U	0.20	0.023 U	0.092	0.020 U	0.069	0.16	--	--	--	*0.63* J	--	89.5
110822017	MW-415A	11/08/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.019 U	0.015 U	0.015 U	0.014 U	0.020 U	0.016 J	*0.038* J	0.064	0.039 J	0.044 J	0.056	0.019 U	0.091	0.025 U	0.029 J	0.026 J	0.046 J	0.083	--	--	--	1.4 U	--	90.8
053018012	MW-415B	05/30/2018	0.50 U	0.50 U	1.00 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.5 U	0.0060 U	0.0049 U	0.0061 U	0.0050 U	0.011 U	0.0076 U	0.011 U	0.012 J	0.0077 J	0.0076 U	0.014 J	0.010 U	0.014 J	0.0081 U	0.018 U	0.019 U	0.020 J	0.022 J	--	--	0.56 U	--	20.0	--
110618013	MW-415B	11/06/2018	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0093 J	0.013 J	0.0080 J	0.0055 U	0.012 U	0.0084 U	0.012 U	*0.023* J	0.019 J	0.019 J	*0.027* J	0.011 U	0.037 J	0.0089 U	0.020 U	0.025 J	0.023 J	0.032 J	--	--	1.4 U	--	20.7 J	--
052919016	MW-415B	05/29/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0060 U	0.0049 U	0.0096 J	0.0050 U	0.021 J	*0.061*	*0.040* J	0.099	0.052	0.072	0.10	0.010 U	0.19	0.012 J	0.041 J	0.019 U	0.16	0.14	--	--	*1.2* J	--	22.8	--
110519018	MW-415B	11/05/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0056 U	0.0081 J	0.0057 U	0.0047 U	0.0099 U	0.013 J	0.018 J	0.030	0.020 J	0.020 J	0.035 J	0.0095 U	0.046 J	0.0075 U	0.017 U	0.018 J	0.027 J	0.047	--	--	2.8 U	--	18.8 J	--
052720018	MW-415B	05/27/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.0060 U	0.0049 U	0.0061 U	0.0050 U	0.011 U	*0.043*	*0.045* J	0.10	0.065	0.086	0.11	0.012 J	0.22	0.0081 U	0.054 J	0.019 U	0.069 J	0.15	--	--	*0.65* J	--	21.5	--
110320018	MW-415B	11/03/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.0058 U	0.0048 U	0.0060 U	0.0049 U	0.010 U	0.023 J	*0.032* J	0.094	0.058	0.054	0.088	0.0098 U	0.14	0.0078 U	0.040 J	0.018 U	0.058 J	0.11	--	--	2.8 U	--	20.7 J	--
052521018	MW-415B	05/25/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.0061 U	0.0051 U	0.0063 U	0.0052 U	0.011 U	0.011 J	0.014 J	0.037	0.026 J	0.013 J	0.031 J	0.010 U	0.056	0.0083 U	0.019 J	0.019 U	0.019 J	0.042	--	--	--	0.56 U	--	22.2
110221018	MW-415B	11/02/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.017 U	0.013 U	0.013 U	0.012 U	0.017 U	0.021 J	*0.027* J	0.050	0.034 J	0.027 J	0.048	0.017 U	0.074	0.022 U	0.025 J	0.022 J	0.031 J	0.054	--	--	*0.67* J	--	19.8	--
051022018	MW-415B	05/10/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.017 U	0.013 U	0.013 U	0.012 U	0.018 U	0.013 U	*0.031* J	0.075	0.049	0.041 J	0.083	0.017 U	0.13	0.023 U	0.043 J	0.019 U	0.077	0.11	--	--	--	*0.94* J	--	21.3
110822018	MW-415B	11/08/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.019 U	0.014 U	0.014 U	0.013 U	0.019 U	0.023 J	*0.035* J	0.069	0.041 J	0.042 J	0.064	0.019 U	0.10	0.024 U	0.031 J	0.021 U	0.047 J	0.096	--	--	--	*1.1* J	--	19.1
053018009	MW-416	05/30/2018	0.50 U	0.50 U	1.00 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.5 U	0.0059 U	0.0049 U	0.0061 U	0.0050 U	0.010 U	0.0076 U	0.011 U	*0.021* J	0.0087 J	0.0076 U	*0.020* J	0.010 U	0.034 J	0.0080 U	0.018 U	0.018 U	0.019 J	0.026 J	--	--	*3.2* J	--	294	--
110618010	MW-416	11/06/2018	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0065 U	0.0071 J	0.012 J	0.0055 U	0.033 J	0.022 J	*0.057* J	0.14	0.090	0.11	0.16	0.014 J	0.25	0.0088 U	0.079 J	0.020 U	0.12	0.20	--	--	5.6 U	--	393	--
052919018	MW-416	05/29/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0064 U	0.0053 U	0.0066 U	0.0054 U	0.024 J	*0.089*	*0.11*	***0.28***	0.14	0.16	**0.25**	0.022 J	0.46	0.0087 U	0.11	0.020 U	0.20	0.36	--	--	5.6 U	--	440	--
110519016	MW-416	11/05/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0055 U	0.0069 J	0.0065 J	0.0046 U	0.0097 U	0.021 J	*0.035* J	0.072	0.041	0.035	0.070	0.0093 U	0.10	0.0074 U	0.033 J	0.017 U	0.052 J	0.097	--	--	***11.2*** J	--	458	--
052720016	MW-416	05/27/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.0060 U	0.0049 U	0.0097 J	0.0050 U	0.027 J	*0.10*	*0.18*	***0.30***	0.15	0.15	**0.27**	*0.026* J	0.46	0.011 J	0.13	0.019 U	0.16	0.34	--	--	5.6 U	--	326	--
110320016	MW-416	11/03/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.0060 U	0.0050 U	0.0090 J	0.0051 U	0.011 U	0.0077 U	0.011 J	0.034	0.021 J	0.019 J	0.031 J	0.010 U	0.060	0.0081 U	0.019 J	0.034 J	0.023 J	0.047	--	--	5.6 U	--	339	--
052521016	MW-416	05/25/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.0068 J	0.0044 U	0.0054 U	0.0044 U	0.0093 U	0.0087 J	0.010 J	0.030	0.020 J	0.012 J	0.027 J	0.0089 U	0.048	0.0071 U	0.016 J	0.016 U	0.017 J	0.037	--	--	--	5.6 U	--	233
110221016	MW-416	11/02/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.017 U	0.013 U	0.013 U	0.012 U	0.017 U	0.025 J	*0.049*	0.10	0.070	0.059	0.088	0.017 U	0.15	0.022 U	0.052	0.019 U	0.048	0.10	--	--	*4.1* J	--	248	--
051022016	MW-416	05/10/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.017 U	0.013 U	0.014 U	0.012 U	0.018 U	0.013 U	0.019 U	0.066	0.044 J	0.032 J	0.052	0.017 U	0.089	0.023 U	0.034 J	0.019 U	0.040 J	0.065	--	--	--	*2.5*	--	227
110822016	MW-416	11/08/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.020 U	0.015 U	0.015 U	0.014 U	0.041 J	0.020 J	*0.038* J	0.081	0.045 J	0.035 J	0.064	0.020 U	0.099	0.026 U	0.036 J	0.022 U	0.042 J	0.086	--	--	--	5.6 U	--	189
052918002	MW-417	05/29/2018	0.50 U	0.50 U	1.00 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.5 U	0.0059 U	0.0049 U	0.0061 U	0.0050 U	0.010 U	0.0076 U	0.011 U	0.0057 U	0.0068 U	0.0076 U	0.013 U	0.010 U	0.011 U	0.0080 U	0.018 U	0.018 U	0.014 U	0.0076 U	--	--	*1.4* J	--	366	--
110518002	MW-417	11/05/2018	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0068 U	0.0056 U	0.0070 U	0.0057 U	0.012 U	0.0087 U	0.012 U	0.0066 U	0.0078 U	0.0087 U	0.015 U	0.012 U	0.012 U	0.0092 U	0.020 U	0.021 U	0.016 U	0.0088 U	--	--	2.8 U	--	*744*	--
052819002	MW-417	05/28/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0076 J	0.0069 J	0.0065 U	0.0053 U	0.011 U	0.0080 U	0.011 U	0.0071 J	0.0072 U	0.0080 U	0.014 U	0.011 U	0.011 U	0.0085 U	0.019 U	0.020 U	0.016 J	0.013 J	--	--	*3.1* J	--	*469*	--
110419002	MW-417	11/04/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0055 U	0.0045 U	0.0056 U	0.0046 U	0.0097 U	0.0080 J	0.011 J	0.014 J	0.0097 J	0.0071 J	0.014 J	0.0093 U	0.018 J	0.0074 U	0.016 U	0.017 U	0.013 U	0.020 J	--	--	5.6 U	--	*560*	--
052620002	MW-417	05/26/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.0098 J	0.0065 J	0.0073 J	0.0049 U	0.010 U	0.0074 U	0.010 U	0.0056 U	0.0066 U	0.0074 U	0.013 U	0.0098 U	0.010 U	0.0078 U	0.017 U	0.018 U	0.016 J	0.0075 U	--	--	*1.6* J	--	*461*	--
110220002	MW-417	11/02/2020	0.84 U	0.87 U	1.71 U	0.26 J	0.32 U	0.29 J	0.26 U	0.47 U	1.5 U	0.0063 U	0.0053 U	0.0065 U	0.0054 U	0.011 U	0.0081 U	0.011 U	0.0062 U	0.0073 U	0.0081 U	0.014 U	0.011 U	0.011 U	0.0086 U	0.019 U	0.020 U	0.015 U	0.0082 U	--	--	2.8 U	--	*655*	--
052421002	MW-417	05/24/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.027 J	0.034	0.0061 U	0.0060 J	0.010 U	0.0084 J	0.011 U	0.0057 U	0.0068 U	0.0076 U	0.013 U	0.010 U	0.015 J	0.011 J	0.018 U	0.098	0.034 J	0.018 J	--	--	--	*1.2* J	--	*473*
110121002	MW-417	11/01/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.025 J	0.022 J	0.013 U	0.012 U	0.018 U	0.013 U	0.019 U	0.018 U	0.022 U	0.021 U	0.025 U	0.017 U	0.025 U	0.022 U	0.015 U	0.040 J	0.024 U	0.021 U	--	--	*2.2*	--	*473*	--
050922002	MW-417	05/09/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.018 U	0.014 U	0.014 U	0.012 U	0.018 U	0.013 U	0.019 U	0.019 U	0.023 U	0.022 U	0.026 U	0.018 U	0.026 U	0.023 U	0.015 U	0.020 U	0.025 U	0.022 U	--	--	--	*1.6*	--	291
110722002	MW-417	11/07/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.019 U	0.015 U	0.015 U	0.013 U	0.020 U	0.014 U	0.013 U	0.0097 U	0.025 U	0.024 U	0.013 U	0.019 U	0.028 U	0.025 U	0.016 U	0.021 U	0.027 U	0.024 U	--	--	--	*2.2*	--	286

Table 1. 2018-2022 Groundwater Analytical Results Compared to the Groundwater SL, the PAL, and Tap Water Criteria

Site-Specific Work Plan Addendum 1
Wisconsin Public Service Corporation
Green Bay Former Manufactured Gas Plant Site
700 N Adams St, Green Bay, Wisconsin
BRRTS#: 02-05-000254 USEPA#: WIN000509948

			PVOC	PVOC	PVOC	PVOC	PVOC	PVOC	PVOC	PVOC	PVOC	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	Metal	Metal	Metal	Metal	Metal	Metal
9-digit Code	Sample Location	Sample Date	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Trimethylbenzenes, Total	Benzene	Ethylbenzene	Toluene	Xylene, o	Xylenes, m + p	Xylenes, Total	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(e)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Aluminum, Total	Antimony, Total	Arsenic, Dissolved	Arsenic, Total	Barium, Dissolved	Barium, Total
	Reporting Units:		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	WI Groundwater SL:		**NS**	**NS**	**480**	**5**	**700**	**800**	**NS**	**NS**	**2,000**	**NS**	**NS**	**NS**	**NS**	**3,000**	**NS**	**0.2**	**0.2**	**NS**	**NS**	**0.2**	**NS**	**400**	**400**	**NS**	**100**	**3,000**	**250**	**200**	**6**	**10**	**10**	**2,000**	**2,000**
	WI Groundwater PAL:		NS	NS	96	0.5	140	160	NS	NS	400	NS	NS	NS	NS	600	NS	0.02	0.02	NS	NS	0.02	NS	80	80	NS	10	NS	50	40	1.2	1	1	400	400
	Tap Water RSL:		*56*	*60*	*NS*	*0.46*	*1.5*	*1,100*	*190*	*190*	*190*	*1.1*	*36*	*530*	*530*	*1,800*	*0.03*	*0.025*	*0.25*	*120*	*2.5*	*25*	*0.025*	*800*	*290*	*0.25*	*0.12*	*1,800*	*120*	*20,000*	*7.8*	*0.052*	*0.052*	*3,800*	*3,800*
052918001	MW-418	05/29/2018	0.50 U	0.50 U	1.00 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.5 U	0.0058 U	0.0048 U	0.0060 U	0.0049 U	0.010 U	0.0074 U	0.010 U	0.0056 U	0.0066 U	0.0074 U	0.013 U	0.0098 U	0.010 U	0.0078 U	0.017 U	0.018 U	0.014 U	0.0075 U	--	--	0.56 U	--	223	--
110518001	MW-418	11/05/2018	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0061 U	0.0051 U	0.0063 U	0.0051 U	0.011 U	0.0078 U	0.011 U	0.0059 U	0.0070 U	0.0078 U	0.013 U	0.010 U	0.011 U	0.0082 U	0.018 U	0.019 U	0.014 U	0.0079 U	--	--	*2.6* J	--	283	--
052819001	MW-418	05/28/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0077 J	0.0095 J	0.0067 U	0.0055 U	0.012 U	*0.038* J	0.012 U	0.015 J	0.0096 J	0.014 J	0.017 J	0.011 U	0.026 J	0.0089 U	0.020 U	0.020 U	0.026 J	0.027 J	--	--	*0.44* J	--	227	--
110419001	MW-418	11/04/2019	0.84 U	0.87 U	1.71 U	0.25 U	0.22 U	0.17 U	0.26 U	0.47 U	1.5 U	0.0089 J	0.013 J	0.0061 J	0.0046 U	0.0096 U	0.025 J	*0.038* J	0.072	0.045	0.039	0.066	0.0092 U	0.097	0.0073 U	0.034 J	0.017 U	0.045 J	0.11	--	--	*0.76* J	--	270	--
052620001	MW-418	05/26/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.0060 J	0.0085 J	0.0059 U	0.0048 U	0.010 U	0.0073 U	0.010 U	0.0059 J	0.0066 U	0.0073 U	0.013 U	0.0097 U	0.012 J	0.0077 U	0.017 U	0.023 J	0.013 U	0.010 J	--	--	*1.2* J	--	142	--
110220001	MW-418	11/02/2020	0.84 U	0.87 U	1.71 U	0.25 U	0.32 U	0.27 U	0.26 U	0.47 U	1.5 U	0.0061 U	0.0051 U	0.0063 U	0.0051 U	0.011 U	0.0078 U	0.011 U	0.0059 U	0.0070 U	0.0078 U	0.013 U	0.010 U	0.011 U	0.0082 U	0.018 U	0.019 U	0.014 U	0.0079 U	--	--	*1.2* J	--	177	--
052421001	MW-418	05/24/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.032	0.043	0.0060 U	0.0052 J	0.010 U	0.0074 U	0.010 U	0.0056 U	0.0066 U	0.0074 U	0.013 U	0.0098 U	0.010 U	0.0078 U	0.017 U	*0.18*	0.020 J	0.0081 J	--	--	--	*1.1* J	--	307
110121001	MW-418	11/01/2021	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.028 J	0.032 J	0.013 U	0.012 U	0.017 U	0.013 U	0.018 U	0.018 U	0.022 U	0.021 U	0.025 U	0.017 U	0.024 U	0.022 U	0.014 U	0.042 J	0.024 U	0.021 U	--	--	0.56 U	--	291	--
050922001	MW-418	05/09/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.017 U	0.013 U	0.014 U	0.012 U	0.018 U	0.013 U	0.019 U	0.019 U	0.023 U	0.022 U	0.026 U	0.017 U	0.025 U	0.023 U	0.015 U	0.019 U	0.025 U	0.022 U	--	--	--	*0.56* J	--	142
110722001	MW-418	11/07/2022	0.45 U	0.36 U	0.81 U	0.30 U	0.33 U	0.29 U	0.35 U	0.70 U	1.0 U	0.019 U	0.014 U	0.015 U	0.013 U	0.019 U	0.014 U	0.013 U	0.0095 U	0.024 U	0.023 U	0.013 U	0.019 U	0.027 U	0.025 U	0.016 U	0.021 U	0.027 U	0.024 U	--	--	--	0.56 U	--	215

Table 1. 2018-2022 Groundwater Analytical Results Cc

Site-Specific Work Plan Addendum 1
Wisconsin Public Service Corporation
Green Bay Former Manufactured Gas Plant Site
700 N Adams St, Green Bay, Wisconsin
BRRTS#: 02-05-000254 USEPA#: WIN000509948

9-digit Code	Sample Location	Sample Date	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Inorganic	Inorganic	Inorganic	Organic	Field	Field	Field	Field	Field	Field	Field
			Cadmium, Dissolved	Cadmium, Total	Chromium, Dissolved	Chromium, Total	Copper, Total	Iron, Dissolved	Iron, Total	Lead, Dissolved	Lead, Total	Manganese, Dissolved	Manganese, Total	Mercury, Dissolved	Mercury, Total	Nickel, Total	Selenium, Dissolved	Selenium, Total	Silver, Dissolved	Silver, Total	Vanadium, Total	Zinc, Total	Chloride, Total	Nitrogen, NO2 + NO3, Total	Sulfate, Total	Methane	Dissolved oxygen	Groundwater, depth to	Oxidation Reduction Potential	pH, Field	Specific Conductance, Field	Temperature, Water	Turbidity, Quantitative
		Reporting Units:	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	feet	millivolts	s.u.	µS/cm	Deg C	NTUs
		WI Groundwater SL:	**5**	**5**	**100**	**100**	**1,300**	**NS**	**NS**	**15**	**15**	**300**	**300**	**2**	**2**	**100**	**50**	**50**	**50**	**50**	**30**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
		WI Groundwater PAL:	0.5	0.5	10	10	130	150	150	1.5	1.5	60	60	0.2	0.2	20	10	10	10	10	6	2,500	125,000	2,000	125,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
		Tap Water RSL:	*1.8*	*1.8*	*22,000*	*22,000*	*800*	*14,000*	*14,000*	*15*	*15*	*430*	*430*	*5.7*	*5.7*	*390*	*100*	*100*	*94*	*94*	*86*	*6,000*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
053018008	MW-401BR	05/30/2018	0.16 U	--	2.0 U	--	--	221 U	--	0.39 U	--	5.4 U	--	0.13 U	--	--	0.63 U	--	0.20 U	--	--	--	--	330	1,140,000	--	1.41	9.80	223.6	7.15	3,785	15.56	4.99
052919009	MW-401BR	05/29/2019	1.5 U	--	10.2 U	--	--	1,420 J	--	2.4 U	--	**366**	--	0.084 U	--	--	3.2 U	--	1.0 U	--	--	--	--	95 U	842,000	--	0.17	7.16	-150.0	8.74	8069.6	12.79	24.91
110619024	MW-401BR	11/06/2019	1.5 U	--	10.2 U	--	--	580 U	--	2.4 U	--	197	--	0.084 U	--	--	3.2 U	--	1.3 U	--	--	--	--	59 U	584,000	--	1.80	--	-69.5	8.45	4540.5	9.31	95.32
052720020	MW-401BR	05/27/2020	0.30 U	--	2.0 U	--	--	850	--	0.47 U	--	**335**	--	0.084 U	--	--	0.63 U	--	0.25 U	--	--	--	--	59 U	687,000	21.3	0.05	7.89	-90.3	7.76	5249.3	30.52	0.00
110320020	MW-401BR	11/03/2020	0.76 U	--	5.1 U	--	--	449 J	--	1.2 U	--	294	--	0.066 U	--	--	1.6 U	--	0.64 U	--	--	--	--	59 U	904,000	10.1	0.21	9.10	-88.0	7.22	5143.8	14.79	0.00
052521021	MW-401BR	05/25/2021	--	0.30 U	--	2.0 U	--	--	116 U	--	0.47 U	--	**326**	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	370	1,030,000	5.5	0.36	8.72	61.8	7.12	3757.5	18.46	0.00
110221021	MW-401BR	11/02/2021	0.30 U	--	2.0 U	--	--	116 U	--	0.47 U	--	299	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	--	1,100	1,030,000	11.5	0.19	10.08	-29.6	6.92	3779.2	13.21	1.79
051022021	MW-401BR	05/10/2022	--	0.15 U	--	1.0 U	--	--	58.0 U	--	0.24 U	--	**428**	--	0.066 U	--	--	0.32 U	--	0.13 U	--	--	--	2,200	1,160,000	4.8	0.08	13.20	29.7	6.55	3,608	16.48	12.79
110822021	MW-401BR	11/08/2022	--	0.30 U	--	2.0 U	--	--	116 U	--	0.74 J	--	***497***	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	1,300	1,280,000	12.6	0.66	8.59	54.0	7.37	3461.7	12.92	0.00
053018019	MW-402R	05/30/2018	1.6 U	--	20.4 U	--	--	*26,100*	--	3.9 U	--	***2,190***	--	0.50 U	--	--	6.3 U	--	2.0 U	--	--	--	--	95 U	100,000 U	--	0.10	3.79	-178.1	6.97	30,316	17.12	7.48
110320021	MW-402R	11/03/2020	1.5 U	--	10.2 U	--	--	10,500	--	2.4 U	--	**336**	--	0.066 U	--	--	3.2 U	--	1.3 U	--	--	--	--	59 U	25,700	691	0.08	4.07	-201.2	6.85	14119.2	16.18	0.00
052521020	MW-402R	05/25/2021	--	0.30 U	--	2.0 U	--	--	4,320	--	0.47 U	--	**325**	--	0.066 U	--	--	1.2 J	--	0.25 U	--	--	--	160 J	152,000	208	0.24	4.11	-47.5	7.03	9063.4	17.38	0.00
110221020	MW-402R	11/02/2021	0.76 U	--	5.1 U	--	--	5,580	--	1.2 U	--	**345**	--	0.066 U	--	--	1.6 U	--	0.64 U	--	--	--	--	59 U	23,500	436	0.17	4.29	-114.4	6.86	11109.5	16.96	1.10
051022020	MW-402R	05/10/2022	--	0.15 U	--	1.0 U	--	--	2,040	--	0.24 U	--	187	--	0.066 U	--	--	3.4	--	0.13 U	--	--	--	340	476,000	508	0.23	5.05	-46.1	7.47	9448.6	12.69	33.73
110822020	MW-402R	11/08/2022	--	0.76 U	--	5.1 U	--	--	2,960	--	1.6 J	--	178	--	0.066 U	--	--	1.6 U	--	0.64 U	--	--	--	75 J	68,800	465	0.62	3.96	-106.5	7.83	5653.3	14.91	5.60
053118025	MW-403R	05/31/2018	1.6 U	--	20.4 U	--	--	2,210 U	--	3.9 U	--	85.3 J	--	0.25 U	--	--	6.3 U	--	2.0 U	--	--	--	--	95 U	1,010,000	--	0.09	1.82	-293.4	9.31	16,352	16.57	15.00
110718023	MW-403R	11/07/2018	3.0 U	--	20.4 U	--	--	2,210 U	--	4.7 U	--	54.0 U	--	0.17 U	--	--	6.3 U	--	2.0 U	--	--	--	--	95 U	2,220,000	--	0.14	2.79	-281.9	8.35	17698.1	11.14	4.77
052919022	MW-403R	05/29/2019	3.0 U	--	20.4 U	--	--	2,210 U	--	4.7 U	--	103 J	--	0.084 U	--	--	6.3 U	--	2.0 U	--	--	--	--	95 U	1,410,000	--	0.05	0.88	-196.5	8.58	21566.1	15.75	3.25
110519022	MW-403R	11/05/2019	3.0 U	--	20.4 U	--	--	1,160 U	--	4.7 U	--	83.2	--	0.084 U	--	--	6.3 U	--	2.5 U	--	--	--	--	59 U	1,800,000	--	0.10	2.65	-270.9	8.20	21385.6	14.49	0.00
052720023	MW-403R	05/27/2020	1.5 U	--	10.2 U	--	--	580 U	--	4.7 U	--	61.0	--	0.084 U	--	--	3.2 U	--	1.3 U	--	--	--	--	82 J	1,840,000	46.6	0.00	1.30	-295.5	8.22	17892.1	31.48	0.00
110320024	MW-403R	11/03/2020	0.30 U	--	20.4 U	--	--	1,160 U	--	4.7 U	--	33.8 J	--	0.066 U	--	--	6.3 U	--	0.25 U	--	--	--	--	59 U	1,820,000	61.0	0.08	2.90	-330.8	8.18	19990.4	17.74	0.76
052621025	MW-403R	05/26/2021	--	0.30 U	--	2.0 U	--	--	1,400	--	0.47 U	--	141	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	120 J	473,000	63.9	0.10	2.76	-127.7	7.40	4622.6	15.78	2.43
110321025	MW-403R	11/03/2021	0.30 U	--	5.1 U	--	--	356 J	--	0.47 U	--	140	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	--	59 U	777,000	191	0.12	3.99	-303.0	7.93	10527.2	16.91	0.00
051022024	MW-403R	05/10/2022	--	0.30 U	--	5.2 J	--	--	2,910	--	1.4 J	--	211	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	59 U	904,000	28.7	0.04	4.00	-110.0	7.67	4069.3	14.02	64.42
110822024	MW-403R	11/08/2022	--	0.76 U	--	5.1 U	--	--	403 J	--	0.47 U	--	104	--	0.066 U	--	--	1.6 U	--	0.64 U	--	--	--	59 U	1,720,000	44.5	0.45	3.14	-179.0	8.64	7,707	16.47	0.13
053018020/053018021 (N)	MW-404	05/30/2018	0.81 U	--	10.2 U	--	--	1,790 J	--	2.0 U	--	**352**	--	0.13 U	--	--	3.2 U	--	1.0 U	--	--	--	--	95 U	324,000	--	0.20	1.23	-23.9	6.73	7,794	19.06	8.20
110618016	MW-404	11/06/2018	0.76 U	--	5.1 U	--	--	3,860	--	1.2 U	--	**337**	--	0.084 U	--	--	1.6 U	--	0.50 U	--	--	--	--	95 U	249,000	--	0.16	2.00	-22.2	6.71	7846.1	15.73	18.37
052919020/052919021 (N)	MW-404	05/29/2019	1.5 U	--	10.2 U	--	--	7,480	--	2.4 U	--	**379**	--	0.084 U	--	--	3.2 U	--	1.0 U	--	--	--	--	95 U	260,000	--	0.15	0.86	8.2	6.39	9277.5	16.09	25.03
110519020	MW-404	11/05/2019	1.5 U	--	10.2 U	--	--	4,610	--	2.4 U	--	**411**	--	0.084 U	--	--	3.2 U	--	1.3 U	--	--	--	--	59 U	279,000	--	0.19	1.41	30.6	6.84	10353.3	11.12	0.00
052720021	MW-404	05/27/2020	0.76 U	--	5.1 U	--	--	5,700	--	1.2 U	--	**318**	--	0.084 U	--	--	1.6 U	--	0.64 U	--	--	--	--	59 U	371,000	112	0.03	1.81	-56.2	7.13	8167.2	30.84	20.96
110320022	MW-404	11/03/2020	0.30 U	--	2.0 U	--	--	538	--	0.47 U	--	**321**	--	0.066 U	--	--	3.2 U	--	0.25 U	--	--	--	--	59 U	547,000	10.8	0.14	2.35	56.1	6.66	10022.8	17.29	44.73
052621023	MW-404	05/25/2021	--	0.76 U	--	5.1 U	--	--	2,560	--	1.2 U	--	280	--	0.066 U	--	--	1.6 U	--	0.64 U	--	--	--	96 J	279,000	76.6	0.42	2.09	-38.6	6.74	7344.9	16.17	0.00
110321023	MW-404	11/03/2021	0.30 U	--	2.0 U	--	--	1,800	--	0.47 U	--	297	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	--	59 U	226,000	77.8	0.19	3.42	-24.0	6.63	7668.9	14.68	0.26
051022022	MW-404	05/10/2022	--	0.30 U	--	2.0 U	--	--	702	--	1.5 J	--	282	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	230 J	349,000	76.3	0.33	3.40	20.9	6.90	6178.3	14.71	26.52
110822022	MW-404	11/08/2022	--	0.76 U	--	5.1 U	--	--	800 J	--	0.47 U	--	**305**	--	0.066 U	--	--	1.6 U	--	0.64 U	--	--	--	59 U	361,000	24.8	0.50	1.52	16.0	7.58	6256.7	16.40	2.14
053018022	MW-405B	05/30/2018	1.6 U	--	20.4 U	--	--	2,210 U	--	3.9 U	--	286	--	0.25 U	--	--	6.3 U	--	2.0 U	--	--	--	--	95 U	240,000	--	0.33	6.35	19.6	7.34	17,251	16.20	0.00
110718022	MW-405B	11/07/2018	3.0 U	--	20.4 U	--	--	2,210 U	--	4.7 U	--	260	--	0.17 U	--	--	6.3 U	--	2.0 U	--	--	--	--	95 U	231,000	--	0.51	6.2	-150.0	7.91	14071.8	11.74	24.56
052919019	MW-405B	05/29/2019	1.5 U	--	10.2 U	--	--	1,110 U	--	2.4 U	--	43.8 J	--	0.084 U	--	--	3.2 U	--	1.0 U	--	--	--	--	1,100	176,000	--	4.56	7.18	102.5	7.71	6191.2	15.85	11.03
110519021	MW-405B	11/05/2019	1.5 U	--	10.2 U	--	--	580 U	--	2.4 U	--	108	--	0.084 U	--	--	3.2 U	--	1.3 U	--	--	--	--	700	199,000	--	0.21	3.15	46.2	7.49	8736.8	11.09	0.00
052720022	MW-405B	05/27/2020	0.76 U	--	5.1 U	--	--	290 U	--	1.2 U	--	28.3	--	0.084 U	--	--	1.6 U	--	0.64 U	--	--	--	--	730	153,000	1.0 J	2.68	6.46	78.4	7.88	6697.2	31.09	2.48
110320023	MW-405B	11/03/2020	0.30 U	--	2.0 U	--	--	116 U	--	0.47 U	--	68.4	--	0.066 U	--	--	3.2 U	--	0.25 U	--	--	--	--	440	182,000	10.1	0.21	3.32	14.6	7.23	8556.8	16.64	0.00
052621024	MW-405B	05/26/2021	--	0.76 U	--	5.1 U	--	--	290 U	--	1.2 U	--	9.3 J	--	0.066 U	--	--	1.6 U	--	0.64 U	--	--	--	1,300	111,000	0.58 U	0.74	4.34	179.9	8.02	4617.3	16.69	0.00
110321024	MW-405B	11/03/2021	0.30 U	--	2.0 U	--	--	120 J	--	0.47 U	--	86.5	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	--	630	146,000	27.1	0.24	4.49	-128.7	7.85	5329.9	14.18	0.00
051022023	MW-405B	05/10/2022	--	0.30 U	--	3.6 J	--	--	184 J	--	1.6 J	--	59.8	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	750	157,000	7.9	4.76	12.00	29.7	7.42	4304.9	16.48	2.21
110822023	MW-405B	11/08/2022	--	0.76 U	--	5.1 U	--	--	409 J	--	0.47 U	--	208	--	0.066 U	--	--	1.6 U	--	0.64 U	--	--	--	59 U	231,000	75.6	0.55	4.26	-145.3	8.46	5214.1	14.71	0.10

Table 1. 2018-2022 Groundwater Analytical Results Cc

Site-Specific Work Plan Addendum 1
Wisconsin Public Service Corporation
Green Bay Former Manufactured Gas Plant Site
700 N Adams St, Green Bay, Wisconsin
BRRTS#: 02-05-000254 USEPA#: WIN000509948

9-digit Code	Sample Location	Sample Date	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Inorganic	Inorganic	Inorganic	Organic	Field	Field	Field	Field	Field	Field	Field
			Cadmium, Dissolved	Cadmium, Total	Chromium, Dissolved	Chromium, Total	Copper, Total	Iron, Dissolved	Iron, Total	Lead, Dissolved	Lead, Total	Manganese, Dissolved	Manganese, Total	Mercury, Dissolved	Mercury, Total	Nickel, Total	Selenium, Dissolved	Selenium, Total	Silver, Dissolved	Silver, Total	Vanadium, Total	Zinc, Total	Chloride, Total	Nitrogen, NO2 + NO3, Total	Sulfate, Total	Methane	Dissolved oxygen	Groundwater, depth to	Oxidation Reduction Potential	pH, Field	Specific Conductance, Field	Temperature, Water	Turbidity, Quantitative
		Reporting Units:	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	feet	millivolts	s.u.	µS/cm	Deg C	NTUs
		WI Groundwater SL:	**5**	**5**	**100**	**100**	**1,300**	**NS**	**NS**	**15**	**15**	**300**	**300**	**2**	**2**	**100**	**50**	**50**	**50**	**50**	**30**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
		WI Groundwater PAL:	0.5	0.5	10	10	130	150	150	1.5	1.5	60	60	0.2	0.2	20	10	10	10	10	6	2,500	125,000	2,000	125,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
		Tap Water RSL:	*1.8*	*1.8*	*22,000*	*22,000*	*800*	*14,000*	*14,000*	*15*	*15*	*430*	*430*	*5.7*	*5.7*	*390*	*100*	*100*	*94*	*94*	*86*	*6,000*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
053018018	MW-406	05/30/2018	0.81 U	--	10.2 U	--	--	1,480 J	--	2.0 U	--	***665***	--	0.25 U	--	--	3.2 U	--	1.0 U	--	--	--	--	95 U	131,000	--	0.26	2.38	-112.0	7.01	9,381	18.85	30.34
110618017	MW-406	11/06/2018	1.5 U	--	10.2 U	--	--	1,110 U	--	2.4 U	--	***700***	--	0.17 U	--	--	3.2 U	--	1.0 U	--	--	--	--	95 U	161,000	--	0.20	2.59	-62.6	6.89	13113.6	13.49	7.32
052919012	MW-406	05/29/2019	3.0 U	--	20.4 U	--	--	2,210 U	--	4.7 U	--	***1,300***	--	0.084 U	--	--	6.3 U	--	2.0 U	--	--	--	--	95 U	201,000	--	0.21	1.58	-51.6	7.13	18,638	15.11	18.39
110519015	MW-406	11/05/2019	3.0 U	--	20.4 U	--	--	1,160 U	--	4.7 U	--	***626***	--	0.084 U	--	--	6.3 U	--	2.5 U	--	--	--	--	59 U	150,000	--	0.18	2.32	-25.8	6.99	14,883	13.45	0.00
052720015	MW-406	05/27/2020	1.5 U	--	10.2 U	--	--	1,590 J	--	2.4 U	--	***791***	--	0.084 U	--	--	3.2 U	--	1.3 U	--	--	--	--	59 U	145,000	178	0.00	2.25	-95.5	7.44	14261.3	29.62	26.44
110320015	MW-406	11/03/2020	0.30 U	--	2.0 U	--	--	1,600	--	0.47 U	--	***836***	--	0.066 U	--	--	3.2 U	--	0.25 U	--	--	--	--	59 U	138,000	79.9	0.11	2.63	-158.5	6.93	14540.4	15.97	0.00
052521013/052521014 (N)	MW-406	05/25/2021	--	1.5 U	--	10.2 U	--	--	1,410 J	--	2.4 U	--	***814***	--	0.066 U	--	--	3.2 U	--	1.3 U	--	--	--	59 U	200,000	198	0.15	2.46	-90.2	7.01	10195.9	19.48	13.77
110221013/110221014 (N)	MW-406	11/02/2021	0.30 U	--	7.3	--	--	2,820	--	0.47 U	--	***605***	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	--	59 U	123,000	172	0.13	3.76	-140.4	7.00	9794.6	17.22	0.00
051022014/051022015 (N)	MW-406	05/10/2022	--	0.30 U	--	3.4 J	--	--	1,430	--	1.5 J	--	***358***	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	68 J	96,300	633	0.05	3.10	-38.9	7.11	11,544	12.33	5.22
110822014/110822015 (N)	MW-406	11/08/2022	--	0.76 U	--	5.1 U	--	--	1,450	--	0.47 U	--	***343***	--	0.066 U	--	--	1.6 U	--	0.64 U	--	--	--	59 U	90,800	502	0.46	1.97	-120.7	7.88	5388.3	15.59	3.06
052918003	MW-407	05/29/2018	0.16 U	--	2.0 U	--	--	11,100	--	0.39 U	--	***819***	--	0.25 U	--	--	0.63 U	--	0.20 U	--	--	--	--	95 U	48,600	--	0.11	3.95	-69.1	6.83	8,445	16.21	35.09
110518003	MW-407	11/05/2018	1.5 J	--	5.1 U	--	--	11,900	--	1.8 J	--	***512***	--	0.084 U	--	--	2.2 J	--	0.77 J	--	--	--	--	95 U	44,700	--	0.13	4.07	-109.9	7.12	5729.2	14.00	43.85
052819003	MW-407	05/28/2019	1.5 U	--	10.2 U	--	--	6,220	--	2.4 U	--	***342***	--	0.084 U	--	--	3.2 U	--	1.0 U	--	--	--	--	95 U	165,000	--	0.21	3.51	-48.3	7.00	8711.1	13.01	25.07
110419003	MW-407	11/04/2019	2.9 J	--	5.1 U	--	--	5,950	--	2.0 J	--	***448***	--	0.084 U	--	--	1.6 U	--	0.90 J	--	--	--	--	380	89,500	--	0.20	3.44	-6.0	6.98	5554.6	13.95	0.00
052620003	MW-407	05/26/2020	0.93 J	--	2.0 U	--	--	5,730	--	0.82 J	--	***421***	--	0.084 U	--	--	0.95 J	--	0.25 U	--	--	--	--	59 U	84,700	584	0.00	2.91	-111.9	7.51	3983.6	28.46	40.65
110220003	MW-407	11/02/2020	1.4 J	--	2.0 U	--	--	5,440	--	0.47 U	--	***464***	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	--	59 U	86,000	1,450	--	3.53	-92.9	7.03	5738.8	14.32	0.00
052421003	MW-407	05/24/2021	--	0.56 J	--	2.0 U	--	--	9,950	--	0.60 J	--	***671***	--	0.066 U	--	--	0.94 J	--	0.25 U	--	--	--	59 U	46,500	472	0.54	3.75	-95.5	7.06	4243.7	16.11	0.00
110121003	MW-407	11/01/2021	0.30 U	--	2.0 U	--	--	6,920	--	0.47 U	--	***391***	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	795,000	78 J	39,000	771	0.20	4.11	-179.0	7.08	3700.6	14.31	0.00
050922004	MW-407	05/09/2022	--	0.30 U	--	3.5 J	--	--	6,700	--	0.91 J	--	***396***	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	67 J	90,200	907	0.00	4.14	-84.5	7.05	3835.3	14.85	26.78
110722003	MW-407	11/07/2022	--	0.30 U	--	2.0 U	--	--	6,880	--	0.47 U	--	***336***	--	0.066 U	--	--	3.2	--	0.25 U	--	--	--	260	48,400	297	0.57	1.97	-73.7	7.12	3459.6	14.74	0.10
053018016	MW-408	05/30/2018	0.81 U	--	10.2 U	--	--	***55,400***	--	2.0 U	--	***5,740***	--	0.25 U	--	--	3.2 U	--	1.0 U	--	--	--	--	95 U	218,000	--	0.25	1.56	-104.2	6.44	14,062	18.34	102.51
110618015	MW-408	11/06/2018	0.76 U	--	5.1 U	--	--	***32,200***	--	1.2 U	--	***3,280***	--	0.084 U	--	--	1.6 U	--	0.50 U	--	--	--	--	95 U	138,000	--	0.19	1.86	-97.5	6.52	10,002	15.28	35.60
052919010/052919011 (N)	MW-408	05/29/2019	3.0 U	--	20.4 U	--	--	***45,400***	--	4.7 U	--	***5,110***	--	0.084 U	--	--	6.3 U	--	2.0 U	--	--	--	--	95 U	179,000	--	0.17	0.31	-54.4	6.71	13536.6	14.98	20.96
110519013/110519014 (N)	MW-408	11/05/2019	3.0 U	--	20.4 U	--	--	***21,100***	--	4.7 U	--	***1,960***	--	0.084 U	--	--	6.3 U	--	2.5 U	--	--	--	--	59 U	85,000 J	--	0.16	1.41	-30.1	6.71	10015.8	12.71	32.21
052720013/052720014 (N)	MW-408	05/27/2020	0.76 U	--	5.1 U	--	--	***41,400***	--	2.4 U	--	***3,730***	--	0.084 U	--	--	1.6 U	--	0.64 U	--	--	--	--	59 U	110,000	340	0.06	0.68	-79.4	6.91	11791.6	30.36	251.93
110320013/110320014 (N)	MW-408	11/03/2020	0.30 U	--	2.6 J	--	--	***35,200***	--	0.99 J	--	***2,770***	--	0.066 U	--	--	3.2 U	--	0.25 U	--	--	--	--	77 J	71,800	710	0.16	1.80	-44.6	6.47	13131.8	16.06	105.78
052521015	MW-408	05/25/2021	--	0.76 U	--	5.1 U	--	--	***32,500***	--	1.2 U	--	***2,630***	--	0.066 U	--	--	1.6 U	--	0.64 U	--	--	--	59 U	50,600	1,100	0.23	1.74	-53.3	6.53	9,063	18.83	71.65
110221015	MW-408	11/02/2021	0.30 U	--	5.1 U	--	--	***22,300***	--	0.47 U	--	***1,860***	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	--	77 J	28,700	972	0.22	2.88	-115.7	6.49	7366.6	17.65	55.00
051022013	MW-408	05/10/2022	--	0.30 U	--	2.1 J	--	--	***29,200***	--	2.4	--	***2,320***	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	59 U	62,300	1,360	0.06	3.60	-43.9	6.63	8360.8	12.36	25.76
110822013	MW-408	11/08/2022	--	0.76 U	--	5.1 U	--	--	***20,500***	--	0.47 U	--	***1,840***	--	0.066 U	--	--	1.6 U	--	0.64 U	--	--	--	59 U	18,000 J	1,390	0.60	2.02	-110.1	7.37	6404.1	16.00	81.23
053018015	MW-409A	05/30/2018	1.6 U	--	20.4 U	--	--	2,210 U	--	3.9 U	--	***505***	--	0.50 U	--	--	6.3 U	--	2.0 U	--	--	--	--	95 U	421,000	--	0.22	2.48	-62.2	7.01	30,832	17.69	46.47
110618018	MW-409A	11/06/2018	3.0 U	--	20.4 U	--	--	6,880 J	--	4.7 U	--	***1,470***	--	0.84 U	--	--	6.3 U	--	2.0 U	--	--	--	--	95 U	848,000	--	0.18	3.01	-82.7	6.75	44494.8	14.68	6.58
052919014	MW-409A	05/29/2019	3.0 U	--	20.4 U	--	--	2,210 U	--	4.7 U	--	***323***	--	0.084 U	--	--	6.3 U	--	2.0 U	--	--	--	--	95 U	577,000	--	0.17	0.89	-36.4	7.26	16580.9	16.07	13.95
110519011	MW-409A	11/05/2019	3.0 U	--	20.4 U	--	--	7,810	--	4.7 U	--	***1,600***	--	0.084 U	--	--	6.3 U	--	2.5 U	--	--	--	--	59 U	769,000	--	0.16	2.20	-48.5	6.88	49409.5	11.97	0.00
052720011	MW-409A	05/27/2020	3.0 U	--	20.4 U	--	--	6,180	--	4.7 U	--	***1,120***	--	0.084 U	--	--	6.3 U	--	2.5 U	--	--	--	--	59 U	408,000	362	0.08	0.69	-95.5	7.18	31281.8	30.79	1.27
110220007	MW-409A	11/02/2020	3.0 U	--	20.4 U	--	--	6,960	--	4.7 U	--	***1,190***	--	0.066 U	--	--	6.3 U	--	2.5 U	--	--	--	--	59 U	517,000	226	--	1.95	-168.0	6.82	34770.5	16.46	0.00
052521011	MW-409A	05/25/2021	--	0.76 U	--	7.6 J	--	--	3,190	--	***19.0***	--	***334***	--	0.066 U	--	--	1.6 U	--	0.64 U	--	--	--	160 J	252,000	703	0.17	2.38	-93.7	7.12	11902.1	18.48	14.05
110221011	MW-409A	11/02/2021	0.30 U	--	9.3	--	--	7,150	--	10.7	--	***651***	--	0.066 U	--	--	1.3 J	--	0.25 U	--	--	--	--	59 U	605,000	893	0.16	3.01	-123.0	6.80	23845.2	12.58	28.37
051022011	MW-409A	05/10/2022	--	0.30 U	--	5.4 J	--	--	7,680	--	***18.6***	--	***771***	--	0.066 U	--	--	0.70 J	--	0.25 U	--	--	--	59 U	494,000	1,180	0.05	4.10	-53.2	6.97	22,332	12.00	48.52
110822011	MW-409A	11/08/2022	--	1.5 U	--	10.2 U	--	--	4,380	--	13.0	--	***522***	--	0.066 U	--	--	3.2 U	--	1.3 U	--	--	--	200 J	287,000	292	0.49	1.91	-147.4	7.73	13,747	15.12	57.81
053118024	MW-409B	05/31/2018	0.22 J	--	2.0 U	--	--	221 U	--	0.39 U	--	130	--	0.13 U	--	--	0.63 U	--	0.20 U	--	--	--	--	95 U	546,000	--	0.53	9.11	211.1	7.65	4,050	17.98	0.00
110718024	MW-409B	11/07/2018	0.30 U	--	2.0 U	--	--	221 U	--	0.47 U	--	354	--	0.084 U	--	--	0.63 U	--	0.20 U	--	--	--	--	95 U	553,000	--	0.92	7.34	-71.5	7.85	2517.7	13.05	13.07
052919013	MW-409B	05/29/2019	0.30 U	--	2.0 U	--	--	221 U	--	0.47 U	--	8.0 J	--	0.084 U	--	--	0.63 U	--	0.20 U	--	--	--	--	140 J	563,000	--	1.46	8.10	5.3	7.59	2511.9	15.28	4.71
110519012	MW-409B	11/05/2019	0.30 U	--	2.0 U	--	--	164 J	--	0.47 U	--	40.5	--	0.084 U	--	--	0.63 U	--	0.25 U	--	--	--	--	100 J	558,000	--	1.12	6.99	106.1	7.62	2537.8	8.62	0.00
052720012	MW-409B	05/27/2020	0.30 U	--	2.0 U	--	--	116 U	--	0.47 U	--	2.9 J	--	0.084 U	--	--	0.63 U	--	0.25 U	--	--	--	--	200 J	607,000	0.66 U	1.63	7.09	34.9	7.95	2042.5	30.05	0.76
110220008	MW-409B	11/02/2020	0.30 U	--	2.0 U	--	--	116 U	--	0.47 U	--	16.7	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	--	110 J	587,000	0.99 J	--	4.82	-5.4	7.41	2073.6	13.88	0.00
052521012	MW-409B	05/25/2021	--	0.30 U	--	2.0 U	--	--	116 U	--	0.47 U	--	9.9	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	750	394,000	0.58 U	2.73	6.63	86.5	6.98	1,485	18.01	2.13
110221012	MW-409B	11/02/2021	0.30 U	--	2.0 U	--	--	116 U	--	0.47 U	--	18.5	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	--	530	446,000	2.9	0.18	5.40	-56.1	7.17	1588.4	11.36	3.61
051022012	MW-409B	05/10/2022	--	0.30 U	--	2.0 U	--	--	116 U	--	1.0 J	--	11.9	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	840	420,000	6.2	0.14	8.20	-70.0	7.91	1882.2	13.51	0.00
110822012	MW-409B	11/08/2022	--	0.30 U	--	2.0 U	--	--	116 U	--	0.47 U	--	2.4 U	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	710	460,000	0.58 U	1.67	5.87	23.2	7.88	1416.2	13.75	0.00

Table 1. 2018-2022 Groundwater Analytical Results Cc

Site-Specific Work Plan Addendum 1
Wisconsin Public Service Corporation
Green Bay Former Manufactured Gas Plant Site
700 N Adams St, Green Bay, Wisconsin
BRRTS#: 02-05-000254 USEPA#: WIN000509948

9-digit Code	Sample Location	Sample Date	Cadmium, Dissolved	Cadmium, Total	Chromium, Dissolved	Chromium, Total	Copper, Total	Iron, Dissolved	Iron, Total	Lead, Dissolved	Lead, Total	Manganese, Dissolved	Manganese, Total	Mercury, Dissolved	Mercury, Total	Nickel, Total	Selenium, Dissolved	Selenium, Total	Silver, Dissolved	Silver, Total	Vanadium, Total	Zinc, Total	Chloride, Total	Nitrogen, NO2 + NO3, Total	Sulfate, Total	Methane	Dissolved oxygen	Groundwater, depth to	Oxidation Reduction Potential	pH, Field	Specific Conductance, Field	Temperature, Water	Turbidity, Quantitative
			Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Inorganic	Inorganic	Inorganic	Organic	Field	Field	Field	Field	Field	Field	Field
		Reporting Units:	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	feet	millivolts	s.u.	µS/cm	Deg C	NTUs
		WI Groundwater SL:	**5**	**5**	**100**	**100**	**1,300**	**NS**	**NS**	**15**	**15**	**300**	**300**	**2**	**2**	**100**	**50**	**50**	**50**	**50**	**30**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
		WI Groundwater PAL:	0.5	0.5	10	10	130	150	150	1.5	1.5	60	60	0.2	0.2	20	10	10	10	10	6	2,500	125,000	2,000	125,000	NS	NS	NS	NS	NS	NS	NS	NS
		Tap Water RSL:	*1.8*	*1.8*	*22,000*	*22,000*	*800*	*14,000*	*14,000*	*15*	*15*	*430*	*430*	*5.7*	*5.7*	*390*	*100*	*100*	*94*	*94*	*86*	*6,000*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
053018014	MW-410R	05/30/2018	0.81 U	--	10.2 U	--	--	2,750 J	--	2.0 U	--	***755***	--	0.25 U	--	--	3.2 U	--	1.0 U	--	--	--	--	95 U	215,000	--	0.14	2.98	-254.5	6.62	11,550	17.27	28.86
110618007	MW-410R	11/06/2018	0.76 U	--	5.1 U	--	--	2,070	--	1.2 U	--	***643***	--	0.17 U	--	--	1.6 U	--	0.50 U	--	--	--	--	95 U	75,100	--	0.10	3.26	-195.8	6.64	10,674	15.41	48.10
052819007	MW-410R	05/28/2019	1.5 U	--	10.2 U	--	--	1,110 U	--	2.4 U	--	154	--	0.084 U	--	--	3.2 U	--	1.0 U	--	--	--	--	95 U	1,140,000	--	0.11	1.29	-98.2	7.24	4162.1	16.55	8.91
110419008/110419009 (N)	MW-410R	11/04/2019	1.5 U	--	10.2 U	--	--	2,310 J	--	2.4 U	--	***626***	--	0.084 U	--	--	3.2 U	--	1.3 U	--	--	--	--	59 U	79,000	--	0.19	2.61	-193.4	6.69	9145.6	13.87	0.00
052620008/052620009 (N)	MW-410R	05/26/2020	0.76 U	--	5.1 U	--	--	1,760	--	1.2 U	--	***708***	--	0.084 U	--	--	1.6 U	--	0.64 U	--	--	--	--	59 U	132,000	3,630	0.00	1.80	-131.9	7.05	9016.7	30.36	49.31
110320011/110320012 (N)	MW-410R	11/03/2020	0.30 U	--	2.9 J	--	--	2,030	--	0.47 U	--	***597***	--	0.066 U	--	--	3.2 U	--	0.25 U	--	--	--	--	59 U	117,000	5,370	0.07	3.15	-252.1	6.57	9854.1	15.46	2.66
052421006/052421007 (N)	MW-410R	05/24/2021	--	0.76 U	--	5.1 U	--	--	2,730	--	1.2 U	--	***798***	--	0.066 U	--	--	1.6 U	--	0.64 U	--	--	--	59 U	103,000	5,250	0.34	3.31	-198.4	6.58	8486.4	16.88	28.39
110121006/110121007 (N)	MW-410R	11/01/2021	0.30 U	--	3.1 J	--	--	2,570	--	0.47 U	--	***512***	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	--	59 U	165,000	5,420	0.16	4.23	-185.9	6.68	6290.8	16.06	0.00
050922008/050922009 (N)	MW-410R	05/09/2022	--	0.30 U	--	11.7	--	--	5,500	--	1.1 J	--	***960***	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	59 U	30,500	11,300	0.09	4.00	-69.6	6.64	7282.1	12.18	31.90
110722008/110722009 (N)	MW-410R	11/07/2022	--	0.76 U	--	5.1 U	--	--	11,200	--	0.47 U	--	***686***	--	0.066 U	--	--	1.6 U	--	0.64 U	--	--	--	65 J	28,900	4,940	0.59	4.19	-57.8	6.41	6,604	15.45	10.67
053018013	MW-411AR	05/30/2018	1.6 U	--	20.4 U	--	--	2,210 U	--	3.9 U	--	54.0 U	--	0.50 U	--	--	6.3 U	--	2.0 U	--	--	--	--	95 U	201,000	--	0.53	2.78	-194.4	8.26	17,043	16.21	34.93
110618008/110618009 (N)	MW-411AR	11/06/2018	3.0 U	--	20.4 U	--	--	2,210 U	--	4.7 U	--	156 J	--	0.17 U	--	--	6.3 U	--	2.0 U	--	--	--	--	430	287,000	--	0.20	3.35	-183.7	7.91	16514.5	14.59	35.69
052819006	MW-411AR	05/28/2019	3.0 U	--	20.4 U	--	--	2,210 U	--	4.7 U	--	107 J	--	0.084 U	--	--	6.3 U	--	2.0 U	--	--	--	--	95 U	202,000	--	0.30	1.38	-206.3	8.29	11759.6	12.31	117.56
110419006	MW-411AR	11/04/2019	3.0 U	--	20.4 U	--	--	4,700 J	--	4.7 U	--	231	--	0.084 U	--	--	6.3 U	--	2.5 U	--	--	--	--	59 U	297,000	--	0.16	2.40	-79.9	7.31	18099.6	13.84	0.00
052620006	MW-411AR	05/26/2020	0.76 U	--	5.1 U	--	--	290 U	--	1.2 U	--	21.2	--	0.084 U	--	--	1.6 U	--	0.64 U	--	--	--	--	270	120,000	10.4	0.08	1.61	-154.9	9.04	8377.4	30.43	14.17
110220005	MW-411AR	11/02/2020	0.30 U	--	2.0 U	--	--	4,440	--	4.7 U	--	253	--	0.066 U	--	--	6.3 U	--	0.25 U	--	--	--	--	59 U	315,000	198	--	2.60	-182.4	7.34	20164.4	15.40	0.00
052521009	MW-411AR	05/25/2021	--	0.30 U	--	4.4 J	--	--	1,150	--	4.5	--	26.6	--	0.066 U	--	--	2.9	--	0.25 U	--	--	--	630	153,000	27.4	0.43	2.90	-70.9	9.35	4970.4	15.51	92.35
110221009	MW-411AR	11/02/2021	0.30 U	--	2.0 U	--	--	3,250	--	0.47 U	--	206	--	0.066 U	--	--	0.69 J	--	0.25 U	--	--	--	--	76 J	245,000	292	0.16	4.10	-199.8	7.24	17090.6	14.08	52.03
050922006	MW-411AR	05/09/2022	--	0.30 U	--	2.0 U	--	--	157 J	--	1.9 J	--	3.2 J	--	0.066 U	--	--	2.3	--	0.25 U	--	--	--	690	105,000	13.8	0.17	4.25	-150.6	9.81	1106.3	13.06	86.85
110722006	MW-411AR	11/07/2022	--	0.30 U	--	5.2 J	--	--	116 U	--	1.3 J	--	2.4 U	--	0.066 U	--	--	1.5 J	--	0.25 U	--	--	--	500	60,300	1.3 J	7.37	2.90	-61.5	9.64	1090.9	13.79	111.22
053118026	MW-411B	05/31/2018	0.81 U	--	10.2 U	--	--	1,110 U	--	2.0 U	--	50.6 J	--	0.25 U	--	--	3.2 U	--	1.0 U	--	--	--	--	270	634,000	--	--	8.39	--	--	--	--	--
110718021	MW-411B	11/07/2018	0.76 U	--	5.1 U	--	--	553 U	--	1.2 U	--	365	--	0.084 U	--	--	1.6 U	--	0.50 U	--	--	--	--	200 J	665,000	--	0.70	9.02	144.8	7.42	5966.4	12.12	4.47
053019024	MW-411B	05/30/2019	3.0 U	--	20.4 U	--	--	2,210 U	--	4.7 U	--	236	--	0.084 U	--	--	6.3 U	--	2.0 U	--	--	--	--	110 J	309,000	--	0.29	0.40	-60.4	8.22	19350.1	14.94	0.00
110419007	MW-411B	11/04/2019	3.0 U	--	20.4 U	--	--	1,160 U	--	4.7 U	--	419	--	0.084 U	--	--	6.3 U	--	2.5 U	--	--	--	--	59 U	561,000	--	0.31	7.29	-59.3	7.72	16049.3	12.88	0.00
052620007	MW-411B	05/26/2020	1.5 U	--	10.2 U	--	--	580 U	--	2.4 U	--	15.1 J	--	0.084 U	--	--	3.2 U	--	1.3 U	--	--	--	--	500	624,000	0.66 U	1.33	6.53	42.5	7.78	10980.6	29.78	3.99
110220006	MW-411B	11/02/2020	0.30 U	--	2.0 U	--	--	116 U	--	0.47 U	--	174	--	0.066 U	--	--	3.2 U	--	0.25 U	--	--	--	--	59 U	649,000	4.4	--	0.15	-16.2	7.62	9525.2	14.31	0.00
052521010	MW-411B	05/25/2021	--	0.30 U	--	2.0 U	--	--	116 U	--	0.47 U	--	107	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	580	74,300	4.8	0.33	4.75	-18.6	8.44	2825.2	15.61	0.00
110221010	MW-411B	11/02/2021	0.30 U	--	2.0 U	--	--	694	--	0.47 U	--	387	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	--	100 J	537,000	95.8	0.19	6.53	-173.2	7.79	5627.4	11.46	0.00
050922007	MW-411B	05/09/2022	--	0.30 U	--	2.0 U	--	--	116 U	--	0.93 J	--	147	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	650	252,000	1.1 J	3.20	5.95	8.6	7.32	3,306	14.77	0.95
110722007	MW-411B	11/07/2022	--	0.76 U	--	5.1 U	--	--	322 J	--	0.47 U	--	273	--	0.066 U	--	--	1.6 U	--	0.64 U	--	--	--	59 U	588,000	38.6	0.78	6.24	-58.7	7.47	4753.6	12.76	0.00
052918004/052918005 (N)	MW-412	05/29/2018	1.3 J	--	10.2 U	--	--	*30,800*	--	2.0 U	--	***1,020***	--	0.13 U	--	--	3.4 J	--	1.0 U	--	--	--	--	2,700	65,200	--	1.38	6.09	-80.0	6.78	10,026	16.93	8.41
110518004	MW-412	11/05/2018	0.49 J	--	2.0 U	--	--	*22,600*	--	0.47 U	--	***932***	--	0.084 U	--	--	0.93 J	--	0.20 U	--	--	--	--	95 U	5,000 U	--	0.18	6.46	-97.7	6.90	5024.6	14.15	4.21
052819004	MW-412	05/28/2019	3.0 U	--	20.4 U	--	--	*27,300*	--	4.7 U	--	***989***	--	0.084 U	--	--	6.3 U	--	2.0 U	--	--	--	--	95 U	128,000	--	0.21	5.06	-63.0	6.78	16920.8	14.41	21.29
110419004	MW-412	11/04/2019	3.0 U	--	20.4 U	--	--	*22,500*	--	4.7 U	--	***965***	--	0.084 U	--	--	6.3 U	--	2.5 U	--	--	--	--	59 U	20,800	--	0.18	7.29	-62.9	6.79	12883.8	13.96	0.00
052620004	MW-412	05/26/2020	0.98 J	--	5.1 U	--	--	*23,300*	--	1.2 U	--	***2,260***	--	0.084 U	--	--	1.6 U	--	0.64 U	--	--	--	--	83 J	144,000	4,340	0.00	4.75	-120.7	7.15	10664.5	31.97	142.53
110220004	MW-412	11/02/2020	0.30 U	--	2.0 U	--	--	*19,700*	--	0.47 U	--	***1,220***	--	0.066 U	--	--	3.2 U	--	0.25 U	--	--	--	--	59 U	41,200	1,140	--	5.90	-143.3	6.90	6855.3	15.66	0.00
052421004	MW-412	05/24/2021	--	0.79 J	--	5.1 U	--	--	*47,100*	--	1.2 U	--	***2,160***	--	0.066 U	--	--	1.6 U	--	0.64 U	--	--	--	59 U	9,300 J	1,680	0.79	6.23	-115.6	6.89	9400.5	16.40	0.00
110121004	MW-412	11/01/2021	0.30 U	--	2.0 U	--	--	*49,100*	--	0.47 U	--	***2,000***	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	--	59 U	2,200 U	4,190	0.19	6.91	-203.8	6.84	6901.7	15.94	0.00
050922003	MW-412	05/09/2022	--	0.15 U	--	1.0 U	--	--	*25,300*	--	0.24 U	--	***1,130***	--	0.066 U	--	--	0.80 J	--	0.13 U	--	--	--	59 U	41,600	3,670	0.00	7.05	-80.1	6.80	7128.3	14.23	0.18
110722004	MW-412	11/07/2022	--	0.76 U	--	5.1 U	--	--	*34,000*	--	1.2 U	--	***1,190***	--	0.066 U	--	--	1.6 U	--	0.64 U	--	--	--	59 U	22,200 U	4,150	0.59	7.57	-111.1	6.79	6839.3	14.50	0.26
052918006	MW-413	05/29/2018	0.16 U	--	2.0 U	--	--	10,800	--	0.39 U	--	406	--	0.13 U	--	--	0.63 U	--	0.20 U	--	--	--	--	95 U	5,000 U	--	0.19	4.02	-155.2	6.43	1,004	13.07	171.18
110618006	MW-413	11/06/2018	0.30 U	--	2.0 U	--	--	13,400	--	0.47 U	--	417	--	0.084 U	--	--	0.63 U	--	0.20 U	--	--	--	--	95 U	5,000 U	--	0.20	4.53	-57.8	6.45	1060.8	12.32	7.18
052819005	MW-413	05/28/2019	1.2 J	--	2.0 U	--	--	5,200	--	0.47 U	--	179	--	0.084 U	--	--	1.5 J	--	0.67 J	--	--	--	--	95 U	15,700	--	0.22	2.42	-59.3	6.77	537.0	9.50	5.74
110419005	MW-413	11/04/2019	0.30 U	--	2.0 U	--	--	10,300	--	0.47 U	--	319	--	0.084 U	--	--	0.63 U	--	0.25 U	--	--	--	--	59 U	2,200 U	--	0.19	3.51	-18.2	6.73	890.7	12.18	0.00
052620005	MW-413	05/26/2020	0.51 J	--	1.0 J	--	--	3,680	--	0.54 J	--	133	--	0.084 U	--	--	0.65 J	--	0.24 J	--	--	--	--	59 U	19,700	7,560	0.00	2.68	-68.9	7.15	611.7	26.10	19.67
110320010	MW-413	11/03/2020	0.30 U	--	2.0 U	--	--	9,940	--	0.47 U	--	295	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	--	59 U	4,100	6,400	0.20	3.89	-177.8	6.60	988.3	11.01	0.00
052421005	MW-413	05/24/2021	--	0.66 J	--	2.0 U	--	--	11,000	--	0.77 J	--	253	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	59 U	11,000	3,780	0.55	4.31	-70.6	6.77	868.0	13.33	5.97
110121005	MW-413	11/01/2021	0.30 U	--	2.0 U	--	--	*18,500*	--	0.47 U	--	378	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	--	65 J	2,200 U	6,530	0.23	5.22	-114.9	6.49	1333.1	13.74	8.35
050922005	MW-413	05/09/2022	--	0.30 U	--	2.0 U	--	--	13,600	--	0.55 J	--	270	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	59 U	52,100	2,580	0.07	5.00	-56.7	6.59	1011.3	9.25	7.59
110722005	MW-413	11/07/2022	--	0.30 U	--	2.0 U	--	--	9,260	--	0.47 U	--	158	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	59 U	1,000 J	5,310	0.60	5.70	-24.3	6.36	549.5	12.03	6.79

Table 1. 2018-2022 Groundwater Analytical Results Co

Site-Specific Work Plan Addendum 1
Wisconsin Public Service Corporation
Green Bay Former Manufactured Gas Plant Site
700 N Adams St, Green Bay, Wisconsin
BRRTS#: 02-05-000254 USEPA#: WIN000509948

9-digit Code	Sample Location	Sample Date	Cadmium, Dissolved	Cadmium, Total	Chromium, Dissolved	Chromium, Total	Copper, Total	Iron, Dissolved	Iron, Total	Lead, Dissolved	Lead, Total	Manganese, Dissolved	Manganese, Total	Mercury, Dissolved	Mercury, Total	Nickel, Total	Selenium, Dissolved	Selenium, Total	Silver, Dissolved	Silver, Total	Vanadium, Total	Zinc, Total	Chloride, Total	Nitrogen, NO2 + NO3, Total	Sulfate, Total	Methane	Dissolved oxygen	Groundwater, depth to	Oxidation Reduction Potential	pH, Field	Specific Conductance, Field	Temperature, Water	Turbidity, Quantitative
		Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Inorganic	Inorganic	Inorganic	Organic	Field	Field	Field	Field	Field	Field	Field
Reporting Units:			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	feet	millivolts	s.u.	µS/cm	Deg C	NTUs
WI Groundwater SL:			**5**	**5**	**100**	**100**	**1,300**	**NS**	**NS**	**15**	**15**	**300**	**300**	**2**	**2**	**100**	**50**	**50**	**50**	**50**	**30**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
WI Groundwater PAL:			0.5	0.5	10	10	130	150	150	1.5	1.5	60	60	0.2	0.2	20	10	10	10	10	6	2,500	125,000	2,000	125,000	NS	NS	NS	NS	NS	NS	NS	NS
Tap Water RSL:			*1.8*	*1.8*	*22,000*	*22,000*	*800*	*14,000*	*14,000*	*15*	*15*	*430*	*430*	*5.7*	*5.7*	*390*	*100*	*100*	*94*	*94*	*86*	*6,000*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
053018017	MW-414	05/30/2018	0.92 J	--	10.2 U	--	--	1,110 U	--	2.0 U	--	**400**	--	0.25 U	--	--	3.2 U	--	1.0 U	--	--	--	4,860,000	1,500	90,500	--	0.25	4.79	41.6	7.01	14,992	16.65	14.47
110618014	MW-414	11/06/2018	1.5 U	--	10.2 U	--	--	1,110 U	--	2.4 U	--	**787**	--	0.084 U	--	--	3.2 U	--	1.0 U	--	--	--	--	470	88,300	--	0.21	4.73	-19.6	7.09	8596.8	12.79	19.92
052919015	MW-414	05/29/2019	1.5 U	--	10.2 U	--	--	1,110 U	--	2.4 U	--	**538**	--	0.084 U	--	--	3.2 U	--	1.0 U	--	--	--	--	1,300	94,300	--	0.65	4.01	50.1	7.17	10635.9	16.17	7.33
110519019	MW-414	11/05/2019	1.5 U	--	10.2 U	--	--	580 U	--	2.4 U	--	**597**	--	0.084 U	--	--	3.2 U	--	1.3 U	--	--	--	--	780	95,000	--	0.18	4.68	119.7	7.14	9971.3	11.64	0.00
052720019	MW-414	05/27/2020	0.30 U	--	2.0 U	--	--	116 U	--	1.2 U	--	157	--	0.084 U	--	--	0.63 U	--	0.25 U	--	--	--	--	590	76,000	9.7	0.10	4.40	70.7	7.35	8023.4	31.97	4.00
110320019	MW-414	11/03/2020	1.5 U	--	10.2 U	--	--	580 U	--	2.4 U	--	263	--	0.066 U	--	--	3.2 U	--	1.3 U	--	--	--	--	660	77,600	15.2	0.18	4.72	61.5	7.01	11042.7	15.64	5.18
052521019	MW-414	05/25/2021	--	0.76 U	--	5.1 U	--	--	290 U	--	1.2 U	--	116	--	0.066 U	--	--	1.6 U	--	0.64 U	--	--	--	470	104,000	2.6 J	0.51	4.66	122.2	7.03	8445.1	16.93	0.00
110221019	MW-414	11/02/2021	0.76 U	--	5.1 U	--	--	598 J	--	1.2 U	--	**1,450**	--	0.066 U	--	--	1.6 U	--	0.64 U	--	--	--	--	59 U	312,000 J	59.0	0.17	4.85	-84.5	6.88	10350.7	14.13	0.00
051022019	MW-414	05/10/2022	--	0.30 U	--	2.0 U	--	--	116 U	--	1.7 J	--	**498**	--	0.066 U	--	--	0.66 J	--	0.25 U	--	--	--	500	107,000	15.1	0.16	5.40	75.7	7.14	9258.5	9.70	0.98
110822019	MW-414	11/08/2022	--	1.5 U	--	10.2 U	--	--	580 U	--	0.47 U	--	**465**	--	0.066 U	--	--	3.2 U	--	1.3 U	--	--	--	78 J	91,700	24.9	0.85	4.55	-31.1	7.72	9203.7	13.30	6.55
053018010/053018011 (N)	MW-415A	05/30/2018	0.16 U	--	2.0 U	--	--	221 U	--	0.39 U	--	5.4 U	--	0.13 U	--	--	0.63 U	--	0.20 U	--	--	--	--	95 U	282,000	--	0.52	2.96	88.7	6.81	5,170	17.16	10.53
110618011/110618012 (N)	MW-415A	11/06/2018	0.76 U	--	5.1 U	--	--	553 U	--	1.2 U	--	24.7 J	--	0.084 U	--	--	1.6 U	--	0.50 U	--	--	--	--	95 U	293,000	--	0.31	2.98	24.4	6.85	5975.9	12.92	14.36
052919017	MW-415A	05/29/2019	0.30 U	--	2.0 U	--	--	221 U	--	0.47 U	--	5.4 U	--	0.084 U	--	--	0.63 U	--	0.20 U	--	--	--	--	95 U	308,000	--	0.93	2.19	92.5	7.05	5357.8	16.59	2.93
110519017	MW-415A	11/05/2019	4.4 J	--	10.2 U	--	--	580 U	--	4.3 J	--	12.2 J	--	0.084 U	--	--	3.2 U	--	2.1 J	--	--	--	--	59 U	278,000	--	0.81	3.12	127.9	7.04	6600.1	10.15	0.00
052720017	MW-415A	05/27/2020	0.30 U	--	2.0 U	--	--	116 U	--	0.87 J	--	3.6 J	--	0.084 U	--	--	0.63 U	--	0.25 U	--	--	--	--	150 J	301,000	0.66 U	0.33	2.45	52.1	7.24	5416.3	32.19	2.53
110320017	MW-415A	11/03/2020	0.30 U	--	2.0 U	--	--	116 U	--	0.47 U	--	8.0 J	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	--	59 U	289,000	0.66 U	0.54	3.33	62.0	6.74	7913.3	16.34	0.00
052521017	MW-415A	05/25/2021	--	0.30 U	--	2.0 U	--	--	116 U	--	0.47 U	--	4.7 J	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	190 J	253,000	0.58 U	0.31	2.97	99.0	6.82	5974.2	18.95	58.08
110221017	MW-415A	11/02/2021	0.76 U	--	5.1 U	--	--	290 U	--	1.2 U	--	38.7	--	0.066 U	--	--	1.6 U	--	0.64 U	--	--	--	--	59 U	278,000	4.3	0.23	3.77	-21.4	6.74	6508.4	16.61	0.00
051022017	MW-415A	05/10/2022	--	0.30 U	--	2.0 U	--	--	116 U	--	1.5 J	--	4.2 J	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	120 J	276,000	1.0 J	0.19	3.70	10.7	6.95	6118.5	13.51	8.13
110822017	MW-415A	11/08/2022	--	0.76 U	--	5.1 U	--	--	290 U	--	0.47 U	--	42.8	--	0.066 U	--	--	1.6 U	--	0.64 U	--	--	--	59 U	305,000	1.1 J	0.59	3.23	44.0	7.54	5761.3	14.26	86.73
053018012	MW-415B	05/30/2018	0.27 J	--	2.0 U	--	--	221 U	--	0.39 U	--	5.4 U	--	0.13 U	--	--	0.63 U	--	0.20 U	--	--	--	--	250 J	1,580,000	--	2.34	7.33	93.9	7.42	2,642	18.28	0.00
110618013	MW-415B	11/06/2018	0.76 U	--	5.1 U	--	--	553 U	--	1.2 U	--	13.5 U	--	0.084 U	--	--	1.6 U	--	0.50 U	--	--	--	--	200 J	1,670,000	--	3.01	5.92	22.6	7.40	2672.4	11.06	5.44
052919016	MW-415B	05/29/2019	0.65 J	--	2.0 U	--	--	221 U	--	0.47 U	--	5.4 U	--	0.084 U	--	--	0.73 J	--	0.20 U	--	--	--	--	270	1,650,000	--	2.11	6.90	72.9	7.61	2310.8	16.64	6.42
110519018	MW-415B	11/05/2019	1.5 U	--	10.2 U	--	--	580 U	--	2.4 U	--	12.2 U	--	0.084 U	--	--	3.2 U	--	1.3 U	--	--	--	--	140 J	1,630,000	--	0.80	5.86	110.2	7.76	2724.1	8.16	0.00
052720018	MW-415B	05/27/2020	0.30 U	--	2.0 U	--	--	116 U	--	0.47 U	--	2.4 U	--	0.084 U	--	--	0.63 U	--	0.25 U	--	--	--	--	240 J	1,640,000	0.66 U	1.59	6.49	83.3	7.85	1432.6	32.22	5.23
110320018	MW-415B	11/03/2020	1.5 U	--	10.2 U	--	--	580 U	--	2.4 U	--	39.2 J	--	0.066 U	--	--	3.2 U	--	1.3 U	--	--	--	--	160 J	1,690,000	0.83 J	0.52	5.26	44.9	7.45	2955.7	15.51	8.11
052521018	MW-415B	05/25/2021	--	0.30 U	--	2.0 U	--	--	116 U	--	0.47 U	--	2.4 U	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	250	1,620,000	0.58 U	2.29	6.14	99.2	7.44	2422.4	17.24	0.00
110221018	MW-415B	11/02/2021	0.36 J	--	2.0 U	--	--	116 U	--	0.47 U	--	6.4 J	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	--	240 J	161,000	0.58 U	2.68	4.85	-14.5	7.26	2627.3	13.90	0.00
051022018	MW-415B	05/10/2022	--	0.30 J	--	4.8 J	--	--	193 J	--	1.4 J	--	2.4 U	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	380	1,590,000	1.2 J	3.26	10.70	10.3	7.47	2604.3	15.74	9.22
110822018	MW-415B	11/08/2022	--	0.30 U	--	2.0 U	--	--	116 U	--	0.47 U	--	3.1 J	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	230 J	1,650,000	1.0 J	3.63	5.13	69.4	8.02	2529.7	13.70	0.00
053018009	MW-416	05/30/2018	1.1 J	--	10.2 U	--	--	3,710	--	2.0 U	--	**3,270**	--	0.50 U	--	--	3.2 U	--	1.0 U	--	--	--	--	95 U	500,000 U	--	0.17	3.06	12.2	6.40	26,844	17.21	8.47
110618010	MW-416	11/06/2018	3.0 U	--	20.4 U	--	--	5,770 J	--	4.7 U	--	**3,370**	--	0.34 U	--	--	6.3 U	--	2.0 U	--	--	--	--	95 U	334,000	--	0.16	3.62	-9.7	6.40	32222.8	14.63	5.81
052919018	MW-416	05/29/2019	3.0 U	--	20.4 U	--	--	9,320	--	4.7 U	--	**3,550**	--	0.084 U	--	--	6.3 U	--	2.0 U	--	--	--	--	95 U	312,000	--	0.23	3.04	36.7	6.66	31824.4	15.53	4.75
110519016	MW-416	11/05/2019	**7.8** J	--	20.4 U	--	--	8,810	--	7.7 J	--	**3,410**	--	0.084 U	--	--	6.3 U	--	2.8 J	--	--	--	--	59 U	339,000 J	--	0.19	3.37	44.7	6.57	33515.6	12.56	0.00
052720016	MW-416	05/27/2020	0.30 U	--	20.4 U	--	--	6,790	--	4.7 U	--	**2,420**	--	0.084 U	--	--	6.3 U	--	0.25 U	--	--	--	--	59 U	332,000	204	0.02	2.80	-25.7	6.91	26633.8	29.74	43.40
110320016	MW-416	11/03/2020	3.0 U	--	20.4 U	--	--	7,330	--	4.7 U	--	**2,640**	--	0.066 U	--	--	6.3 U	--	2.5 U	--	--	--	--	59 U	348,000	76.8	0.16	3.56	-10.2	6.40	33678.3	17.31	0.00
052521016	MW-416	05/25/2021	--	3.0 U	--	20.4 U	--	--	5,900	--	4.7 U	--	**2,060**	--	0.066 U	--	--	6.3 U	--	2.5 U	--	--	--	59 U	322,000	21.3	0.34	3.21	24.3	6.46	24783.7	19.07	0.00
110221016	MW-416	11/02/2021	1.5 U	--	10.2 U	--	--	4,820	--	2.4 U	--	**1,880**	--	0.066 U	--	--	3.2 U	--	1.3 U	--	--	--	--	59 U	298,000	76.5	0.21	3.96	-28.5	6.31	25882.8	18.28	2.27
051022016	MW-416	05/10/2022	--	0.30 U	--	2.0 U	--	--	5,460	--	1.8 J	--	**1,990**	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	59 U	344,000	56.0	0.06	4.30	17.5	6.61	24,915	12.60	0.00
110822016	MW-416	11/08/2022	--	3.0 U	--	20.4 U	--	--	5,170	--	1.2 U	--	**1,350**	--	0.066 U	--	--	6.3 U	--	2.5 U	--	--	--	59 U	162,000 J	71.6	0.51	3.25	-16.6	7.23	20,978	16.55	0.08
052918002	MW-417	05/29/2018	2.0 J	--	2.0 U	--	--	4,930	--	1.7 J	--	**446**	--	0.13 U	--	--	4.8	--	0.20 U	--	--	--	--	1,300	94,200	--	0.66	4.72	-64.5	6.97	7,142	16.70	54.15
110518002	MW-417	11/05/2018	1.5 U	--	10.2 U	--	--	*14,100*	--	2.4 U	--	**966**	--	0.17 U	--	--	3.2 U	--	1.0 U	--	--	--	--	95 U	12,200 J	--	0.15	5.08	-113.0	6.90	11884.9	15.44	80.18
052819002	MW-417	05/28/2019	1.5 U	--	10.2 U	--	--	6,580	--	2.4 U	--	**590**	--	0.084 U	--	--	3.2 U	--	1.0 U	--	--	--	--	2,000	108,000	--	3.47	4.22	-5.4	6.89	9,988	12.10	11.87
110419002	MW-417	11/04/2019	3.0 U	--	20.4 U	--	--	8,890	--	4.7 U	--	**684**	--	0.084 U	--	--	6.3 U	--	2.5 U	--	--	--	--	59 U	41,500	--	0.19	4.85	4.0	6.87	12845.6	15.03	139.37
052620002	MW-417	05/26/2020	0.30 U	--	2.0 U	--	--	6,030	--	2.4 U	--	**413**	--	0.084 U	--	--	1.4 J	--	0.25 U	--	--	--	--	470	31,600	437	0.01	4.45	-116.3	7.41	11697.4	28.08	177.24
110220002	MW-417	11/02/2020	1.5 U	--	10.2 U	--	--	6,510	--	2.4 U	--	**851**	--	0.066 U	--	--	3.2 U	--	1.3 U	--	--	--	--	59 U	22,700	113	0.12	4.99	-3.6	6.87	13801.6	15.18	76.16
052421002	MW-417	05/24/2021	--	0.30 U	--	2.0 U	--	--	7,740	--	0.47 U	--	**689**	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	59 U	16,000	262	0.87	4.97	-70.5	6.80	10661.9	16.23	101.31
110121002	MW-417	11/01/2021	0.30 U	--	2.0 U	--	--	9,980	--	0.47 U	--	**751**	--	0.066 U	--	--	0.63 U	--	0.25 U	--	--	--	--	59 U	3,300 J	608	0.22	5.41	-167.0	6.85	10,854	16.56	17.30
050922002	MW-417	05/09/2022	--	0.15 U	--	1.0 U	--	--	6,740	--	0.24 U	--	**449**	--	0.066 U	--	--	3.4	--	0.13 U	--	--	--	59 U	59,000	1,510	0.00	5.20	-84.1	6.95	6961.3	13.67	9.85
110722002	MW-417	11/07/2022	--	0.30 U	--	2.0 U	--	--	2,540	--	0.65 J	--	256	--	0.066 U	--	--	17.9	--	0.25 U	--	--	--	25,200	926,000	885	0.69	4.35	-69.5	6.68	8081.3	13.46	2.37

Table 1. 2018-2022 Groundwater Analytical Results Co

Site-Specific Work Plan Addendum 1
Wisconsin Public Service Corporation
Green Bay Former Manufactured Gas Plant Site
700 N Adams St, Green Bay, Wisconsin
BRRTS#: 02-05-000254 USEPA#: WIN000509948

			Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Inorganic	Inorganic	Inorganic	Organic	Field	Field	Field	Field	Field	Field	Field
9-digit Code	Sample Location	Sample Date	Cadmium, Dissolved	Cadmium, Total	Chromium, Dissolved	Chromium, Total	Copper, Total	Iron, Dissolved	Iron, Total	Lead, Dissolved	Lead, Total	Manganese, Dissolved	Manganese, Total	Mercury, Dissolved	Mercury, Total	Nickel, Total	Selenium, Dissolved	Selenium, Total	Silver, Dissolved	Silver, Total	Vanadium, Total	Zinc, Total	Chloride, Total	Nitrogen, NO2 + NO3, Total	Sulfate, Total	Methane	Dissolved oxygen	Groundwater, depth to	Oxidation Reduction Potential	pH, Field	Specific Conductance, Field	Temperature, Water	Turbidity, Quantitative
		Reporting Units:	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	feet	millivolts	s.u.	µS/cm	Deg C	NTUs
		WI Groundwater SL:	**5**	**5**	**100**	**100**	**1,300**	**NS**	**NS**	**15**	**15**	**300**	**300**	**2**	**2**	**100**	**50**	**50**	**50**	**50**	**30**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
		WI Groundwater PAL:	0.5	0.5	10	10	130	150	150	1.5	1.5	60	60	0.2	0.2	20	10	10	10	10	6	2,500	125,000	2,000	125,000	NS	NS	NS	NS	NS	NS	NS	NS
		Tap Water RSL:	*1.8*	*1.8*	*22,000*	*22,000*	*800*	*14,000*	*14,000*	*15*	*15*	*430*	*430*	*5.7*	*5.7*	*390*	*100*	*100*	*94*	*94*	*86*	*6,000*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
052918001	MW-418	05/29/2018	0.16 U	--	2.0 U	--	--	221 U	--	0.39 U	--	23.6	--	0.13 U	--	--	12.5	--	0.20 U	--	--	--	--	6,500	69,000	--	4.21	5.82	214.1	6.80	3,477	16.34	5.27
110518001	MW-418	11/05/2018	2.2 J	--	5.1 U	--	--	553 U	--	2.3 J	--	**365**	--	0.084 U	--	--	5.8	--	0.93 J	--	--	--	--	3,400	84,800	--	0.46	6.11	227.0	6.88	3189.6	15.57	4.34
052819001	MW-418	05/28/2019	0.15 U	--	1.0 U	--	--	111 U	--	0.24 U	--	185	--	0.084 U	--	--	10.7	--	0.10 U	--	--	--	--	5,600	86,800	--	0.24	5.13	248.3	6.75	5,596	12.70	5.28
110419001	MW-418	11/04/2019	0.30 U	--	2.0 U	--	--	116 U	--	0.47 U	--	165	--	0.084 U	--	--	5.4	--	0.25 U	--	--	--	--	3,800	65,500	--	0.25	5.81	178.6	6.76	6288.6	16.33	0.00
052620001	MW-418	05/26/2020	0.83 J	--	2.0 U	--	--	116 U	--	1.0 J	--	128	--	0.084 U	--	--	3.0	--	0.42 J	--	--	--	--	2,000	50,400	0.66 U	0.56	5.36	228.6	7.18	6146.5	35.63	1.62
110220001	MW-418	11/02/2020	0.58 J	--	2.0 U	--	--	116 U	--	0.57 J	--	294	--	0.066 U	--	--	3.3	--	0.25 U	--	--	--	--	1,700	59,300	14.6	0.16	5.79	-102.3	6.83	5512.1	16.45	0.00
052421001	MW-418	05/24/2021	--	0.55 J	--	2.0 U	--	--	116 U	--	0.72 J	--	**389**	--	0.066 U	--	--	5.1	--	0.25 U	--	--	--	--	2,700	70,500	30.0	6.81	6.14	200.2	6.76	4956.7	16.23	0.00
110121001	MW-418	11/01/2021	0.30 U	--	2.0 U	--	--	116 U	--	0.47 U	--	**779**	--	0.066 U	--	--	2.6	--	0.25 U	--	--	--	--	1,400	81,800	1.3 J	0.32	6.33	57.9	6.81	5407.7	16.00	0.00
050922001	MW-418	05/09/2022	--	0.15 U	--	1.0 U	--	--	58.0 U	--	0.24 U	--	99.1	--	0.066 U	--	--	15.3	--	0.13 U	--	--	--	--	7,900	59,400	1.5 J	0.00	7.30	168.5	7.18	2776.5	14.94	5.24
110722001	MW-418	11/07/2022	--	0.45 J	--	2.0 U	--	--	116 U	--	0.60 J	--	145	--	0.066 U	--	--	10.3	--	0.25 U	--	--	--	--	11,300	153,000	0.77 J	7.23	4.05	227.3	6.91	2981.7	13.96	0.00

Table 1. 2018-2022 Groundwater Analytical Results Compared to the Groundwater SL, the PAL, and Tap Water Criteria

Site-Specific Work Plan Addendum 1
Wisconsin Public Service Corporation
Green Bay Former Manufactured Gas Plant Site
700 N Adams St, Green Bay, Wisconsin
BRRTS#: 02-05-000254 USEPA#: WIN000509948

Bold	exceeds the WI Groundwater SL
Underline	attains or exceeds the WI Groundwater PAL
Italic	exceeds the Tap Water RSL
Pink Highlighting	Groundwater SL exceedance; results only exceeding the PAL and/or Tap Water criteria are not highlighted.
Yellow Highlighting	analyte concentration exceedance in one or more samples

Screening Levels:
Screening Levels used on this table were presented in the Multi-Site Risk Assessment Framework (RAF) Addendum Revision 6, issued in August 2017. Since that time, nine revisions of the RSLs have been published by EPA through May 2022. The RSLs necessary for the MGP-related constituents evaluated in this table are up to date with the most recent revision.
PAL and ES from WI Administrative Code NR 140 groundwater quality standard revised effective January 2020.

Results & Flags:
-- = Analysis not performed
J = Estimated Concentration
NA = Not Applicable
U = Concentration was not detected above the reported limit

Acronyms:
(N) = Normalized sample locations created from combining parent and field duplicate samples following EPA protocol
µg/L = micrograms per liter
BRRTS = Bureau for Remediation and Redevelopment Tracking System
EPA = Environmental Protection Agency
MCL = Maximum Contaminant Level
MGP = Manufactured Gas Plant
NO2 + NO3 = nitrite plus nitrate
NS = No Screening Level/No Standard
PAH = Polycyclic Aromatic Hydrocarbon
PAL = Preventive Action Limit
PVOC = Petroleum Volatile Organic Compound
RSL = Regional Screening Level
SL = Screening Level
USEPA = United States Environmental Protection Agency
WI = Wisconsin

Superscripts:
1. Total Trimethylbenzenes were calculated by Ramboll as follows:
   a. Where no detections were observed, the sum of the reporting limits is presented.
   b. Where detections were observed, only the detected results were added together for the total summation.
   c. Analytes used for the calculation are 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene.

Lab comments, additional data qualifiers and definitions can be found in associated laboratory reports.

Table 2. Sampling and Analysis Plan

Site-Specific Work Plan Addendum 1
Wisconsin Public Service Corporation
Former MGP Site - Green Bay
700 N. Adams Street, Green Bay, WI 54307
BRRTS# 02-05-000254 | USEPA# WIN000509948

Sample Type	Proposed Number of Samples	Parameter	Method	Field Duplicates[1] (1 extra volume)	MS/MSD[2] (2 extra volumes)	Equipment Blanks	Trip Blanks	Container Type	Minimum Volume	Preservation (Cool All Samples to 4° ± 2°C Unless 'None' Indicated)	Holding Time from Sample Date
Soil	54-57	PVOCs[3]	8260	1 per 20	1 per 20		VOC trip blanks will accompany each cooler containing VOC samples.	Glass Vial	2 oz.	NaSO4 and MeOH	48 hours to freeze 14 days to analyze
		PAHs[4]	8270E	1 per 20	1 per 20		--	Glass	4 oz.	--	14 days to extract 40 days to analyze
		Total Metals[5]	6020B/7471	1 per 20	1 per 20		--	Plastic	5 oz.	--	14 days/6 months
		Total Cyanide	9012	1 per 20	1 per 20		--	Glass	4 oz.	--	14 days
Groundwater	10	PVOCs[3]	8260	1 per 20	1 per 20		VOC trip blanks will accompany each cooler containing VOC samples.	Glass Vial	3-40 mL	HCl to pH<2, Zero Headspace	14 days
		PAHs[4]	8270E	1 per 20	1 per 20		--	Amber Glass	1 L	--	7 days to extract 40 days to analyze
		Total Metals[5]	6020B/7471	1 per 20	1 per 20		--	Plastic	250 mL	HNO3 to pH<2	6 months
		Sulfate	300	1 per 20	1 per 20		--	Plastic	250 mL	--	28 days
		Nitrogen (Nitrite + Nitrate)	353.2	1 per 20	1 per 20		--	Plastic	250 mL	H2SO4	28 days

Notes:
1. Field duplicates will be collected at a frequency of 1 per 20 or fewer samples.
2. Matrix Spike/Matrix Spike Duplicate (MS/MSD) samples will be collected at a frequency of 1 per group of 20 or fewer samples. Additional volume will be determined by laboratory requirements.
3. Petroleum volatile organic compounds (PVOCs) include benzene, ethylbenzene, toluene, total xylenes, and 1,2,4-trimethylbenzene
4. Polycyclic aromatic hydrocarbon (PAHs) include 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenz(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene
5. Total metals include arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver

BRRTS - Bureau for Remediation and Redevelopment Tracking System
BTEX - benzene, toluene, ethylbenzene and xylenes
L - liter
mL - millieter
MGP - manufactured gas plant
-- - not applicable
oz. - ounce
PAH - polycyclic aromatic hydrocarbon
PVOC - petroleum volatile organic compound
TPAH - total polycyclic aromatic hydrocarbons
USEPA - United States Environmental Protection Agency

RAMBOLL

ENVIRONMENT
& HEALTH

MEMO

To: Glenn Luke – WEC Energy Group

From: Abby Small and Staci Goetz – Ramboll

cc: Frank Dombrowski - -WEC Energy Group

Re: Site Specific Work Plan Addendum No. 1, Revision ~~0~~1
Green Bay Former Manufactured Gas Plant, Green Bay, Wisconsin
Wisconsin Public Service Corporation

BACKGROUND AND OBJECTIVE

~~May 16~~June 29, 2023

Ramboll
234 W. Florida Street
Fifth Floor
Milwaukee, WI 53204
USA

T 414-837-3607
F 414-837-3608
~~www.ramboll.com~~
www.ramboll.com

Ref. 1940103365

Ramboll has prepared this Site Specific Work Plan, Addendum 1 (SSWP Addendum) on behalf of Wisconsin Public Service Corporation (WPSC) for a portion of the upland operable unit (OU1) of the Green Bay Former Manufactured Gas Plant (MGP) (Figure 1). This investigation is to augment information collected under the USEPA-approved Site-Specific Work Plan (SSWP) Revision 2 (NRT, 2015a and NRT, 2015b) and the USEPA-approved VI Technical Memorandum Revision 1 (NRT, 2016b) to support delineation of the nature and extent of MGP impacts at the Site.

The former WPSC Green Bay MGP (Site) is one of six former MGP sites addressed through the Administrative Order on Consent (AOC) and Statement of Work (SOW), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Docket No. V-W-06-C-847, dated May 5, 2006. The Site is currently enrolled in the United States Environmental Protection Agency (USEPA) Superfund Alternative Approach (SAA) program. Under the AOC/SOW, a generic approach to addressing the six sites is to be developed (the Multi-Site approach), describing the procedures and tasks to be followed to complete the Remedial Investigation/Feasibility Study (RI/FS) at the former Green Bay MGP facility, which, in turn, may be modified to account for site-specific differences that may exist at a particular location.

To facilitate project progress, the site has been divided into a sediment operable unit (OU) and an upland OU. The upland OU (OU1) extends from the top slope of the East River riverbank, landward and includes soil, groundwater, and potential vapor. The sediment OU (OU2) extends from the top slope of the East River riverbank, riverward and includes channel sediments, underlying clay, and surface water. The upland OU1 consists of three parcels, the largest of which is owned by WPSC. The former MGP structures were primarily located on the southern part of this parcel (Figure 2). In relation to the upland OU1, the WPSC General Office and Annex Buildings are located northwest, the KI Convention center is located southwest, the Associated Bank Office Building is located south and parking areas owned by Harbinger Development LLC and Associated Bank National Association adjoin the Site to the south and east, respectively (Figure 3). For the purposes of this document, "Site" refers to areas where contamination related to the former MGP has been discovered through investigation activities completed to-date and nearby areas necessary for implementation of the response

action inclusive of both the upland OU1 and the sediment OU2. For the purposes of this work plan, the upland OU1 has been further subdivided into two areas as follows:

- "North Parking Lot" refers to the portion of the Site located north of Utility Street/Utility Court. This portion of the site is bounded by the WPSC Annex Building to the west, Utility Court/Utility Street to the south, and the Fox River and East River to the north and east. The North Parking Lot is currently undergoing an Early Removal Action (ERA) as described below.
- "South Parking Lot" refers to the portion of the Site south of Utility Street/Utility Court inclusive of the roadways. The South Parking lot consists of two parcels and the adjacent roadways. The largest parcel is owned by WPSC and used for parking while the smaller parcel is owned by Harbinger Corporation and is used as parking for the Associated Bank Office Building to the south This portion of the Site is bounded by North Jefferson Street to the west, Utility Court/Utility Street to the north, North Madison Street to the East and Elm Street to the south. The former MGP structures were primarily located in this area (Figure 3).

The USEPA-approved SSWP Revision 2 was implemented in October 2015 and February 2016 to characterize the extent of MGP impacts in the subsurface soil and groundwater; and, evaluate vapor intrusion pathways. Supplemental vapor intrusion and indoor air sampling were implemented between August and December 2016 in accordance with the USEPA-approved VI Technical Memorandum Revision 1. An RI data summary package was submitted to USEPA for discussion on February 10, 2017 (NRT, 2017). An Upland Remedial Investigation Data Summary Report (Ramboll, 2020b) was submitted to USEPA in September 2020. USEPA provided comments on December 7, 2020.

In September 2022, an Early Removal Action Work Plan (Ramboll, 2022) was submitted to USEPA to address soil impacts in the North Parking Lot in preparation for potential redevelopment for residential use to expedite the RI/FS process. The ERA construction consists of removal and off-site disposal of soil identified as principal threat waste, removal and off-site disposal of the top four feet of surface soil in the main parking lot, and removal and off-site disposal of the top two feet of surface soil in the Riverwalk area. All areas will be backfilled and clean soil will be imported to address the direct contact pathway. Work began November 2022 and is ongoing with an anticipated completion date of July 2023.

Based on a review of site data collected to date, ~~the ongoing ERA in the North Parking Lot, and a preliminary redevelopment plan for residential use~~, supplemental RI activities are proposed to address remaining data gaps for the site and close out the RI phase of work. Remaining data gaps are further described below and include~~:~~

- ~~Uncertainty regarding remaining residential vapor intrusion (VI) risk in the Annex Building following the ERA in the North Parking Lot.~~

~~Uncertainty~~ uncertainty regarding principal threat waste potentially remaining in place in the South Parking Lot.

CURRENT DATA GAPS

~~VI Risk in the Annex Building following ERA~~

~~When the SSWP Revision 2 and the VI Technical Memorandum were prepared in 2015 and 2016, the Annex Building (located to the west of the North Parking Lot, Figure 2) was used as commercial office space by WPSC. The potential VI risk was evaluated using the Multi-Site VI Decision Matrix (NRT, 2016a), approved by the USEPA on February 10, 2016. In accordance with the Multi-Site VI Decision Matrix, soil borings and~~

soil vapor probes SG-401 and SG-402 were installed east of the Annex Building (Figure 4). Oil-wetted/oil-coated material and detected concentrations of constituents of potential concern (COPCs) were identified in soil borings and the industrial screening level (SL) for benzene was exceeded at SG-401. In 2015 and 2016, it was also identified that the southern portion of the building was in contact with groundwater and/or the capillary fringe and groundwater samples collected at the time from neighboring monitoring wells were below SLs but were present in detectable concentrations; therefore, sampling of indoor air and other lines of evidence were pursued. The northern portion of the building is not underlain by basement and is not in contact with groundwater or the capillary fringe. Based on the analytical results and building observations, a combination of indoor air, sub-slab, and soil gas sampling was performed to complete evaluation of the VI pathway at the Annex Building.

Nested sub-slab and soil gas probes (SS413/SG413D and SS414/SG414D, Figure 4) were completed within the Annex building in August of 2016. Coincident samples of indoor air, ambient air, sub-slab, and soil gas were collected from the Annex building in August and December of 2016 to evaluate the VI pathway. Soil gas and indoor air sample results from the North Parking Lot are presented on Table 1 and Table 2 and Figure 4. In 2016, prior to the ERA, naphthalene was identified above the Residential SLs at soil gas/subslab locations SG413/SG413D and SS414/SG414D during the December sampling event and at SS413D during the August sampling event (Table 1). In the southern portion of the building, naphthalene was detected above the residential SL at indoor air location (IA1) in August of 2016 (Table 2). Note that the purpose of indoor air sampling was to compare air quality to site use at the time (industrial), therefore the target reporting limit for multiple compounds including benzene, and naphthalene were higher than the residential SLs (Table 2).

Since the VI sampling was conducted in 2016, site conditions have changed including:

- The ERA was conducted removing principal threat waste to the east of the Annex Building as well as soil in the vicinity of SG401 and SG402.
- The building has been vacated and a potential residential redevelopment opportunity has been identified.

Given the changed conditions, the VI risk associated with residential site use following the ERA is unknown. Further sampling is proposed to address this data gap.

Additional Delineation in the South Parking Lot

In addition to the 2023 ERA, soil remediation was undertaken in 2003 with the objective of removing significant soil impacts and source areas. The selected remedy was source area excavation with medium temperature thermal desorption. Details of the remedial work were summarized in Section 4 of the Completion Report (NRT, 2014).

Excavation and decommissioning of former MGP structures and piping removed approximately 30,075 tons of soil and debris from four areas (Figure 3) that included the following:

- Area 1 (South Parking Lot) - included the 300,000 ft^3 gas holder near Elm Street
- Area 2 (South Parking Lot) - included the former tar well, oil tanks, purifiers, and small gas holders
- Area 3 (North Parking Lot) – included the suspected discharge area of the former concrete channel to the river

- Area 4 (North Parking Lot) – included an area along the East River bank near well MW-410 (elevated cyanide)

In addition, former MGP and sewer piping was also excavated and disposed as shown on Figure 3.

Excavation limits were determined by visual inspection because this was a source area removal effort. The main purpose for excavation was to remove former MGP structures (pipes, channels, tar well, etc.) considered to be sources of the tar impacted material. The extent of the excavation areas is shown on Figure 3. Figures ~~5a~~4a through ~~5c~~4c show the South Parking Lot and remediated areas in cross-section view. Areas 3 and 4 in the North Parking Lot were re-excavated as part of the 2023 ERA and are not further described below.~~-~~ A summary of the South Parking Lot 2003 remedial excavation (Area 1, Area 2, and the former piping) is provided below.

Table A. Excavation Volumes and Disposal Summary

Site Area/Feature	Depth Excavated ft. bgs (approx.)	Tons Excavated	Backfill Material	Final Disposal
Area 1	6-8	3,484	Imported Sand; Treated Soil	Excess soil thermally treated and debris disposed at Hickory Meadows
Area 2 & Tar Well	Tar Well: 16-22, Other: 8-14	14,461	Treated Soil	

Area 1

Excavation depths ranged from 6 to 8 feet bgs around the former 300,000 ft^3 gas holder near Elm Street and approximately 3,484 tons of MGP impacted soil was excavated from Area 1 (Figure 3) and thermally treated. Approximately 90 to 95 percent of the concrete base of the gas holder was removed. Due to existing utilities and structures, a small portion of the base was left in place but other MGP conveyance piping, sewers, and impacted soil were excavated.

Area 2

The former tar well and subsurface foundations/structures of oil tanks, purifiers, small gas holders, and additional MGP conveyance piping and sewers were excavated from Area 2 (Figure 3). The former 50-foot diameter tar well extended approximately 16 - 20 feet bgs and was filled with tar-impacted soil and debris. An additional gas holder (possibly the remains of a 15,000 ft^3 gas holder) filled with similar material was also encountered. These structures, the material within them, and adjacent soils were excavated and thermally treated or transported for landfill disposal. Former MGP piping or structures and areas of impacted soils were excavated south of the tar well. More than 14,460 tons of MGP impacted soil was excavated from Area 2 and thermally treated. Excavation depths ranged from 16 - 22 feet bgs within the tar well, 10 - 12 feet bgs in the 15,000 ft^3 gas holder area, and 8 - 14 feet bgs in surrounding areas.

Former Piping

Former MGP piping, abandoned gas lines, and sewer piping were excavated to depths of 5 to 10 feet bgs. Many former MGP conveyance pipes and sewers were excavated according to plan but others were excavated as encountered during excavation (Figure 3). All MGP related piping, sewers, and structures were excavated as part of the remediation effort as discussed in the Completion Report (NRT, 2014). Where inaccessible or at excavation extents, pipes were abandoned in place and filled with concrete grout to prevent preferential migration of groundwater. Tar-impacted conveyance piping, sewers, and structures

were removed and segregated for disposal at an off-site landfill while the surrounding soils were thermally treated.

Excavations did not proceed laterally or vertically to remove tar or tar staining that observed in clay fractures or silt seams as agreed upon with Wisconsin Department of Natural Resources (WDNR) in the 2003 Remedial Action Work Plan (NRT, 2003). The USEPA noted in the May 29, 2020 comments on the Pre-Design Investigation Work Plan – Revision 0 (Ramboll, 2020a), that:

> *The extent of subsurface NAPL in the area of the former MGP structures south of the Utility Court are not known. Based on a review of Table 12 from the 2003 Remedial Action Documentation Report, the side wall and bottom samples from the four excavation areas still have exceedances of screening levels. For example, Sample EW 2-4 (7 ft) has detections of benzene at 8,900 ppb, benzo(a)pyrene at 11,000 ppb, and naphthalene at 95,000 ppb all of which are above screening levels. Additionally, the statement on page 15 of the 2020 PDI WP that excavations did not proceed laterally or vertically to remove tar that occurred in clay fractures or "silt seams", indicates there may be NAPL that extends laterally from the excavation areas in silt seams. The extent of NAPL does not appear to be defined.*

This work plan aims to address the aforementioned comment and define the horizontal and vertical limits of potential principal threat waste beyond the previous removal areas.

Additionally, following the 2003 excavation, three monitoring wells (MW-401AR, MW-402R, and MW-403R, Figure ~~6~~5) were re-installed within the backfilled areas with screens that partially span the remedial excavation backfill and partially span the clay unit. Existing monitoring wells MW-405A and MW-404 are also sampled on a semi-annual basis to monitor groundwater in the South Parking Lot (Figure ~~6~~5) and are screened across the fill and clay. Figure ~~5a~~4a through Figure ~~5c~~4c depict the remedial excavation, lithology and monitoring wells in the South Parking Lot in cross-section view. Since the 2003 remedial action, dense non-aqueous phase liquid (DNAPL) has been periodically detected in wells MW-401AR and MW-405A. Groundwater concentrations in the cross-unit screened wells MW-402R, MW-403R, and MW-404 have shown ongoing benzene and naphthalene groundwater concentrations exceeding Risk Assessment Framework SLs (Table ~~3~~1). It is unknown whether the source of the contaminant mass contributing to groundwater impacts and the ongoing DNAPL in wells is predominantly related to principal threat waste in clay fractures below the remedial excavation backfill or principal threat waste outside the excavation areas that has re-affected the backfill. ~~-~~This work plan aims to better define the source of the ongoing groundwater impacts in the South Parking Lot.

Based on these identified data gaps, the primary objectives of this SSWP ~~are~~is to~~:~~

~~• Determine vapor intrusion risk within Annex Building under residential future use conditions following completion of the ERA in the North Parking Lot.~~

~~Delineate~~ delineate the extent of remaining principal threat waste in the South Parking Lot including:

- Determine the horizontal and vertical limits of principal threat waste beyond the previous removal areas, including in Elm Street and Madison Street.
- Determine if principal threat waste remains within Excavation Area 1 and 2 or if principal threat waste has re-affected the backfill placed during the 2003 remedial action.

- Better define the source of the ongoing groundwater impacts in the South Parking Lot. Determine if the contaminant mass contributing to groundwater impacts is predominantly related to principal threat waste in clay fractures or remaining principal threat waste in the fill unit.

PROPOSED SUPPLEMENTAL SAMPLING ACTIVITIES

Based on the discussion above, additional investigation will be performed to ~~understand VI risk to residential receptors in the Annex Building following completion of the ERA and to~~ complete delineation of the nature and extent of principal threat waste in the South Parking Lot. The supplemental RI activities described below will be performed in accordance with the site-specific information included in the SSWP Revision 2 and the Multi-Site Field Sampling Plan (FSP) – Revision 4 (IBS, 2008), except where noted.

~~Soil Vapor Sampling~~

~~Sampling will be conducted in accordance with the guidelines presented in the SSWP Revision 2, Multi-Site SOP SAS-11-06 (Rev 1), and the 2016 VI Technical Memorandum Revision 1. Note that the Annex Building heating, ventilation and air conditioning, (HVAC) was supplied by the neighboring Division Office Building which has been demolished. Therefore, the Annex Building does not have an active HVAC system and the building has been vacant without ventilation. Indoor air sampling in the southern portion of the building where shallow groundwater contacts/is near the basement foundation is not proposed because the current conditions are not representative of functional building conditions. Subslab and soil gas sampling will be conducted under existing conditions without operational HVAC. Because there is no operational HVAC, a single round of soil vapor sampling is proposed. If needed, additional sampling could be conducted in the future with an operational HVAC system based on final building redevelopment plans.~~

~~The existing nested sub-slab sampling ports and soil gas probes SS-413/SG-413 and SS-414/SG-414 located in the northern portion of the Annex Building will be evaluated for reuse and re-sampled if the ports pass the chemical leak test described in SOP SAS-11-06 (Rev 1). Sampling will be in accordance with the SSWP Revision 2, the Multi-Site FSP Sub-Slab Sample Port Installation, Sampling and Abandonment SOP SAS-11-01 (Rev 1) and Soil Vapor Probe Installation and Soil Gas Sampling SOP SAS-11-06 (Rev 1). Prior to sample collection, the ports will undergo chemical (helium) leak testing and mechanical leak testing as described in SOP SAS-1106 (Rev 1). A pre-cleaned, evacuated 1-liter (Summa) canister with a laboratory calibrated flow controller will be used to collect the samples. Subslab and soil gas samples will be submitted to a Wisconsin certified laboratory (Pace Analytical of Mount Juliet, Tennessee, EurofinsTest America, South Burlington Vermont or STAT Analysis Corporation of Chicago, IL) for analysis of:~~

- ~~BTEX, naphthalene, and 1,2,4-trimethylbenzene via USEPA Method TO-15.~~
- ~~Carbon dioxide, oxygen and methane via ASTM Method 1946 or USEPA Method 3C.~~

~~A sampling and analysis plan summary is presented in Table 4. Data will undergo data validation by a third-party data validator.~~

~~Quality control (QC) samples will be collected as required by Multi-Site FSP SOP SAS-04-03. Samples will be labeled and packaged in accordance with Multi-Site FSP SOP SAS-03-01 and shipped using chain-of-custody procedures described in Multi-Site FSP SOP SAS-03-02.~~

Soil Boring and Sampling

~~**This section describes the means and methods proposed to delineate the extent of remaining principal threat waste in the South Parking Lot.**~~

For the purposes of this investigation, a definition of principal threat waste consistent with the definition used in the North Parking Lot Early Removal Action Work Plan (Ramboll, 2022) will be utilized and will be defined as soil that meets one or more of the following metrics:

- Non-aqueous phase liquid (NAPL) identified as separated liquid.
- Oil-coated or oil-wetted soil.
- Highly adsorbed phase concentrations of constituents of concern (COCs) exceeding a lifetime incremental cancer risk (CR) of 10^{-3} or a hazard index (HI) of 10 under applicable, residential land use assumptions.

Soil Boring Locations

Soil borings will be installed at the ~~19~~18 primary soil boring locations shown on Figure ~~6.~~5. Contingent soil boring (SB-714) will only be installed if principal threat waste (as defined above) is identified at primary boring SB-717. USEPA will be notified if the contingent boring is needed based on field observations or laboratory analytical results. Seven primary boring locations are located within the 2003 excavation area to vertically delineate the potential presence of principal threat waste in clay fractures and determine if present, whether the principal threat waste has re-affected the backfill placed during the 2003 remedial action. ~~Twelve~~Eleven primary boring locations and the single contingent boring location are located exterior to the previous excavation area to laterally delineate the horizontal limits of principal threat waste beyond the previous removal areas. Soil boring locations were also limited by the presence of utilities throughout the parking lot and streets and shown on Figure ~~6.~~5. Locations may be field modified as needed based on the field-identified locations of utilities.

If principal threat waste is identified at SB-718, additional step-out boring(s) may be needed. However, the utility network is dense at the intersection of Elm Street and N. Madison Street, and WPSC does not own the parcels to the south and east of the roadways. Access agreement(s) will need to be negotiated to install borings on those parcels. WPSC intends to proceed with the initial boring in the roadway. If contingent borings are required, USEPA will be notified, and access agreements will be negotiated at that time. Installation of contingent boring(s) will be performed as part of a second drilling mobilization.

Soil borings will be advanced using a direct-push method. Unless otherwise noted, sampling will be continuous, to define the presence/absence and vertical extent of affected soil at each boring location and extend a minimum of 5-ft into the confining clay layer. For the purpose of guiding investigation fieldwork, the vertical and horizontal extent of principal threat waste will be considered delineated if:

- no oil-coated or oil-wetted observations are present for two consecutive sample intervals (e.g., 4-feet); and
- for the evaluation of risk criteria, a Residential CR is less than 10^{-3} and Residential HI is less than 10 within one sample interval.

All borings advanced as part of the investigation will be continuously logged, following Multi-Site standard SOP SAS-05-02, the presence of fill material, moisture content, photoionization detector readings, the nature of each geologic unit encountered, and visual and olfactory observations indicating the presence of NAPL (e.g., oil-coated, or oil-wetted). Soil boring locations will be recorded per Multi-Site SOP SAS-03-03, and will

be abandoned following the methods described in Multi-Site SOP SAS-05-05. Field equipment will be calibrated prior to use, as required by Multi-Site SOP SAS-02-01 from the Multi-Site FSP.

Subsurface soil samples will be collected from all delineation borings as follows:

- For borings that show no visual, olfactory, or PID indication of impacts, one sample will be collected in the upper four feet to characterize direct contact risks, one sample will be collected within the 2-foot interval above the clay confining layer, and one sample will be collected from the 2-foot interval within the clay confining layer immediately below the fill unit.
- For borings that indicate the presence of contamination (through visual, olfactory, or PID indication), a sample of impacted material will be collected. A second sample will also be collected below the interval(s) of potential MGP impacts, to document vertical extent. Soils will be collected in both fill and clay units as encountered. A third sample will be collected from the upper four feet to characterize direct contact risks.

All soil samples will be submitted to a Wisconsin certified laboratory (Pace Analytical of Green Bay, Wisconsin or EurofinsTest America, Chicago, IL) for COPCs identified in the SSWP Revision 2 including:

- Petroleum volatile organic compounds (PVOCs) via USEPA Method 8260 (Benzene, Ethylbenzene, Toluene, Total Xylenes, 1,2,4-Trimethylbenzene)
- Polycyclic aromatic hydrocarbons (PAHs) via USEPA Method 8270 (1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenz(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene)
- Total Metals via USEPA Method 6020A (Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver) and total Mercury via USEPA Method 7471.
- Total cyanide via USEPA Method 9012B

A sampling and analysis plan summary is presented in Table ~~4~~2. Data will undergo data validation by a third-party data validator.

Quality control (QC) samples will be collected as required by Multi-Site FSP SOP SAS-04-03. Samples will be labeled and packaged in accordance with Multi-Site FSP SOP SAS-03-01 and shipped using chain-of-custody procedures described in Multi-Site FSP SOP SAS-03-02. Equipment will be decontaminated after use in accordance with Multi-Site FSP SOP SAS-04-04.

Well Installation and Groundwater Sampling

Well installation

Following soil boring installation, five pairs of monitoring wells will be installed as shown on Figure ~~6~~5. At each well pair, one well will be fully screened within the clay unit just below the fill and one well will be fully screened within the fill unit. The objective of positioning well screens specific to each unit is to understand contaminant mass and potential migration within each of the hydrostratigraphic/lithologic units[1]. Groundwater samples will be collected from both wells to determine if the contaminant mass contributing to groundwater impacts observed to date in the cross-unit screened wells is predominantly related to principal threat waste in clay fractures or ~~remaining~~residual principal threat waste in the fill unit. Two well pairs will

be located to the south and west of the previous remedial area, two well pairs will be located within the previous remedial area, and one well pair will be located adjacent to the former piping removal area.

Wells will be constructed according to Multi-Site SOP SAS-05-03, and ~~thread~~threaded joints will be tightened per manufacturer requirements. A 2-inch inner diameter poly vinyl chloride well with a 0.01-inch factory slotted screen will be installed, and the annular space around the wells will be backfilled with filter pack, bentonite seal, and finished with a steel flush mount cover. The overall depth of the well and the corresponding length of well screen will be determined in the field by the Ramboll field personnel, based on subsurface information collected during soil boring advancement. The following guidelines will be considered when selecting screen placement and length:

- A minimum 3-foot annular seal is preferred; however, a shorter seal length (minimum 2-feet) is acceptable if dictated by field conditions.
- Monitoring well screens will be 5 feet in length. Shorter screens may be considered if dictated by field conditions.
- In each well pair, the bottom of the ~~shallow~~ effective screen interval (i.e., lowermost sand pack) for the shallow well shall be placed ~~at~~approximately 1 foot above the fill-clay interface~~.~~ to limit the potential for cross contamination between the two lithological units. In each well pair, the top of the ~~deep~~ effective screen (i.e., uppermost sand pack) for the deep well shall be placed approximately ~~1 foot~~2 feet below the fill-clay interface.
- Each deep well where oil-wetted/oil-coated clay was observed will be constructed with a sump that is a minimum of 2 feet long to allow for the accumulation of mobile DNAPL if present. The top of the sump (base of the screen) will be placed at the interface of the fissured clay (if present) and competent clay. The annular space around the sump will be seated with grout or bentonite. A minimum of 6" of filter pack will be placed between the bentonite and well screen to prevent smearing of bentonite near the well screen. Locations without oil-wetted/oil-coated observations will not have a sump installed.
- Sumps will not be installed at the capillary interface between the fill unit and the fissured clay unit in the shallow wells for the following reasons:
  - The expected fill thickness (<8 feet) limits the available space for placing the well with an appropriate annular seal.
  - A two-foot sump would require drilling into the clay unit which may potentially cause cross-contamination/screening between the fill and clay units. The primary goal of the groundwater investigation is to determine if the contaminant mass contributing to groundwater impacts is predominantly related to principal threat waste in clay fractures or residual principal threat waste in the fill unit. The inclusion of sumps with the shallow groundwater wells poses a risk of cross contaminating across hydrostratigraphic units in the shallow wells. However, sumps may be installed on shallow wells if field observations of oil-wetted/oil-coated material above the unit interface indicate that sumps can be installed without causing cross-contamination of the two units.
  - Adjacent to locations SB-712 and SB-706, existing wells (MW-401AR and MW-403R) are currently screened across both hydrostratigraphic units. At these locations, if oil-wetted/oil-coated material is observed near the fill-clay interface, the existing adjacent monitoring well that is screened across both units will be used to monitor DNAPL accumulation. If the adjacent deep clay well with a sump (which is hydraulically isolated from the fill) accumulates DNAPL as well, then it will be inferred that the fractured clay is a source of the DNAPL. These results in combination with the fill well, the cross-unit

well, and the visual logging of the soil boring will be considered to evaluate the source of groundwater impacts.

Well Development

Following installation, wells will be developed in accordance with Multi-Site SOP SAS-05-04. Wells will be developed using an electric submersible pump for surging and pumping. Field parameters—specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential, and turbidity—will be measured during development. Wells will be considered developed when field parameters meet the stabilization criteria detailed in Multi-Site SOP SAS-05-04.

Groundwater Sampling

Each well will be sampled for groundwater COPCs, using low-flow sample techniques, in accordance with Multi-Site SOP SAS-08-02. Groundwater sampling will be conducted within two months following well installation. Field parameters—specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential, and turbidity—will be measured using a flow-through cell. Samples will be submitted to Pace of Green Bay, Wisconsin for groundwater COPCs identified in the SSWP Revision 2 including:

- PVOCs including BTEX, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene via USEPA Method 8260
- PAHs via USEPA Method 8270 (1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenz(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene)
- Total Metals via USEPA Method 6020A (Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver) and total mercury via USEPA Method 7471.
- Nitrate and Nitrite via USEPA method 353.2
- Sulfate via USEPA Method 300

A sampling and analysis plan summary is presented in Table 42. Data will undergo data validation by a third-party data validator.

If the schedule allows, sampling of the newly installed wells will be conducted at the same time as semi-annual sampling of existing wells.

Quality control (QC) samples will be collected as required by Multi-Site FSP SOP SAS-04-03. Samples will be labeled and packaged in accordance with Multi-Site FSP SOP SAS-03-01 and shipped using chain-of-custody procedures described in Multi-Site FSP SOP SAS-03-02. Equipment will be decontaminated after use in accordance with Multi-Site FSP SOP SAS-04-04.

The need for additional sampling at these wells will be evaluated once the results of the initial round of sampling have been received. A minimum of four semi-annual groundwater sampling events is anticipated. A recommendation for either abandonment or incorporation into the long-term monitoring network will be provided in the Remedial Investigation Report.

Observation of DNAPL Accumulation

Following installation and development of new wells, the thickness of DNAPL in the wells (if present) will be measured on a consistent monthly basis for three months, using a weighted cotton string or interface probe. After three months, the gauging frequency will be reduced to semi-annually to coordinate with the planned semi-annual groundwater monitoring events.

Schedule and Reporting

Soil boring and monitoring well installation is proposed to be completed ~~during the summer~~in late July 2023 following USEPA-approval of this work plan. ~~Subslab/soil gas sampling is proposed to begin in August 2023 pending completion of the ERA in the North Parking Lot.~~ Results of the investigation will be incorporated into a Remedial Investigation Report, which will be submitted by the end of 2023.

References

Integrys Business Support, 2008. Multi-Site Field Sampling Plan, Revision 4, Remedial Investigation/Feasibility Study, Former Manufactured Gas Plant Sites, CERCLA V-W-06-C-847. September.

ITRC, 2007 *Vapor Intrusion Pathway: A* Practical Guideline. January.

NRT, 2003. Remedial Work Plan, Former Manufactured Gas Plant Site, Green Bay, Wisconsin, February.

NRT, 2014. Completion Report (Revision 0), Former Green Bay MGP, Green Bay, Wisconsin. June 17.

NRT, 2015a, Site Specific Work Plan Revision 2, Green Bay Former MGP, Green Bay, Wisconsin. March 20.

NRT, 2015b, Site Specific Work Plan Revision 2, Modified October 2015, Green Bay Former MGP, Green Bay, Wisconsin. October 9.

NRT, 2016a, Vapor Intrusion Investigation Decision Matrix. January 15.

NRT, 2016b, Technical Memorandum No. 1 – Rev1, Supplemental RI Activities – VI Evaluation, Green Bay Former MGP, Green Bay, Wisconsin. July 15.

Ramboll, 2020a. Pre-Design Investigation Work Plan, Former green Bay Manufactured Gas Plant. March 16.

Ramboll, 2020b. Upland Remedial Investigation Data Summary Report, Former Green Bay Manufactured Gas Plant Site Operable Unit 1. September 18.

Ramboll, 2022. Early Removal Action Work Plan, Former Green Bay Manufactured Gas Plant, Revision 2. September 26.

Attachments

Figure 1 – Site Location Map
Figure 2 – Site Layout Map
Figure 3 – Soil Remediation Excavation Areas
Figure ~~4 – North Parking Lot Future Residential Use Vapor Intrusion Evaluation~~
~~Figure 5a~~4a – Geologic Cross Section D-D'
Figure ~~5b~~4b – Geologic Cross Sections E-E' and F-F'
Figure ~~5c~~4c – Geologic Cross Section G-G' and H-H'
Figure ~~6~~5 – Proposed Soil Borings and Monitoring Wells
~~Table 1 – Soil Gas Analytical Results Compared to Residential and Industrial SLs - North Parking Lot~~
~~Table 2 – Indoor Air and Ambient Analytical Results Compared to Residential and Industrial SLs - Annex Building~~
~~Table 3~~Table 1 – 2018-2022 Groundwater Analytical Results Compared to the Groundwater SL, the PAL, and Tap Water Criteria
Table 42 – Sampling and Analysis Plan