



1610 North 2nd Street
Suite 201
Milwaukee, Wisconsin 53212
United States
T +1.414.272.2426
F +1.414.272.4408
www.jacobs.com

October 15, 2024

Andrew Kleinberg
U.S. Environmental Protection Agency Region 5
Land, Chemicals & Redevelopment Division
77 West Jackson Blvd, LR-16J
Chicago, IL 60604-3590

Subject: *Quarterly Progress Report (July through September 2024)*
Administrative Order on Consent (February 26, 2009)
Tyco Fire Products LP, Stanton Street Facility, Marinette, Wisconsin
WID 006 125 215

Dear Mr. Kleinberg:

In accordance with Section VI, 21, b (page 10) of the Administrative Order on Consent (AOC), dated February 26, 2009,¹ Tyco Fire Products LP (Tyco) has prepared this quarterly progress report for the U.S. Environmental Protection Agency (EPA) Region 5 and Wisconsin Department of Natural Resources (WDNR) (collectively referred to herein as the Agencies). Progress reports are required to document activities conducted as part of the Resource Conservation and Recovery Act (RCRA) corrective actions at the Tyco property on One Stanton Street in Marinette, Wisconsin (Figure 1). This report covers the period from July 1 through September 30, 2024, and presents a brief description of the work performed, data collected, problems encountered, and schedule of activities as required by the 2009 AOC and subsequent agreements.

1.0 Work Completed during This Reporting Period

Groundwater Collection and Treatment

The following subsections summarize the current status of the groundwater collection and treatment components and groundwater system operations during the third quarter 2024 reporting period. Attachment 1 provides a summary of the operational data for the groundwater collection and treatment system (GWCTS) during this reporting period and includes Table 1-1, which lists the estimated volumes of water extracted, treated, stored, discharged, and disposed of offsite. Attachment 2 contains the monthly Discharge Monitoring Reports for Wisconsin Pollutant Discharge Elimination System (WPDES) General Permit WI-0001040-08-01 for Outfall OF004 (Figure 2) and Sampling Point SP108 (GWCTS effluent).

¹ U.S. Environmental Protection Agency. 2009. *Resource Conservation and Recovery Act Administrative Order on Consent, Ansol, Incorporated*. EPA Docket No. RCRA-05-2009-0007542-S-02-001. February 26.

GWCTS Operations Status

The upgraded GWCTS treats groundwater extracted from the Main Plant (FD-1, EW-5, EW-6, and EW-7) and Wetlands Area (EW-1) to prevent surface flooding of the facility (Figures 1 and 2). The GWCTS also treats groundwater recovered from the pump down program (PDP) operations, which include the former Salt Vault (HW-1 and HW-2) and former 8th Street Slip (EW-8 and EW-9) areas (Figures 1 and 2). PDP water was also used to fill offsite disposal trucks (disposed of offsite at the Waste Management Vickery Deepwell Hazardous Waste disposal facility in Vickery, Ohio) if additional volume was needed when reject water was being filled into the trucks or when GWCTS operations were down for maintenance.

PDP operations continued under management of Endpoint Solutions (Endpoint) of Franklin, Wisconsin, during the reporting period, and Endpoint coordinated with Tyco on PDP settings and conveyance to the GWCTS.

GWCTS operations continued under management of Tyco operators. The GWCTS operated continuously except for select weekends and holidays and for short-term maintenance. During the reporting period, an extended maintenance and optimization configuration shutdown occurred from July 1 to July 8, 2024, for updates and cleaning (with a portion of that being over the long holiday weekend), which included the following:

- The two reaction tanks were drained and cleaned, including the associated tank pumps and piping.
- The clarifier was drained and cleaned.
- Piping for the clarifier effluent was modified to a larger-diameter 5-inch pipe to improve flow to the microfiltration (MF) units.
- Additional piping and connections were added between the two reaction tanks to facilitate cleaning of the piping.

Other GWCTS maintenance items that limited operations during the reporting period are as follows:

- MF Unit B had operational issues starting in June 2024 which limited treatment rates of the system during this time. Replacement MF Unit B membranes were ordered in second quarter, and installed on July 24, 2024, and were operational on July 25, 2024. This resolved the operational issues. Additional backup MF membranes will also be ordered to prevent significant downtime related to the MF unit from occurring in the future.
- The vibratory shear-enhanced processing (VSEP) units were shut down the weekend prior to August 26, 2024 to allow troubleshooting associated with high conductivity readings causing performance issues with the reverse osmosis (RO) system. Troubleshooting is ongoing to determine the root cause of this issue. During this time, the VSEP units have remained off, and will likely remain off, leading to an increase in reject water generation. The VSEP units will be evaluated further in fourth quarter.
- RO Unit 1 had issues returning to regular operations following routine cleaning since August 2024, likely due to the high VSEP permeate conductivity discussed above. As a result, RO Unit 1 has been turned off and the data are currently being reviewed to evaluate if replacement of the RO membranes is needed. Tyco has spare RO membranes in-house if replacement is determined necessary.

Other GWCTS activities during the reporting period are as follows:

- As noted in the last quarterly report, on June 4 and June 24, 2024, Tyco's chemical supplier ChemTreat was onsite to conduct jar testing and follow-up laboratory testing to determine whether

the addition of ferric sulfate will help with optimization related to reducing solids loadings on the MF units. The report from ChemTreat with the initial jar testing results indicated that a dosage rate between 100 and 300 milligrams per liter will improve the clarification process. Details regarding the proposed chemical addition were emailed to the WDNR WPDES staff for review on September 4 and September 13, 2024, and is currently under their review. Details regarding an anti-foaming product (Foamtrol [AF2050]) were also included in the email. Foamtrol addition is proposed at the first reaction tank, and only when needed.

- After getting a few tears in the filter press cloths, change out of all the filter press cloths started in mid-September 2024, and the cloths are being replaced on a schedule of approximately two at a time over the next several weeks and will be completed in early fourth quarter 2024. This will allow for continued operations and no extended downtime of the GWCTS.
- In mid-September 2024, loose wiring at the contactor of a breaker in the panel of the hot water heater caused the breaker to fail. A backup hot water system was put in place and shortly after were able to set it back up to using the existing system. A new breaker was installed the week of September 30, 2024, and the wiring at the contactors will be monitored over the next month.

Main Plant and Wetlands Area Extraction Well Maintenance

During the reporting period, the Main Plant and Wetlands Area extraction well maintenance and improvement activities were conducted as follows:

- EW-7, northwestern corner of the Main Plant: As noted in the previous quarterly report, a higher-capacity pump was installed in July 2024 to allow for increased capacity (instantaneous flows of 15 to 20 gallons per minute [gpm]) at EW-7, in case it is needed.
- EW-4, northeastern corner of the Main Plant: As noted in the previous quarterly report, the capacity of extraction well EW-4 is limited (typically 0.5 gpm or less). As such, this pump is not typically operated, and the focus of operations in the Main Plant is at EW-5, EW-6, and EW-7. Tyco submitted the design document on August 28, 2024, for instead using new horizontal extraction wells (HW-3 and HW-4), for the Agencies' review and approval. Additional email communication regarding EPA questions on the design occurred on September 6 and September 13, 2024. Based on the October 3, 2024 monthly meeting, the Agencies gave verbal approval to start planning for the installation of these wells, and the Agencies planned to follow up with a written approval prior to installation.
- New proposed EW-15, outside the wall in the northwestern corner of the site: As noted in the previous quarterly report, the intent of EW-15 is to extract groundwater outside the wall to reduce potential discharge of groundwater to the river between the western extents of the vertical barrier wall and the Fincantieri Marinette Marine Corporation property to the west. Tyco submitted the design document (in the same deliverable for horizontal wells HW-3 and HW-4) on August 28, 2024, for the proposed new extraction well for the Agencies' review and approval. Additional email communication regarding EPA questions on the design occurred on September 6 and September 13, 2024. Based on the October 3, 2024 monthly meeting, the Agencies were agreeable to installing EW-15 with the caveat of developing a pilot test program for the Agencies to evaluate and confirm that the new well will not interfere with the current RCRA remedy objectives.

GWCTS Operations

As summarized in Attachment 1, Table 1-1, a total of approximately 1,109,556 gallons of groundwater was extracted from the site with the sitewide extraction well network for the reporting period, with an overall average pumping rate of 8.4 gpm. The GWCTS operated 69 days during the reporting period and

treated approximately 960,130 gallons (overall average influent rate of 7.2 gpm) of this water, which was extracted from both the active Main Plant and Wetlands Area extraction wells, and a portion of the water from the PDP system wells (Figures 1 and 2). The GWCTS estimated effluent total for the reporting period is 793,505 gallons (overall average effluent rate of 6.0 gpm). The monthly Discharge Monitoring Report results from June 2024, July 2024, and August 2024 (Attachment 2) indicate that treated groundwater GWCTS effluent complies with both the permitted SP108 GWCTS effluent limits and Outfall OF004 discharge requirements.

An estimated 298,171 gallons of water (Attachment 1, Table 1-1) was removed from the site during the reporting period and disposed of at the Waste Management Vickery Deepwell Hazardous Waste disposal facility in Vickery, Ohio.

PDP Water Levels

Both the former Salt Vault and former 8th Street Slip areas have maintained average groundwater levels below the target elevation during the reporting period, except for the manual water level measurement average elevation on July 16, 2024, which was 0.02 foot above the target. These data are included in Attachment 3 (the target elevation calculation included in the manual water level measurements table) and Attachment 4 (one hydrograph with the manual water level measurement average elevations and the transducer data collected as part of the pump house system operations, and a hydrograph for each area that provides the individual manual water level data for each well and the average elevation relative to the river elevation). An inward hydraulic gradient was maintained for each of these areas during the entire reporting period.

Manual water level measurements were collected a minimum frequency of monthly in the PDP area, and the electronic PDP transducer data were reviewed and used to monitor the water levels on a weekly basis.

In addition, the SW001 PDP river transducer was still housed in the old SG4 stilling well that also housed the SG4 transducer (the old river transducer that was removed in May 2024 and replaced with SG4-2). A new stilling well was installed using 4-inch-diameter well screen material, and the SW001 PDP river transducer was installed here on July 23, 2024.

Barrier Wall Groundwater Monitoring Activities

As noted in the last quarterly report, EPA emailed a letter on February 14, 2024, with the Agencies' review comments on the *2022 Barrier Wall Groundwater Monitoring Annual Monitoring Report*.² A memorandum was submitted on April 1, 2024, to respond to the comments; as noted in the response, the comments were addressed in the *Five-Year Technical Review Report (Five-Year Review Report)*³ or the *2023 Barrier Wall Groundwater Monitoring Annual Monitoring Report* (included as Appendix A to the Five-Year Review Report) that was also submitted on April 1, 2024.

² Jacobs. 2023. *2022 Barrier Wall Groundwater Monitoring Annual Report*. April 15.

³ Jacobs. 2024. *Five-Year Technical Review Report*. April 1.

The spring barrier wall groundwater monitoring and sampling event was conducted the week of June 17, 2024, by Endpoint. The sampling was conducted in accordance with the *Revised Barrier Wall Groundwater Monitoring Plan Update (2015 Monitoring Plan)*⁴ and the 2019 Addendum to the 2015 Monitoring Plan.⁵

Four additional monitoring wells were added to the collection of the sitewide water levels at the shallow- and medium-depth wells at monitoring well nests MW028 and MW029 installed as part of the per- and polyfluoroalkyl substances (PFAS) project.

Pressure transducer-related activities were completed by Endpoint as follows:

- July 9, 2024: Pressure transducers that were removed on June 5, 2024, at seven monitoring wells (MW003S, MW003D, MW064D, MW100S, MW102S, MW107D, and MW118D-R), in advance of PFAS sampling, were reinstalled on July 9, 2024.
- Week of July 8, 2024: As noted in the previous quarterly report, during the week of May 6, 2024, Endpoint installed In-Situ Inc. VuLink data logger/cellular telemetry devices at nine pressure transducers (MW047S, MW120S, MW117S, MW117D, MW115S, MW124S, MW108S, MW118S, and MW064S) to allow for remote telemetry monitoring in the different contained areas. Two new VuLink/pressure transducer setups were also installed at MW042S and MW012S on September 25, 2024 to better evaluate water levels changes across the Main Plant. Tyco is waiting on additional equipment and will install two more setups at MW121S and MW068S in fourth quarter.

Maintenance Inspections

The following maintenance inspection field activities were completed in third quarter 2024.

Phyto-Plot Inspections

Routine maintenance visits were conducted by Sand County Environmental, Inc. of Rhinelander, Wisconsin, in the phyto-plot zones 4 and 7 (Figure 2) on July 3 and August 22, 2024, and a final maintenance and winterization visit was completed the week of September 30, 2024. The site visits included the following:

- Zone 4: Only fence maintenance was conducted.
- Zone 7: Weeds were cleared around the trees, and holes in the fence made by rabbits were patched. Nine trees planted in 2024 were identified as at risk of dying over the winter due to damage caused by rabbits. These locations will be assessed for replanting in the spring 2025, if needed. The irrigation system was winterized during the last visit.

Cover Area Inspections

The following updates are provided for cover areas (Figure 3) where issues were identified during the May 21, 2024 inspection:

- The former Salt Vault and former 8th Street Slip had minor asphalt sealing and crack repairs, which were completed by August 28, 2024.
- Cover Area K had a small area along Building 67 where a portion of the soil cover had eroded, which will be addressed in fourth quarter when ChemDesign completes the water line work in this same area.

⁴ CH2M HILL, Inc. 2015. *Revised Barrier Wall Groundwater Monitoring Plan Update*. September 3.

⁵ Jacobs. 2019. *Addendum to 2015 Barrier Wall Groundwater Monitoring Plan Update*. June.

Vertical Barrier Wall Inspections

As noted in the last quarterly report, Endpoint completed the visual inspection for the barrier markers on the western, southern, and eastern sides of the site on April 26, 2024. Missing slurry barrier wall markers identified during the inspection were replaced by the week of June 13, 2024. The waterside (above water line) inspection of the sheet pile vertical barrier wall (Figure 1) along the Menominee River was completed by Endpoint during the week of June 17, 2024.

During the third quarter, the landside portion of the sheet pile vertical barrier wall was completed by Endpoint on July 8, 2024. The survey of the sheet pile vertical barrier wall was completed on July 17 and July 18, 2024. No major issues were identified during the waterside and landside sheet pile wall inspections or from the survey data. Findings identified during 2023 and 2024 inspections that required maintenance activities have the following updates:

- Cylindrical steel caps welded to the steel sheet piles: The missing epoxy sealant at the bottom of the cylindrical steel caps that are welded to the steel sheet piles where the tiebacks penetrate the wall, noted during the 2023 inspection, was replaced at seven locations on September 12, 2024.
- Steel bent plate cap: The steel bent plate cap appeared to be loose at several sections along the sheet pile vertical wall during the 2024 inspection. These areas were spot welded to keep the cap in place the week of September 30, 2024.
- Slurry wall settling: South of Building 29 (Figure 2), an area along the slurry wall vertical barrier wall had some settling that was noted during the 2024 inspection (which appears to be from construction equipment that went through the area) and was backfilled and reseeded during the week of September 30, 2024.
- Erosion on the land side: Asphalt work to address some of the erosion along the landside of the sheet pile vertical barrier wall in the northwestern corner of the site (near Weir #1, Figure 2), noted during the 2023 and 2024 inspections, is currently underway and will be completed in early fourth quarter 2024.
- Missing external waler tieback caps at the end of the tieback: The custom-made caps for the 35 locations with missing caps noted during the 2023 inspection, plus 5 spares, were ordered and are expected to be shipped by the end of October 2024. If weather conditions and river levels allow, the tieback caps will be replaced in fourth quarter 2024.

Endpoint is preparing documentation to summarize the inspection and repair activities that will be provided in the annual report.

Monthly Meetings

Monthly teleconference meetings were attended by EPA, WDNR, Tyco, Jacobs, and Endpoint on July 11, August 8, and September 5, 2024. During each meeting, the status of deliverables and a brief update of completed or upcoming activities were discussed. During the August 2024 meeting, additional items were added to the agenda by the Agencies regarding vapor intrusion and are further discussed in the following section.

Vapor Intrusion Assessment and Work Plan Comments

As noted in the last quarterly report, the *Revised Vapor Intrusion Assessment and Work Plan*⁶ was submitted to EPA and WDNR on March 17, 2021, which included an updated evaluation of potential vapor intrusion at the site and a revised work plan for additional vapor intrusion evaluation activities to be conducted at the site. Comments on the work plan were provided by the Agencies on December 20, 2023. A meeting occurred on April 4, 2024, to discuss the comments with the Agencies. EPA sent an email on April 23, 2024, that indicated that it would send out an agenda to further discuss the vapor intrusion work plan. Subsequently, during the June 13, 2024 monthly meeting, EPA indicated that the discussion would occur during the August 8, 2024 monthly meeting. Following the August 2024 meeting, Tyco finalized and submitted the *Response to Comments on Vapor Intrusion Work Plan Review With Comments* memorandum (which also included the proposed work plan approach) on September 4, 2024. Tyco is preparing the updated work plan and will wait to submit the document until fourth quarter 2024 once the Agencies have approved the September 4, 2024 response to comments document that includes the general approach for inclusion in the revised work plan.

Additional Activities

Soil Management Plan Activities

No soil disposal occurred during this reporting period.

Tyco leases a portion of the site to ChemDesign. The new water line work to provide water to a new building constructed by ChemDesign (noted in the last quarterly report) has been postponed from later in third quarter 2024 to fourth quarter 2024.

2.0 Data Collected

Extraction and treatment volumes, analytical testing, and discharge data are required as part of WPDES Permit WI-0001040-08-0. Attachment 2 includes the GWCTS monthly WPDES Discharge Monitoring Reports for June 2024 through August 2024, and Attachment 1 contains additional data on GWCTS operations for the reporting period.

Monthly groundwater elevation data were collected from monitoring wells in the former 8th Street Slip and former Salt Vault areas in accordance with the PDP requirements, and the data are included in the 2024 PDP summary table (Attachment 3). Water level data from transducers in monitoring wells collected as part of the PDP pump house system are also summarized in hydrographs (Attachment 4). Although this is the post-drawdown monitoring phase (which requires quarterly manual water level measurements, instead of monthly), monthly water level measurements will continue to be collected through the end of 2024. Quarterly monitoring will begin in 2025.

Barrier wall groundwater monitoring event data will be included in the annual report. Groundwater elevation data recorded by transducers are being compiled and evaluated. The transducer data will also be provided in the annual report.

⁶ Jacobs. 2021. *Revised Vapor Intrusion Assessment and Work Plan*. March 17.

3.0 Problems Encountered

There were no problems encountered during this reporting period.

4.0 Schedule of Upcoming Activities

The following summarizes the activities to be conducted during the next reporting period:

- Submit the quarterly progress report.
- Continue operating the GWCTS, which includes PDP operations in the former Salt Vault and former 8th Street Slip areas.
- Continue measuring PDP water levels monthly in the former Salt Vault and former 8th Street Slip areas until the end of 2024, at which time monitoring will be converted to quarterly.
- Submit a revised vapor intrusion work plan.
- Address remaining inspection finding for cover Area K.
- Address remaining inspection findings for the sheet pile vertical barrier wall.
- Complete installation and connection to the GWCTS of horizontal wells HW-3 and HW-4 to replace EW-4 in order to provide more operational flexibility for maintaining groundwater levels across the Main Plant area.
- Complete installation and pilot testing of new extraction well EW-15 to evaluate the feasibility of extracting groundwater outside the wall to limit the discharge of groundwater to the river while limiting any impacts to the current remedy.
- Conduct the fourth quarter 2024 semiannual barrier wall water level monitoring event.
- Conduct transducer data download activities.
- ChemDesign will conduct the new water line work in cover Area J.

5.0 List of Key Correspondence and Document Submittals

Project-related documents submitted to and received from the Agencies during third quarter 2024 are summarized in Tables 1 and 2, respectively.

Table 1. Documents Submitted

Quarterly Progress Report (July through September 2024), Tyco Fire Products LP Facility, Marinette, Wisconsin

| Description of Submittal | Submitted To | Date Submitted |
|---|--------------|----------------|
| Email—Documentation with confirmation of the established standby trust alongside the surety bond for the 2024 Financial Assurance | EPA | July 3, 2024 |
| Email—July 11th Proposed RCRA Meeting Agenda Items | EPA and WDNR | July 10, 2024 |
| Quarterly Progress Report (Second Quarter 2024) | EPA | July 15, 2024 |
| Email—August 8th Proposed RCRA Meeting Agenda Items | EPA and WDNR | August 8, 2024 |

Table 1. Documents Submitted

Quarterly Progress Report (July through September 2024), Tyco Fire Products LP Facility, Marinette, Wisconsin

| Description of Submittal | Submitted To | Date Submitted |
|---|--------------|-------------------------------------|
| Design for New Extraction Wells EW-15, HW-3 and HW-4 | EPA | August 28, 2024 |
| High capacity well application package for addition of new extraction wells EW-15, HW-3 and HW-4 and changes to existing extraction wells | WDNR | August 30, 2024 |
| <i>Response to Comments on Vapor Intrusion Work Plan Review With Comments</i> | EPA | September 4, 2024 |
| Email—September 5th Proposed RCRA Meeting Agenda Items | EPA and WDNR | September 4, 2024 |
| Emails—Details to WDNR on proposed GWCTS chemicals for ferric sulfate and Foamtrol AF2050 | WDNR | September 4 and September 13, 2024 |
| Emails—Responding to EPA September 6, 2024 email regarding Design for New Extraction Wells EW-15, HW-3 and HW-4 | EPA | September 6 and September 13, 2024 |
| Emails—Responding to WDNR follow up regrading high capacity well application package for addition of new extraction wells EW-15, HW-3 and HW-4 and changes to existing extraction wells | WDNR | September 20 and September 23, 2024 |

Table 2. Correspondence from Agency

Quarterly Progress Report (July through September 2024), Tyco Fire Products LP Facility, Marinette, Wisconsin

| Description of Correspondence | Submitted By | Date Submitted |
|---|--------------|-------------------------------------|
| WDNR Email—Follow up on High Capacity Well Application and WPDES Permit Modification Questions | WDNR | July 1, 2024 |
| WDNR Email—Adding two agenda items to the July 11th Proposed RCRA Meeting Agenda Items | WDNR | July 11, 2024 |
| EPA Email—Proposed vapor intrusion agenda items for the August 8th Proposed RCRA Meeting | EPA | August 1, 2024 |
| WDNR Email—Requesting additional information on ferric sulfate and Foamtrol AF2050 | WDNR | September 4, 2024 |
| EPA Email—Regarding Design for New Extraction Wells EW-15, HW-3 and HW-4 | EPA | September 6, 2024 |
| WDNR Emails—Follow up regrading high capacity well application package for addition of new extraction wells EW-15, HW-3 and HW-4 and changes to existing extraction wells | WDNR | September 17 and September 20, 2024 |

If you have any questions or require additional information, please contact me at 262-644-6167 or Denice Nelson at 651-280-7259.

Respectfully Yours,

Jacobs



Heather Ziegelbauer
Project Manager

cc: Angela Carey, WDNR
Sarah Krueger, WDNR
Ryan Suennen, Tyco Fire Products
Denice Nelson, Johnson Controls
Scott Wahl, Tyco Fire Products
Mariel Carter, Stephenson Public Library

Figures

- 1 Site Map
- 2 Site Plan with Wells
- 3 Cover Area Location Map

Attachments

- 1 Groundwater Collection and Treatment System Operation Summary
- 2 Discharge Monitoring Reports for the Groundwater Collection and Treatment System and Outfall OF004
- 3 2024 PDP Groundwater Elevation Monitoring
- 4 2024 PDP System Hydrographs

Document Control No.: D3838400.321



Figures



LEGEND

- Steel Sheet Pile Wall (Vertical Barrier Wall)
- Slurry Wall (Vertical Barrier Wall)
- Approximate Property Boundary

Note:
 1. Imagery Source: Pléiades Neo (PNEO) Satellite
 Acquisition Date: 6/7/2023

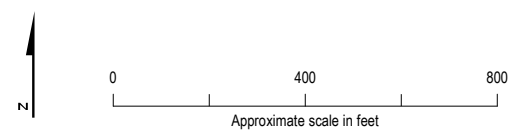
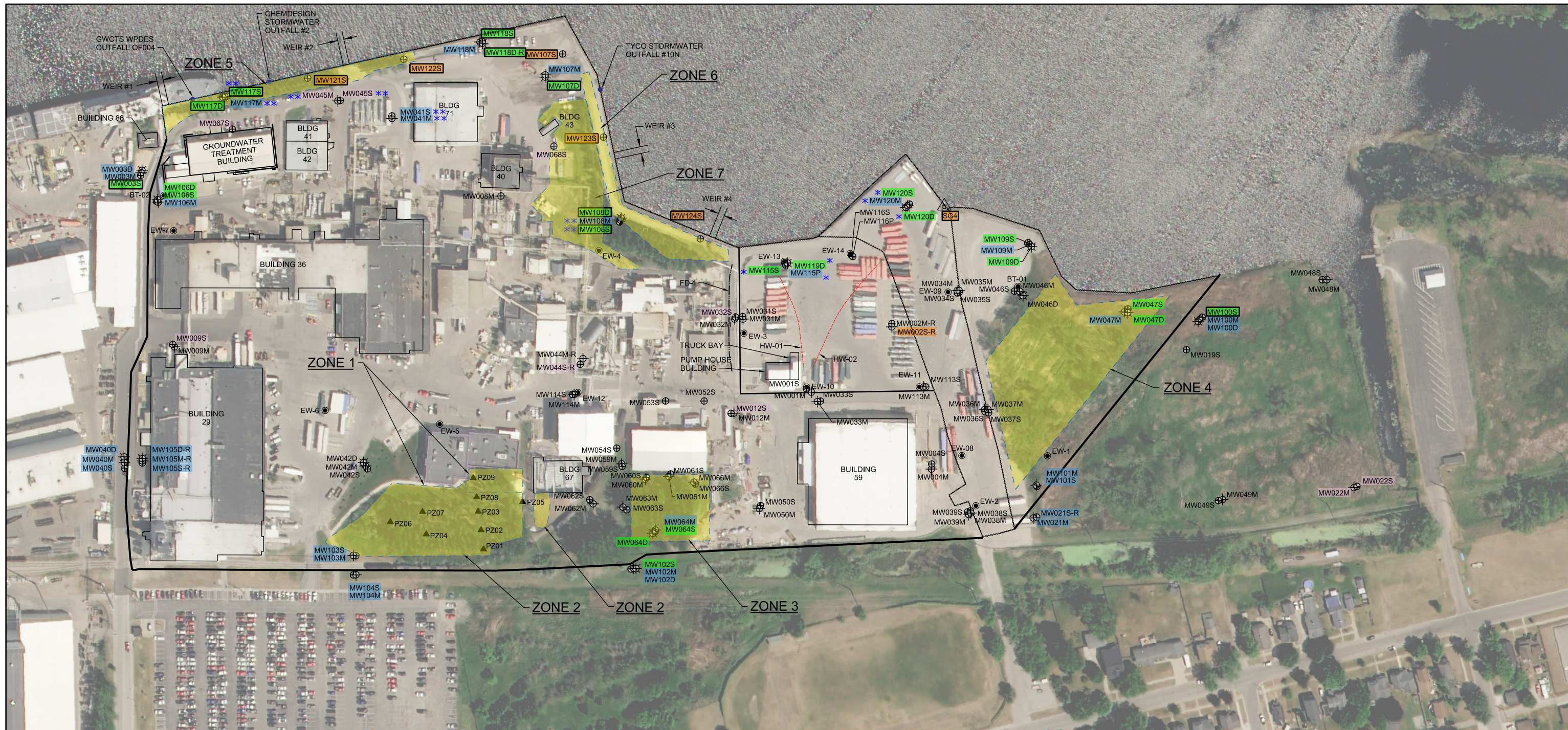


Figure 1. Site Map
 Tyco Fire Products LP
 Marinette, WI



LEGEND

- | | | | |
|------------------|-----------------------------------|------|---|
| EW-5 OR BT-02 | EXTRACTION WELL OR TEST WELL | ASPH | ARSENIC SAMPLING LOCATION AND MANUAL WATER LEVEL MEASUREMENT |
| MW002S OR MW115P | MONITORING WELL - SHALLOW OR PEAT | GRN | TRANSDUCER GROUNDWATER ELEVATION MEASUREMENT LOCATION AND ARSENIC SAMPLING LOCATION |
| MW002M | MONITORING WELL - MEDIUM | BLK | BOX AROUND HIGHLIGHTING INDICATES TRANSDUCER DATA WILL BE ANALYZED USING SERIES SEE |
| MW002D | MONITORING WELL - DEEP (BEDROCK) | ORG | TRANSDUCER WATER LEVEL MEASUREMENT AND MANUAL WATER ELEVATION MEASUREMENT AT TIME OF ARSENIC SAMPLING |
| PZ04 | PIEZOMETER | MAN | MANUAL GROUNDWATER ELEVATION MEASUREMENT ONLY AT TIME OF ARSENIC SAMPLING EVENTS |
| VW-TB01 | VIBRATING WIRE PIEZOMETER | PHY | PHYTO-PUMPING AREAS |
| SG1 | STAFF GAUGE | | |
| --- | SHEET PILE WALL | | |
| --- | SLURRY WALL | | |
| --- | HORIZONTAL WELL (SCREEN) | | |
| --- | HORIZONTAL WELL (RISER) | | |
| --- | FRENCH DRAIN | | |
| * | ARSENIC SAMPLING EVERY 5 YEARS | | |
| ** | VOC SAMPLING EVERY 5 YEARS | | |
| ● | APPROXIMATE OUTFALL LOCATION | | |

NOTES:

- EXCEPT FOR THE SALT VAULT AND 8TH STREET SLIP, ARSENIC SAMPLING WAS CONDUCTED ANNUALLY IN 2024 AND SAMPLING FREQUENCY WILL CONTINUE TO BE RE-EVALUATED IN ANNUAL REPORTS.
- MW002S, MW115S, MW120S, AND MW120D ARE EQUIPPED WITH TRANSDUCERS IN THE FORMER SALT VAULT/ 8TH STREET SLIP AREAS TO MONITOR THE PUMP DOWN PROGRAM AND WILL BE EVALUATED ANNUALLY TO DETERMINE WHETHER TRANSDUCERS AT THESE MONITORING WELL LOCATIONS ARE STILL NEEDED.
- SEE FIGURE 4-1 OF 2015 MONITORING PLAN FOR WELL LOCATIONS MONITORED AS PART OF PUMP DOWN PROGRAM.
- IMAGERY SOURCE: PLEIADES NEO (PNEO) SATELLITE ACQUISITION DATE: 6/7/2023

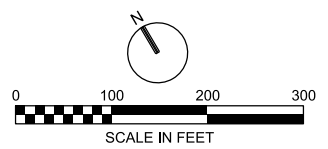
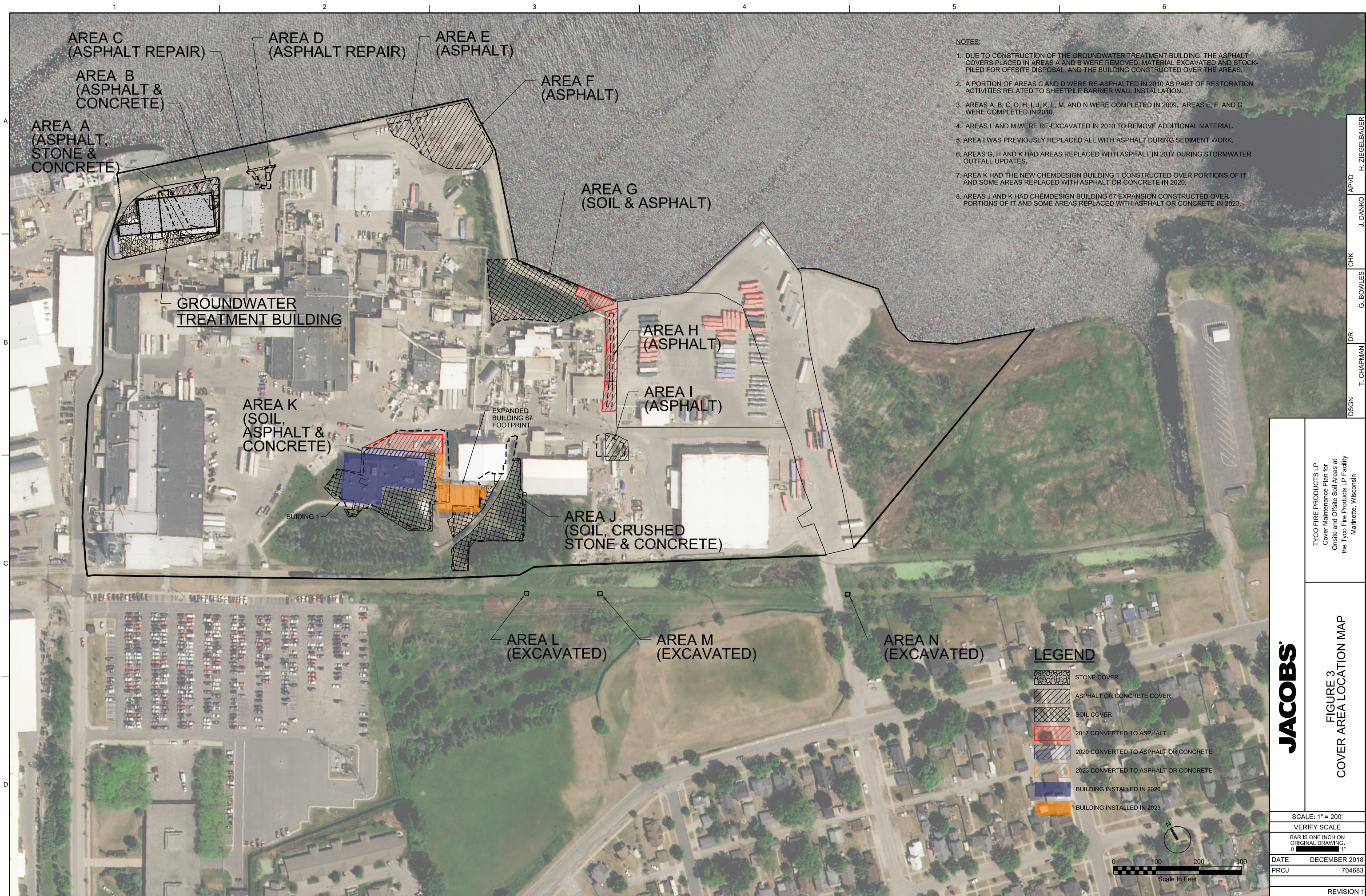


FIGURE 2
SITE PLAN WITH WELLS
 TYCO FIRE PRODUCTS LP
 MARINETTE, WISCONSIN





JACOBS

**FIGURE 3
 COVER AREA LOCATION MAP**

| |
|---|
| TYCO FIRE PRODUCTS LP Cover Maintenance Plan for Onsite and Offsite Soil Areas at the Tyco Fire Products LP Facility Marquette, Wisconsin |
| SCALE: 1" = 200' |
| VERIFY SCALE |
| BAR IS ONE INCH ON ORIGINAL DRAWING. |
| DATE: DECEMBER 2018 |
| PROJ: 704683 |
| REVISION 1 |

REUSE OF DOCUMENTS: THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN AS AN INSTRUMENT OF PROFESSIONAL SERVICE IS THE PROPERTY OF CHEM HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CHEM HILL. ©CHEM HILL 2009. ALL RIGHTS RESERVED.

DR: T. CHAPMAN
 CHK: G. BOWLES
 APVD: J. DANKO
 H. ZIEGELBAUER

Attachment 1
Groundwater Collection and Treatment System
Operation Summary

Groundwater Collection and Treatment System Operations for Tyco Fire Products LP, Marinette, Wisconsin, July through September 2024

The following summarizes groundwater collection and treatment system operations from July 1 through September 30, 2024, at the Tyco Fire Products LP facility on Stanton Street in Marinette, Wisconsin:

- The groundwater collection and treatment system operated for 18 days in July 2024, 23 days in August 2024, and 28 days in September 2024, for a total of 69 days.
- For the reporting period, the precipitation recorded from the weather station in Marinette, Wisconsin, was 5.59 inches of rain (<https://www.weather.gov/wrh/Climate?wfo=grb>).
- Table 1-1 lists the estimated volumes of water extracted, treated, and discharged under the Wisconsin Pollutant Discharge Elimination System permit as well as the volumes disposed of offsite and those currently stored onsite and awaiting treatment or disposal.

Table 1-1. GWCTS Operations Summary (July through September 2024) -DRAFT

Tyco Fire Products LP, Marinette, Wisconsin

| Item Description | Beginning of 3rd Quarter 2024 | End of 3rd Quarter 2024 | Estimated Gallons, 3rd Quarter 2024 | Average Rate* (gallons per minute) | Comments |
|---|-------------------------------|-------------------------|-------------------------------------|------------------------------------|---|
| Total GW Extracted | - | - | 1,109,556 | 8.4 | Total GW extracted from the site at all extraction wells in all areas |
| PDP Total | - | - | 282,253 | 2.1 | Some PDP GW was treated at the GWCTS and the remainder disposed of offsite |
| SV Total | - | - | 148,983 | 1.1 | |
| SV - Totalizer HW-2-2 | 438,569 | 438,569 | 0 | 0.0 | |
| SV - Totalizer HW-2-1 | 534,067 | 578,492 | 44,424 | 0.3 | |
| SV - Totalizer HW-1-2 | 589,319 | 687,168 | 97,849 | 0.7 | |
| SV - Totalizer HW-1-1 | 521,519 | 528,229 | 6,709 | 0.1 | |
| 8SS Total | - | - | 133,271 | 1.0 | |
| 8SS - Totalizer Well #9 | 785,185 | 821,286 | 36,101 | 0.3 | |
| 8SS - Totalizer Well #8 | 675,798 | 772,967 | 97,169 | 0.7 | |
| Totalizer FD-1 in MP | 89,291 | 110,441 | 21,150 | 0.2 | Some French drain GW was treated at the GWCTS and the remainder disposed of offsite |
| WA and MP Total | - | - | 806,152 | 6.1 | All treated by GWCTS |
| WA - Totalizer EW-1 | 8,669 | 70,155 | 61,486 | 0.5 | |
| MP - Totalizer EW-4 | 0 | 0 | 0 | 0.0 | |
| MP - Totalizer EW-5 | 208,982 | 344,715 | 135,733 | 1.0 | |
| MP - Totalizer EW-6 | 326,674 | 581,410 | 254,736 | 1.9 | |
| MP - Totalizer EW-7 | 524,288 | 878,485 | 354,197 | 2.7 | |
| Additional Water Collected (from Non-GWCTS Sources) | - | - | 0 | - | No additional water was collected and disposed of offsite during the reporting period |
| Remaining Water Stored in Frac Tanks Onsite | 0 | 0 | 0 | - | No water remained stored in frac tanks at the end of the reporting period |
| GWCTS Operations | - | - | - | - | |
| Totalizer GWCTS Influent | 3,528,620 | 4,488,750 | 960,130 | 7.2 | Consists of WA and MP GW, and component of PDP and FD-1 GW |
| GWCTS Effluent | 2,378,810 | 3,172,315 | 793,505 | 6.0 | |
| GWCTS Reject Water | 446,665 | 595,410 | 148,745 | 1.1 | Water is disposed of offsite |
| Outfall OF004 Discharge | 13,191,405 | 15,983,300 | 2,791,895 | 21.1 | Combined GWCTS effluent and facility wastewater effluent discharged to river |
| Total Water Disposed of Offsite (based on totalizer values) | - | - | 298,171 | - | Consists of PDP and FD-1 GW that was not treated and reject water – Water was disposed of at the Waste Management Vickery Deepwell Hazardous Waste disposal facility in Vickery, Ohio |

GWCTS = groundwater collection and treatment system
 PDP = pump down program
 MP = Main Plant
 WA = Wetlands Area
 GW = groundwater
 SV = former Salt Vault
 8SS = former 8th Street Slip
 *Pumping averages are calculated as if the pump or system were operating 24-hours a day, 7-days a week

Attachment 2
Discharge Monitoring Reports for the Groundwater
Collection and Treatment System and
Outfall OF004

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: TYCO FIRE PRODUCTS LP
Contact Address: □□
□□, □□
Facility Contact: , □□
Phone Number: □□
Reporting Period: 06/01/2024 - 06/30/2024
Form Due Date: 07/21/2024
Permit Number: 0001040

| | |
|-----------------|---------------------------|
| Date Received: | |
| DOC: | 546001 |
| FIN: | 7245 |
| FID: | 438039470 |
| Region: | Northeast Region |
| Permit Drafter: | Laura K Rodriguez Alvarez |
| Reviewer: | Laura A Gerold |
| Office: | Green Bay |

Sample Point(s) active?

- No - 703 sample point (Menominee River Intake)
- Yes - 101 sample point (Metal Finishing Effluent)
- Yes - 704 sample point (GWCTS Influent)
- Yes - 107 sample point (Mercury Field Blank Results)
- Yes - 004 sample point (Combined Process WW & GW)
- Yes - 108 sample point (GWCTS Effluent)

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: TYCO FIRE PRODUCTS LP
 Contact Address: □□ □□ , □□
 Facility Contact: , □□
 Phone Number: □□
 Reporting Period: 06/01/2024 - 06/30/2024
 Form Due Date: 07/21/2024
 Permit Number: 0001040

Date Received:
 DOC: 546001
 FIN: 7245
 FID: 438039470
 Region: Northeast Region
 Permit Drafter: Laura K Rodriguez Alvarez
 Reviewer: Laura A Gerold
 Office: Green Bay

| Sample Point | 101 | 101 | 101 | 101 | 101 |
|----------------|--------------------------|--------------------------|--------------------------|----------------------------------|--|
| Description | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent |
| Parameter | 211 | 373 | 374 | 379 | 376 |
| Description | Flow Rate | pH (Maximum) | pH (Minimum) | pH Total Exceedance Time Minutes | pH Exceedances Greater Than 60 Minutes |
| Units | MGD | su | su | minutes | Number |
| Sample Type | CONTINUOUS | CONTINUOUS | CONTINUOUS | CONTINUOUS | CONTINUOUS |
| Frequency | DAILY | DAILY | DAILY | DAILY | DAILY |
| Sample Results | Day 1 | 0.002898 | 8.2 | 7.0 | |
| | 2 | 0 | | | |
| | 3 | 0.016665 | 8.2 | 7.6 | |
| | 4 | 0.032459 | 8.0 | 7.3 | |
| | 5 | 0.032514 | 8.0 | 6.7 | |
| | 6 | 0.031840 | 7.6 | 6.7 | |
| | 7 | 0.030369 | 8.0 | 7.1 | |
| | 8 | 0.007757 | 8.1 | 7.7 | |
| | 9 | 0 | | | |
| | 10 | 0.030016 | 8.5 | 6.8 | |
| | 11 | 0.036468 | 8.5 | 7.4 | |
| | 12 | 0.037051 | 8.2 | 7.2 | |
| | 13 | 0.028181 | 8.2 | 7.2 | |
| | 14 | 0.002883 | 7.5 | 6.8 | |
| | 15 | 0.003294 | 8.4 | 6.9 | |
| | 16 | 0 | | | |
| | 17 | 0.024697 | 8.0 | 7.4 | |
| | 18 | 0.025433 | 8.4 | 7.1 | |
| | 19 | 0.028209 | 8.0 | 7.1 | |
| | 20 | 0.025341 | 8.2 | 7.2 | |
| | 21 | 0.015637 | 8.4 | 7.4 | |
| | 22 | 0.002850 | 8.4 | 6.6 | |
| | 23 | 0 | | | |
| | 24 | 0.020084 | 8.0 | 7.5 | |
| | 25 | 0.031499 | 8.1 | 7.5 | |
| | 26 | 0.036585 | 8.1 | 7.1 | |
| | 27 | 0.029777 | 8.0 | 6.6 | |
| | 28 | 0.013856 | 7.9 | 6.8 | |
| | 29 | 0 | | | |
| | 30 | 0 | | | |
| | 31 | | | | |

| | | | | | | | | | |
|---------------------------|--------------------------|--------------------------|--|--------------------------|---|--------------------------|---|----------------------------------|---|
| | Sample Point | 101 | | 101 | | 101 | | 101 | |
| | Description | Metal Finishing Effluent | | Metal Finishing Effluent | | Metal Finishing Effluent | | Metal Finishing Effluent | |
| | Parameter | 211 | | 373 | | 374 | | 379 | |
| | Description | Flow Rate | | pH (Maximum) | | pH (Minimum) | | pH Total Exceedance Time Minutes | |
| | Units | MGD | | su | | su | | minutes | |
| Summary Values | Monthly Avg | 0.0182121 | | 8.120833333 | | 7.1125 | | | |
| | Monthly Total | | | | | | | | |
| | Daily Max | 0.037051 | | 8.5 | | 7.7 | | | |
| | Daily Min | 0 | | 7.5 | | 6.6 | | | |
| Limit(s) in Effect | Monthly Avg | | | | | | | | |
| | Monthly Total | | | | | 446 | 0 | 0 | 0 |
| | Daily Max | | | 9 | 0 | | | | |
| | Daily Min | | | | | 6 | 0 | | |
| QA/QC Information | LOD | | | | | | | | |
| | LOQ | | | | | | | | |
| | QC Exceedance | N | | N | | N | | N | |
| | Lab Certification | | | | | | | | |

| | | | | | | |
|-----------------------|---------------------|--------------------------|--------------------------|----------------------------|---------------------------|---------------------------|
| | Sample Point | 101 | 101 | 101 | 101 | 101 |
| | Description | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent |
| | Parameter | 457 | 651 | 87 | 147 | 315 |
| | Description | Suspended Solids, Total | Oil & Grease (Hexane) | Cadmium, Total Recoverable | Copper, Total Recoverable | Nickel, Total Recoverable |
| | Units | mg/L | mg/L | ug/L | ug/L | ug/L |
| | Sample Type | 24 HR FLOW PROP | GRAB | 24 HR FLOW PROP | 24 HR FLOW PROP | 24 HR FLOW PROP |
| | Frequency | 3/WEEK | MONTHLY | MONTHLY | MONTHLY | MONTHLY |
| Sample Results | Day 1 | | | | | |
| | 2 | | | | | |
| | 3 | 4.2 | | | | |
| | 4 | <1.9 | | | | |
| | 5 | 2.0 | | <0.49 | 4.3 | 4.9 |
| | 6 | | | | | |
| | 7 | | | | | |
| | 8 | | | | | |
| | 9 | | | | | |
| | 10 | 3.2 | <1.3 | | | |
| | 11 | 3.0 | | | | |
| | 12 | 2.6 | | | | |
| | 13 | | | | | |
| | 14 | | | | | |
| | 15 | | | | | |
| | 16 | | | | | |
| | 17 | 2.8 | | | | |
| | 18 | 2.2 | | | | |
| | 19 | 3.2 | | | | |
| | 20 | | | | | |
| | 21 | | | | | |
| | 22 | | | | | |
| | 23 | | | | | |
| | 24 | 4.2 | | | | |
| | 25 | 3.6 | | | | |
| | 26 | <1.9 | | | | |
| | 27 | | | | | |
| | 28 | | | | | |
| | 29 | | | | | |
| | 30 | | | | | |
| | 31 | | | | | |

| | | | | | | | | | | | |
|---------------------------|--------------------------|--------------------------|---|--------------------------|---|----------------------------|---|---------------------------|---|---------------------------|---|
| | Sample Point | 101 | | 101 | | 101 | | 101 | | 101 | |
| | Description | Metal Finishing Effluent | | Metal Finishing Effluent | | Metal Finishing Effluent | | Metal Finishing Effluent | | Metal Finishing Effluent | |
| | Parameter | 457 | | 651 | | 87 | | 147 | | 315 | |
| | Description | Suspended Solids, Total | | Oil & Grease (Hexane) | | Cadmium, Total Recoverable | | Copper, Total Recoverable | | Nickel, Total Recoverable | |
| | Units | mg/L | | mg/L | | ug/L | | ug/L | | ug/L | |
| Summary Values | Monthly Avg | 2.583333333 | | 0 | | 0 | | 4.3 | | 4.9 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 4.2 | | <1.3 | | <0.49 | | 4.3 | | 4.9 | |
| | Daily Min | <1.9 | | <1.3 | | <0.49 | | 4.3 | | 4.9 | |
| Limit(s) in Effect | Monthly Avg | 31 | 0 | 26 | 0 | 260 | 0 | 2070 | 0 | 2380 | 0 |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 60 | 0 | 52 | 0 | 690 | 0 | 3380 | 0 | 3980 | 0 |
| | Daily Min | | | | | | | | | | |
| QA/QC Information | LOD | | | 1.3 | | 0.49 | | 1.7 | | 1.5 | |
| | LOQ | | | 4.9 | | 1 | | 5 | | 5 | |
| | QC Exceedance | N | | N | | N | | N | | N | |
| | Lab Certification | 999580010 | | 999580010 | | 999580010 | | 999580010 | | 999580010 | |

| | | | | | | |
|-----------------------|---------------------|--------------------------|--------------------------|----------------------------|----------------------------|----------------------------|
| | Sample Point | 101 | 101 | 101 | 101 | 101 |
| | Description | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent |
| | Parameter | 553 | 507 | 280 | 280 | 35 |
| | Description | Zinc, Total Recoverable | Total Toxic Organics | Mercury, Total Recoverable | Mercury, Total Recoverable | Arsenic, Total Recoverable |
| | Units | ug/L | ug/L | ng/L | mg/day | ug/L |
| | Sample Type | 24 HR FLOW PROP | 24 HR FLOW PROP | GRAB | CALCULATED | 24 HR FLOW PROP |
| | Frequency | MONTHLY | MONTHLY | MONTHLY | MONTHLY | MONTHLY |
| Sample Results | Day 1 | | | | | |
| | 2 | | | | | |
| | 3 | | | | | |
| | 4 | | | | | |
| | 5 | 60 | | | | <2.1 |
| | 6 | | | | | |
| | 7 | | | | | |
| | 8 | | | | | |
| | 9 | | | | | |
| | 10 | | | | | |
| | 11 | | | | | |
| | 12 | | | | | |
| | 13 | | | | | |
| | 14 | | | | | |
| | 15 | | | | | |
| | 16 | | | | | |
| | 17 | | | | | |
| | 18 | | | | | |
| | 19 | | | | | |
| | 20 | | | | | |
| | 21 | | | | | |
| | 22 | | | | | |
| | 23 | | | | | |
| | 24 | | | | | |
| | 25 | | | | | |
| | 26 | | | | 1.1 | 0.1525227 |
| | 27 | | | | | |
| | 28 | | | | | |
| | 29 | | | | | |
| | 30 | | | | | |
| | 31 | | | | | |

| | | | | | | | | | | | |
|---------------------------|--------------------------|--------------------------|---|--------------------------|--|----------------------------|--|----------------------------|--|----------------------------|--|
| | Sample Point | 101 | | 101 | | 101 | | 101 | | 101 | |
| | Description | Metal Finishing Effluent | | Metal Finishing Effluent | | Metal Finishing Effluent | | Metal Finishing Effluent | | Metal Finishing Effluent | |
| | Parameter | 553 | | 507 | | 280 | | 280 | | 35 | |
| | Description | Zinc, Total Recoverable | | Total Toxic Organics | | Mercury, Total Recoverable | | Mercury, Total Recoverable | | Arsenic, Total Recoverable | |
| | Units | ug/L | | ug/L | | ng/L | | mg/day | | ug/L | |
| Summary Values | Monthly Avg | 60 | | | | 1.1 | | 0.1525227 | | 0 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 60 | | | | 1.1 | | 0.1525227 | | <2.1 | |
| | Daily Min | 60 | | | | 1.1 | | 0.1525227 | | <2.1 | |
| Limit(s) in Effect | Monthly Avg | 1480 | 0 | | | | | | | | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 2610 | 0 | 2130 | | | | | | | |
| | Daily Min | | | | | | | | | | |
| QA/QC Information | LOD | 3.6 | | | | 0.2 | | | | 2.1 | |
| | LOQ | 10 | | | | 0.5 | | | | 5 | |
| | QC Exceedance | N | | N | | N | | N | | N | |
| | Lab Certification | 999580010 | | | | 999580010 | | | | 999580010 | |

| | | | | | | |
|-----------------------|---------------------|----------------------------|----------------|----------------------------|-------------------------|----------------------------|
| | Sample Point | 101 | 704 | 704 | 704 | 704 |
| | Description | Metal Finishing Effluent | GWCTS Influent | GWCTS Influent | GWCTS Influent | GWCTS Influent |
| | Parameter | 35 | 211 | 35 | 457 | 280 |
| | Description | Arsenic, Total Recoverable | Flow Rate | Arsenic, Total Recoverable | Suspended Solids, Total | Mercury, Total Recoverable |
| | Units | lbs/day | gpd | ug/L | mg/L | ng/L |
| | Sample Type | CALCULATED | CONTINUOUS | 24 HR FLOW PROP | 24 HR FLOW PROP | GRAB |
| | Frequency | MONTHLY | DAILY | WEEKLY | WEEKLY | MONTHLY |
| Sample Results | Day 1 | | 1545 | | | |
| | 2 | | 0 | | | |
| | 3 | | 11605 | | | |
| | 4 | | 9155 | 76000 | 900 | |
| | 5 | 0.000567 | 11850 | | | |
| | 6 | | 19110 | | | |
| | 7 | | 14515 | | | |
| | 8 | | 5 | | | |
| | 9 | | 5 | | | |
| | 10 | | 0 | 36000 | 110 | |
| | 11 | | 18100 | | | |
| | 12 | | 11340 | | | |
| | 13 | | 15265 | | | |
| | 14 | | 24775 | | | |
| | 15 | | 19085 | | | |
| | 16 | | 0 | | | |
| | 17 | | 0 | | | |
| | 18 | | 14510 | | | |
| | 19 | | 5955 | | | |
| | 20 | | 11410 | 20000 | 100 | |
| | 21 | | 17910 | | | |
| | 22 | | 0 | | | |
| | 23 | | 0 | | | |
| | 24 | | 14570 | | | |
| | 25 | | 22845 | 3100 | 22 | |
| | 26 | | 15445 | | | 2.2 |
| | 27 | | 10650 | | | |
| | 28 | | 11515 | | | |
| | 29 | | 10 | | | |
| | 30 | | 255 | | | |
| | 31 | | | | | |

| | | | | | | |
|---------------------------|--------------------------|----------------------------|----------------|----------------------------|-------------------------|----------------------------|
| | Sample Point | 101 | 704 | 704 | 704 | 704 |
| | Description | Metal Finishing Effluent | GWCTS Influent | GWCTS Influent | GWCTS Influent | GWCTS Influent |
| | Parameter | 35 | 211 | 35 | 457 | 280 |
| | Description | Arsenic, Total Recoverable | Flow Rate | Arsenic, Total Recoverable | Suspended Solids, Total | Mercury, Total Recoverable |
| | Units | lbs/day | gpd | ug/L | mg/L | ng/L |
| Summary Values | Monthly Avg | 0.000567 | 9381 | 33775 | 283 | 2.2 |
| | Monthly Total | | | | | |
| | Daily Max | 0.000567 | 24775 | 76000 | 900 | 2.2 |
| | Daily Min | 0.000567 | 0 | 3100 | 22 | 2.2 |
| Limit(s) in Effect | Monthly Avg | | | | | |
| | Monthly Total | | | | | |
| | Daily Max | | | | | |
| | Daily Min | | | | | |
| QA/QC Information | LOD | | | 420 | | 0.2 |
| | LOQ | | | 1000 | | 0.5 |
| | QC Exceedance | N | N | N | N | N |
| | Lab Certification | | | 999580010 | 999580010 | 999580010 |

| | | | | | | | |
|-----------------------|---------------------|-----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-----|
| | Sample Point | 107 | 004 | 004 | 004 | 004 | |
| | Description | Mercury Field Blank Results | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | |
| | Parameter | 280 | 211 | 373 | 374 | 112 | |
| | Description | Mercury, Total Recoverable | Flow Rate | pH (Maximum) | pH (Minimum) | Chlorine, Total Residual | |
| | Units | ng/L | MGD | su | su | ug/L | |
| | Sample Type | BLANK | CONTINUOUS | CONTINUOUS | CONTINUOUS | GRAB | |
| | Frequency | MONTHLY | DAILY | DAILY | DAILY | MONTHLY | |
| Sample Results | Day 1 | | | | | | |
| | 2 | | | | | | |
| | 3 | | | | | | |
| | 4 | | | | | | |
| | 5 | | | | | | |
| | 6 | | | | | | |
| | 7 | | | | | | |
| | 8 | | | | | | |
| | 9 | | | | | | |
| | 10 | | | | | | |
| | 11 | | | | | | |
| | 12 | | | | | | |
| | 13 | | | | | | |
| | 14 | | | | | | |
| | 15 | | | | | | |
| | 16 | | | | | | |
| | 17 | | | | | | |
| | 18 | | | | | | |
| | 19 | | | | | | |
| | 20 | | | | | | |
| | 21 | | | | | | |
| | 22 | | | | | | |
| | 23 | | | | 6.5 | 6.2 | |
| | 24 | | | 0.045415 | 7.3 | 6.1 | |
| | 25 | | | 0.069310 | 6.7 | 6.1 | <10 |
| | 26 | | <0.20 | 0.065130 | 7.2 | 6.2 | |
| | 27 | | | 0.051635 | 7.0 | 6.5 | |
| | 28 | | | 0.028550 | 6.6 | 6.2 | |
| | 29 | | | 0 | 6.6 | 6.2 | |
| | 30 | | | 0.003830 | 6.9 | 6.0 | |
| | 31 | | | | | | |

| | | | | | | |
|---------------------------|--------------------------|-----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | Sample Point | 107 | 004 | 004 | 004 | 004 |
| | Description | Mercury Field Blank Results | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW |
| | Parameter | 280 | 211 | 373 | 374 | 112 |
| | Description | Mercury, Total Recoverable | Flow Rate | pH (Maximum) | pH (Minimum) | Chlorine, Total Residual |
| | Units | ng/L | MGD | su | su | ug/L |
| Summary Values | Monthly Avg | 0 | 0.037695714 | 6.85 | 6.1875 | 0 |
| | Monthly Total | | | | | |
| | Daily Max | <0.2 | 0.06931 | 7.3 | 6.5 | <10 |
| | Daily Min | <0.2 | 0 | 6.5 | 6 | <10 |
| Limit(s) in Effect | Monthly Avg | | | | | 38 0 |
| | Monthly Total | | | | | |
| | Daily Max | | | 9 0 | | 38 0 |
| | Daily Min | | | | 6 0 | |
| QA/QC Information | LOD | 0.2 | | | | 30 |
| | LOQ | 0.5 | | | | 100 |
| | QC Exceedance | N | N | N | N | N |
| | Lab Certification | 999580010 | | | | |

| | | | | | | |
|-----------------------|---------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | Sample Point | 004 | 004 | 004 | 004 | 004 |
| | Description | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW |
| | Parameter | 35 | 35 | 280 | 280 | 87 |
| | Description | Arsenic, Total Recoverable | Arsenic, Total Recoverable | Mercury, Total Recoverable | Mercury, Total Recoverable | Cadmium, Total Recoverable |
| | Units | ug/L | lbs/day | ng/L | mg/day | ug/L |
| | Sample Type | 24 HR FLOW PROP | CALCULATED | GRAB | CALCULATED | 24 HR FLOW PROP |
| | Frequency | MONTHLY | MONTHLY | MONTHLY | MONTHLY | MONTHLY |
| Sample Results | Day 1 | | | | | |
| | 2 | | | | | |
| | 3 | | | | | |
| | 4 | | | | | |
| | 5 | | | | | |
| | 6 | | | | | |
| | 7 | | | | | |
| | 8 | | | | | |
| | 9 | | | | | |
| | 10 | <2.1 | 0.000006 | | | <0.49 |
| | 11 | | | | | |
| | 12 | | | | | |
| | 13 | | | | | |
| | 14 | | | | | |
| | 15 | | | | | |
| | 16 | | | | | |
| | 17 | | | | | |
| | 18 | | | | | |
| | 19 | | | | | |
| | 20 | | | | | |
| | 21 | | | | | |
| | 22 | | | | | |
| | 23 | | | | | |
| | 24 | | | | | |
| | 25 | | | | | |
| | 26 | | | 0.52 | 0.12835836 | |
| | 27 | | | | | |
| | 28 | | | | | |
| | 29 | | | | | |
| | 30 | | | | | |
| | 31 | | | | | |

| | | | | | | | | | | | |
|---------------------------|--------------------------|-------------------------------|---|-------------------------------|---|-------------------------------|---|-------------------------------|----|-------------------------------|--|
| | Sample Point | 004 | | 004 | | 004 | | 004 | | 004 | |
| | Description | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | |
| | Parameter | 35 | | 35 | | 280 | | 280 | | 87 | |
| | Description | Arsenic, Total Recoverable | | Arsenic, Total Recoverable | | Mercury, Total Recoverable | | Mercury, Total Recoverable | | Cadmium, Total Recoverable | |
| | Units | ug/L | | lbs/day | | ng/L | | mg/day | | ug/L | |
| Summary Values | Monthly Avg | 0 | | 6E-06 | | 0.52 | | 0.12835836 | | 0 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | <2.1 | | 6E-06 | | 0.52 | | 0.12835836 | | <0.49 | |
| | Daily Min | <2.1 | | 6E-06 | | 0.52 | | 0.12835836 | | <0.49 | |
| Limit(s) in Effect | Monthly Avg | | | | | | | | 57 | 0 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 194 | 0 | 0.22 | 0 | 18 | 0 | | 57 | 0 | |
| | Daily Min | | | | | | | | | | |
| QA/QC Information | LOD | 2.1 | | | | 0.2 | | | | 0.49 | |
| | LOQ | 5 | | | | 0.5 | | | | 1 | |
| | QC Exceedance | N | | N | | N | | N | | N | |
| | Lab Certification | 999580010 | | | | 999580010 | | | | 999580010 | |

| | | | | | | |
|-----------------------|---------------------|-------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| | Sample Point | 004 | 004 | 004 | 004 | 004 |
| | Description | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW |
| | Parameter | 87 | 147 | 147 | 315 | 315 |
| | Description | Cadmium, Total Recoverable | Copper, Total Recoverable | Copper, Total Recoverable | Nickel, Total Recoverable | Nickel, Total Recoverable |
| | Units | lbs/day | ug/L | lbs/day | ug/L | lbs/day |
| | Sample Type | CALCULATED | 24 HR FLOW PROP | CALCULATED | 24 HR FLOW PROP | CALCULATED |
| | Frequency | MONTHLY | MONTHLY | MONTHLY | MONTHLY | MONTHLY |
| Sample Results | Day 1 | | | | | |
| | 2 | | | | | |
| | 3 | | | | | |
| | 4 | | | | | |
| | 5 | | | | | |
| | 6 | | | | | |
| | 7 | | | | | |
| | 8 | | | | | |
| | 9 | | | | | |
| | 10 | 0.00000147 | 3.6 | 0.0000108 | <1.5 | 0.0000045 |
| | 11 | | | | | |
| | 12 | | | | | |
| | 13 | | | | | |
| | 14 | | | | | |
| | 15 | | | | | |
| | 16 | | | | | |
| | 17 | | | | | |
| | 18 | | | | | |
| | 19 | | | | | |
| | 20 | | | | | |
| | 21 | | | | | |
| | 22 | | | | | |
| | 23 | | | | | |
| | 24 | | | | | |
| | 25 | | | | | |
| | 26 | | | | | |
| | 27 | | | | | |
| | 28 | | | | | |
| | 29 | | | | | |
| | 30 | | | | | |
| | 31 | | | | | |

| | | | | | | | | | | | |
|---------------------------|--------------------------|-------------------------------|---|------------------------------|---|------------------------------|---|------------------------------|---|------------------------------|---|
| | Sample Point | 004 | | 004 | | 004 | | 004 | | 004 | |
| | Description | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | |
| | Parameter | 87 | | 147 | | 147 | | 315 | | 315 | |
| | Description | Cadmium, Total Recoverable | | Copper, Total Recoverable | | Copper, Total Recoverable | | Nickel, Total Recoverable | | Nickel, Total Recoverable | |
| | Units | lbs/day | | ug/L | | lbs/day | | ug/L | | lbs/day | |
| Summary Values | Monthly Avg | 1.47E-06 | | 3.6 | | 1.08E-05 | | 0 | | 4.5E-06 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 1.47E-06 | | 3.6 | | 1.08E-05 | | <1.5 | | 4.5E-06 | |
| | Daily Min | 1.47E-06 | | 3.6 | | 1.08E-05 | | <1.5 | | 4.5E-06 | |
| Limit(s) in Effect | Monthly Avg | | | 69 | 0 | | | 2000 | 0 | | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 0.23 | 0 | 69 | 0 | 0.28 | 0 | 2000 | 0 | 8.1 | 0 |
| | Daily Min | | | | | | | | | | |
| QA/QC Information | LOD | | | 1.7 | | | | 1.5 | | | |
| | LOQ | | | 5 | | | | 5 | | | |
| | QC Exceedance | N | | N | | N | | N | | N | |
| | Lab Certification | | | 999580010 | | | | 999580010 | | | |

| | | | | | | |
|-----------------------|---------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| | Sample Point | 004 | 004 | 004 | 004 | 004 |
| | Description | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW |
| | Parameter | 553 | 553 | 152 | 152 | 231 |
| | Description | Zinc, Total Recoverable | Zinc, Total Recoverable | Cyanide, Amenable | Cyanide, Amenable | Hardness, Total as CaCO3 |
| | Units | ug/L | lbs/day | ug/L | lbs/day | mg/L |
| | Sample Type | 24 HR FLOW PROP | CALCULATED | 24 HR FLOW PROP | CALCULATED | 24 HR FLOW PROP |
| | Frequency | MONTHLY | MONTHLY | MONTHLY | MONTHLY | MONTHLY |
| Sample Results | Day 1 | | | | | |
| | 2 | | | | | |
| | 3 | | | | | |
| | 4 | | | | | |
| | 5 | | | | | |
| | 6 | | | | | |
| | 7 | | | | | |
| | 8 | | | | | |
| | 9 | | | | | |
| | 10 | 26 | 0.000078 | 5.9 | 0.0000177 | 390 |
| | 11 | | | | | |
| | 12 | | | | | |
| | 13 | | | | | |
| | 14 | | | | | |
| | 15 | | | | | |
| | 16 | | | | | |
| | 17 | | | | | |
| | 18 | | | | | |
| | 19 | | | | | |
| | 20 | | | | | |
| | 21 | | | | | |
| | 22 | | | | | |
| | 23 | | | | | |
| | 24 | | | | | |
| | 25 | | | | | |
| | 26 | | | | | |
| | 27 | | | | | |
| | 28 | | | | | |
| | 29 | | | | | |
| | 30 | | | | | |
| | 31 | | | | | |

| | | | | | | | | | | | |
|---------------------------|--------------------------|-----------------------------|---|-----------------------------|---|-----------------------------|---|-----------------------------|---|-----------------------------|--|
| | Sample Point | 004 | | 004 | | 004 | | 004 | | 004 | |
| | Description | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | |
| | Parameter | 553 | | 553 | | 152 | | 152 | | 231 | |
| | Description | Zinc, Total Recoverable | | Zinc, Total Recoverable | | Cyanide, Amenable | | Cyanide, Amenable | | Hardness, Total as CaCO3 | |
| | Units | ug/L | | lbs/day | | ug/L | | lbs/day | | mg/L | |
| Summary Values | Monthly Avg | 26 | | 7.8E-05 | | 5.9 | | 1.77E-05 | | 390 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 26 | | 7.8E-05 | | 5.9 | | 1.77E-05 | | 390 | |
| | Daily Min | 26 | | 7.8E-05 | | 5.9 | | 1.77E-05 | | 390 | |
| Limit(s) in Effect | Monthly Avg | 520 | 0 | | | 92 | 0 | | | | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 520 | 0 | 2.1 | 0 | 92 | 0 | 0.37 | 0 | | |
| | Daily Min | | | | | | | | | | |
| QA/QC Information | LOD | 3.6 | | | | 3.6 | | | | | |
| | LOQ | 10 | | | | 5 | | | | | |
| | QC Exceedance | N | | N | | N | | N | | N | |
| | Lab Certification | 999580010 | | | | 999580010 | | | | 999580010 | |

| | | | | | | |
|-----------------------|---------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|----------------|
| | Sample Point | 004 | 004 | 004 | 004 | 108 |
| | Description | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | GWCTS Effluent |
| | Parameter | 480 | 1352 | 1353 | 1353 | 211 |
| | Description | Temperature Maximum | PFOA | PFOS | PFOS | Flow Rate |
| | Units | degF | ng/L | ng/L | mg/day | MGD |
| | Sample Type | MEASURE | 24 HR FLOW PROP | 24 HR FLOW PROP | CALCULATED | CONTINUOUS |
| | Frequency | WEEKLY | MONTHLY | MONTHLY | MONTHLY | DAILY |
| Sample Results | Day 1 | 81 | | | | 0 |
| | 2 | 84 | | | | 0 |
| | 3 | 82 | | | | 0.008809 |
| | 4 | 82 | | | | 0.009558 |
| | 5 | 82 | | | | 0.009818 |
| | 6 | 78 | | | | 0.013833 |
| | 7 | 79 | | | | 0.013511 |
| | 8 | 81 | | | | 0 |
| | 9 | 81 | | | | 0 |
| | 10 | 82 | 2.0 | 1.2 | 0.001614 | 0 |
| | 11 | 80 | | | | 0.013406 |
| | 12 | 76 | | | | 0.008855 |
| | 13 | 84 | | | | 0.012976 |
| | 14 | 85 | | | | 0.018856 |
| | 15 | 81 | | | | 0.015079 |
| | 16 | 84 | | | | 0 |
| | 17 | 85 | | | | 0 |
| | 18 | 87 | | | | 0.011330 |
| | 19 | 85 | | | | 0.006393 |
| | 20 | 85 | | | | 0.008476 |
| | 21 | 83 | | | | 0.013887 |
| | 22 | | | | | 0 |
| | 23 | 87 | | | | 0 |
| | 24 | 85 | | | | 0.012005 |
| | 25 | 88 | | | | 0.019430 |
| | 26 | 84 | | | | 0.008825 |
| | 27 | 81 | | | | 0.009885 |
| | 28 | 81 | | | | 0.007054 |
| | 29 | 87 | | | | 0 |
| | 30 | 78 | | | | 0.000822 |
| | 31 | | | | | |

| | | | | | | | | | | | |
|---------------------------|--------------------------|-----------------------------|--|-----------------------------|--|-----------------------------|---|-----------------------------|---|----------------|--|
| | Sample Point | 004 | | 004 | | 004 | | 004 | | 108 | |
| | Description | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | GWCTS Effluent | |
| | Parameter | 480 | | 1352 | | 1353 | | 1353 | | 211 | |
| | Description | Temperature Maximum | | PFOA | | PFOS | | PFOS | | Flow Rate | |
| | Units | degF | | ng/L | | ng/L | | mg/day | | MGD | |
| Summary Values | Monthly Avg | 82.689655172 | | 2 | | 1.2 | | 0.001614 | | 0.007426933 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 88 | | 2 | | 1.2 | | 0.001614 | | 0.01943 | |
| | Daily Min | 76 | | 2 | | 1.2 | | 0.001614 | | 0 | |
| Limit(s) in Effect | Monthly Avg | | | | | 11 | 0 | 2.1 | 0 | | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | | | | | 11 | 0 | | | | |
| | Daily Min | | | | | | | | | | |
| QA/QC Information | LOD | | | 0.76 | | 0.48 | | | | | |
| | LOQ | | | 1.8 | | 1.8 | | | | | |
| | QC Exceedance | N | | N | | N | | N | | N | |
| | Lab Certification | | | 998204680 | | 998204680 | | | | | |

| | | | | | | |
|-----------------------|---------------------|-------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| | Sample Point | 108 | 108 | 108 | 108 | 108 |
| | Description | GWCTS Effluent | GWCTS Effluent | GWCTS Effluent | GWCTS Effluent | GWCTS Effluent |
| | Parameter | 457 | 35 | 35 | 280 | 280 |
| | Description | Suspended Solids, Total | Arsenic, Total Recoverable | Arsenic, Total Recoverable | Mercury, Total Recoverable | Mercury, Total Recoverable |
| | Units | mg/L | ug/L | lbs/day | ng/L | mg/day |
| | Sample Type | 24 HR FLOW PROP | 24 HR FLOW PROP | CALCULATED | 24 HR FLOW PROP | CALCULATED |
| | Frequency | WEEKLY | WEEKLY | WEEKLY | MONTHLY | MONTHLY |
| Sample Results | Day 1 | | | | | |
| | 2 | | | | | |
| | 3 | | | | | |
| | 4 | <1.9 | 3.1 | 0.000248 | | |
| | 5 | | | | | |
| | 6 | | | | | |
| | 7 | | | | | |
| | 8 | | | | | |
| | 9 | | | | | |
| | 10 | <1.9 | <2.1 | | | |
| | 11 | | | | | |
| | 12 | | | | | |
| | 13 | | | | | |
| | 14 | | | | | |
| | 15 | | | | | |
| | 16 | | | | | |
| | 17 | | | | | |
| | 18 | | | | | |
| | 19 | | | | | |
| | 20 | <1.9 | <2.1 | | | |
| | 21 | | | | | |
| | 22 | | | | | |
| | 23 | | | | | |
| | 24 | | | | | |
| | 25 | <1.9 | <2.1 | 0.000336 | | |
| | 26 | | | | 0.28 | 0.00936516 |
| | 27 | | | | | |
| | 28 | | | | | |
| | 29 | | | | | |
| | 30 | | | | | |
| | 31 | | | | | |

| | | | | | | | | | | | |
|---------------------------|--------------------------|-------------------------|--|----------------------------|---|----------------------------|---|----------------------------|---|----------------------------|--|
| | Sample Point | 108 | | 108 | | 108 | | 108 | | 108 | |
| | Description | GWCTS Effluent | | GWCTS Effluent | | GWCTS Effluent | | GWCTS Effluent | | GWCTS Effluent | |
| | Parameter | 457 | | 35 | | 35 | | 280 | | 280 | |
| | Description | Suspended Solids, Total | | Arsenic, Total Recoverable | | Arsenic, Total Recoverable | | Mercury, Total Recoverable | | Mercury, Total Recoverable | |
| | Units | mg/L | | ug/L | | lbs/day | | ng/L | | mg/day | |
| Summary Values | Monthly Avg | 0 | | 0.775 | | 0.000292 | | 0.28 | | 0.00936516 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | <1.9 | | 3.1 | | 0.000336 | | 0.28 | | 0.00936516 | |
| | Daily Min | <1.9 | | <2.1 | | 0.000248 | | 0.28 | | 0.00936516 | |
| Limit(s) in Effect | Monthly Avg | | | | | | | | | | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | | | 500 | 0 | 0.17 | 0 | 24 | 0 | | |
| | Daily Min | | | | | | | | | | |
| QA/QC Information | LOD | | | 2.1 | | | | 0.2 | | | |
| | LOQ | | | 5 | | | | 0.5 | | | |
| | QC Exceedance | N | | N | | N | | N | | N | |
| | Lab Certification | 999580010 | | 999580010 | | | | 999580010 | | | |

| | | | |
|-----------------------|---------------------|-----------------|-----------------|
| | Sample Point | 108 | 108 |
| | Description | GWCTS Effluent | GWCTS Effluent |
| | Parameter | 1352 | 1353 |
| | Description | PFOA | PFOS |
| | Units | ng/L | ng/L |
| | Sample Type | 24 HR FLOW PROP | 24 HR FLOW PROP |
| | Frequency | MONTHLY | MONTHLY |
| Sample Results | Day 1 | | |
| | 2 | | |
| | 3 | | |
| | 4 | | |
| | 5 | | |
| | 6 | | |
| | 7 | | |
| | 8 | | |
| | 9 | | |
| | 10 | | |
| | 11 | | |
| | 12 | | |
| | 13 | | |
| | 14 | | |
| | 15 | | |
| | 16 | | |
| | 17 | | |
| | 18 | | |
| | 19 | | |
| | 20 | <0.73 | <0.46 |
| | 21 | | |
| | 22 | | |
| | 23 | | |
| | 24 | | |
| | 25 | | |
| | 26 | | |
| | 27 | | |
| | 28 | | |
| | 29 | | |
| | 30 | | |
| | 31 | | |

| | | | |
|---------------------------|--------------------------|----------------|----------------|
| | Sample Point | 108 | 108 |
| | Description | GWCTS Effluent | GWCTS Effluent |
| | Parameter | 1352 | 1353 |
| | Description | PFOA | PFOS |
| | Units | ng/L | ng/L |
| Summary Values | Monthly Avg | 0 | 0 |
| | Monthly Total | | |
| | Daily Max | <0.73 | <0.46 |
| | Daily Min | <0.73 | <0.46 |
| Limit(s) in Effect | Monthly Avg | | |
| | Monthly Total | | |
| | Daily Max | | |
| | Daily Min | | |
| QA/QC Information | LOD | 0.73 | 0.46 |
| | LOQ | 1.7 | 1.7 |
| | QC Exceedance | N | N |
| | Lab Certification | 998204680 | 998204680 |

Footnotes (DNR Use Only; Instructions for completing this form that are unique for your facility may be displayed here.)

General Remarks

Laboratory Quality Control Comments

Submitted by Anne Fleury(afleury16) on 7/18/2024 10:34:44 AM

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: TYCO FIRE PRODUCTS LP
Contact Address: □□
□□, □□
Facility Contact: , □□
Phone Number: □□
Reporting Period: 07/01/2024 - 07/31/2024
Form Due Date: 08/21/2024
Permit Number: 0001040

| | |
|-----------------|---------------------------|
| Date Received: | |
| DOC: | 550627 |
| FIN: | 7245 |
| FID: | 438039470 |
| Region: | Northeast Region |
| Permit Drafter: | Laura K Rodriguez Alvarez |
| Reviewer: | Laura A Gerold |
| Office: | Green Bay |

Sample Point(s) active?

- No - 703 sample point (Menominee River Intake)
- Yes - 101 sample point (Metal Finishing Effluent)
- Yes - 704 sample point (GWCTS Influent)
- Yes - 107 sample point (Mercury Field Blank Results)
- Yes - 004 sample point (Combined Process WW & GW)
- Yes - 108 sample point (GWCTS Effluent)

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: TYCO FIRE PRODUCTS LP
 Contact Address: □□ □□ , □□
 Facility Contact: , □□
 Phone Number: □□
 Reporting Period: 07/01/2024 - 07/31/2024
 Form Due Date: 08/21/2024
 Permit Number: 0001040

Date Received:
 DOC: 550627
 FIN: 7245
 FID: 438039470
 Region: Northeast Region
 Permit Drafter: Laura K Rodriguez Alvarez
 Reviewer: Laura A Gerold
 Office: Green Bay

| Sample Point | 101 | 101 | 101 | 101 | 101 |
|----------------|--------------------------|--------------------------|--------------------------|----------------------------------|--|
| Description | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent |
| Parameter | 211 | 373 | 374 | 379 | 376 |
| Description | Flow Rate | pH (Maximum) | pH (Minimum) | pH Total Exceedance Time Minutes | pH Exceedances Greater Than 60 Minutes |
| Units | MGD | su | su | minutes | Number |
| Sample Type | CONTINUOUS | CONTINUOUS | CONTINUOUS | CONTINUOUS | CONTINUOUS |
| Frequency | DAILY | DAILY | DAILY | DAILY | DAILY |
| Sample Results | Day 1 | 0.027044 | 8.4 | 7.4 | |
| | 2 | 0.020133 | 8.4 | 6.8 | |
| | 3 | 0.014863 | 8.7 | 7.2 | |
| | 4 | 0 | | | |
| | 5 | 0 | | | |
| | 6 | 0 | | | |
| | 7 | 0.009793 | 8.1 | 7.7 | |
| | 8 | 0.027374 | 8.1 | 6.9 | |
| | 9 | 0.020693 | 7.8 | 6.6 | |
| | 10 | 0.017197 | 8.0 | 6.8 | |
| | 11 | 0.017380 | 8.0 | 6.9 | |
| | 12 | 0.007131 | 7.8 | 6.7 | |
| | 13 | 0.003242 | 8.0 | 7.1 | |
| | 14 | 0 | | | |
| | 15 | 0.022945 | 8.0 | 7.6 | |
| | 16 | 0.018849 | 7.8 | 7.0 | |
| | 17 | 0.014216 | 8.5 | 6.9 | |
| | 18 | 0.017583 | 8.0 | 6.5 | |
| | 19 | 0.062530 | 8.0 | 6.8 | |
| | 20 | 0.004065 | 8.0 | 6.9 | |
| | 21 | 0 | | | |
| | 22 | 0.016708 | 8.1 | 7.8 | |
| | 23 | 0.023320 | 7.9 | 7.1 | |
| | 24 | 0.021796 | 8.0 | 7.0 | |
| | 25 | 0.012687 | 8.0 | 7.2 | |
| | 26 | 0.008980 | 8.0 | 7.1 | |
| | 27 | 0.001684 | 8.0 | 7.0 | |
| | 28 | 0 | | | |
| | 29 | 0.020929 | 7.8 | 7.2 | |
| | 30 | 0.020407 | 8.3 | 6.8 | |
| | 31 | 0.016142 | 8.0 | 7.2 | |

| | Sample Point | 101 | | 101 | | 101 | | 101 | |
|---------------------------|-------------------|--------------------------|--|--------------------------|---|--------------------------|-----|----------------------------------|---|
| | Description | Metal Finishing Effluent | | Metal Finishing Effluent | | Metal Finishing Effluent | | Metal Finishing Effluent | |
| | Parameter | 211 | | 373 | | 374 | | 379 | |
| | Description | Flow Rate | | pH (Maximum) | | pH (Minimum) | | pH Total Exceedance Time Minutes | |
| | Units | MGD | | su | | su | | minutes | |
| Summary Values | Monthly Avg | 0.014441645 | | 8.068 | | 7.048 | | | |
| | Monthly Total | | | | | | | | |
| | Daily Max | 0.06253 | | 8.7 | | 7.8 | | | |
| | Daily Min | 0 | | 7.8 | | 6.5 | | | |
| Limit(s) in Effect | Monthly Avg | | | | | | | | |
| | Monthly Total | | | | | | 446 | 0 | 0 |
| | Daily Max | | | 9 | 0 | | | | |
| | Daily Min | | | | | 6 | 0 | | |
| QA/QC Information | LOD | | | | | | | | |
| | LOQ | | | | | | | | |
| | QC Exceedance | N | | N | | N | | N | |
| | Lab Certification | | | | | | | | |

| | | | | | | |
|-----------------------|---------------------|--------------------------|--------------------------|----------------------------|---------------------------|---------------------------|
| | Sample Point | 101 | 101 | 101 | 101 | 101 |
| | Description | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent |
| | Parameter | 457 | 651 | 87 | 147 | 315 |
| | Description | Suspended Solids, Total | Oil & Grease (Hexane) | Cadmium, Total Recoverable | Copper, Total Recoverable | Nickel, Total Recoverable |
| | Units | mg/L | mg/L | ug/L | ug/L | ug/L |
| | Sample Type | 24 HR FLOW PROP | GRAB | 24 HR FLOW PROP | 24 HR FLOW PROP | 24 HR FLOW PROP |
| | Frequency | 3/WEEK | MONTHLY | MONTHLY | MONTHLY | MONTHLY |
| Sample Results | Day 1 | 2.6 | | | | |
| | 2 | 3.2 | | | | |
| | 3 | 3.8 | | | | |
| | 4 | | | | | |
| | 5 | | | | | |
| | 6 | | | | | |
| | 7 | | | | | |
| | 8 | 2.8 | | | | |
| | 9 | <1.9 | <1.3 | | | |
| | 10 | <1.9 | | | | |
| | 11 | | | | | |
| | 12 | | | | | |
| | 13 | | | | | |
| | 14 | | | | | |
| | 15 | 2.6 | | <0.49 | 5.9 | 4.8 |
| | 16 | <1.9 | | | | |
| | 17 | <1.9 | | | | |
| | 18 | | | | | |
| | 19 | | | | | |
| | 20 | | | | | |
| | 21 | | | | | |
| | 22 | 4.0 | | | | |
| | 23 | <1.9 | | | | |
| | 24 | 2.8 | | | | |
| | 25 | | | | | |
| | 26 | | | | | |
| | 27 | | | | | |
| | 28 | | | | | |
| | 29 | | | | | |
| | 30 | | | | | |
| | 31 | | | | | |

| | | | | | | | | | | | |
|---------------------------|--------------------------|--------------------------|---|--------------------------|---|----------------------------|---|---------------------------|---|---------------------------|---|
| | Sample Point | 101 | | 101 | | 101 | | 101 | | 101 | |
| | Description | Metal Finishing Effluent | | Metal Finishing Effluent | | Metal Finishing Effluent | | Metal Finishing Effluent | | Metal Finishing Effluent | |
| | Parameter | 457 | | 651 | | 87 | | 147 | | 315 | |
| | Description | Suspended Solids, Total | | Oil & Grease (Hexane) | | Cadmium, Total Recoverable | | Copper, Total Recoverable | | Nickel, Total Recoverable | |
| | Units | mg/L | | mg/L | | ug/L | | ug/L | | ug/L | |
| Summary Values | Monthly Avg | 1.816666667 | | 0 | | 0 | | 5.9 | | 4.8 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 4 | | <1.3 | | <0.49 | | 5.9 | | 4.8 | |
| | Daily Min | <1.9 | | <1.3 | | <0.49 | | 5.9 | | 4.8 | |
| Limit(s) in Effect | Monthly Avg | 31 | 0 | 26 | 0 | 260 | 0 | 2070 | 0 | 2380 | 0 |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 60 | 0 | 52 | 0 | 690 | 0 | 3380 | 0 | 3980 | 0 |
| | Daily Min | | | | | | | | | | |
| QA/QC Information | LOD | | | 1.3 | | 0.49 | | 1.7 | | 1.5 | |
| | LOQ | | | 5.1 | | 1 | | 5 | | 5 | |
| | QC Exceedance | N | | N | | N | | N | | N | |
| | Lab Certification | 999580010 | | 999580010 | | 999580010 | | 999580010 | | 999580010 | |

| | | | | | | |
|-----------------------|---------------------|--------------------------|--------------------------|----------------------------|----------------------------|----------------------------|
| | Sample Point | 101 | 101 | 101 | 101 | 101 |
| | Description | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent |
| | Parameter | 553 | 507 | 280 | 280 | 35 |
| | Description | Zinc, Total Recoverable | Total Toxic Organics | Mercury, Total Recoverable | Mercury, Total Recoverable | Arsenic, Total Recoverable |
| | Units | ug/L | ug/L | ng/L | mg/day | ug/L |
| | Sample Type | 24 HR FLOW PROP | 24 HR FLOW PROP | GRAB | CALCULATED | 24 HR FLOW PROP |
| | Frequency | MONTHLY | MONTHLY | MONTHLY | MONTHLY | MONTHLY |
| Sample Results | Day 1 | | | | | |
| | 2 | | | | | |
| | 3 | | | | | |
| | 4 | | | | | |
| | 5 | | | | | |
| | 6 | | | | | |
| | 7 | | | | | |
| | 8 | | | | | |
| | 9 | | | | | |
| | 10 | | | | | |
| | 11 | | | | | |
| | 12 | | | | | |
| | 13 | | | | | |
| | 14 | | | | | |
| | 15 | 180 | | | | <2.1 |
| | 16 | | | | | |
| | 17 | | | | | |
| | 18 | | | | | |
| | 19 | | | | | |
| | 20 | | | | | |
| | 21 | | | | | |
| | 22 | | | | | |
| | 23 | | | | | |
| | 24 | | | 1.7 | 0.1404319 | |
| | 25 | | | | | |
| | 26 | | | | | |
| | 27 | | | | | |
| | 28 | | | | | |
| | 29 | | | | | |
| | 30 | | | | | |
| | 31 | | | | | |

| | | | | | | | | | | | |
|---------------------------|--------------------------|--------------------------|---|--------------------------|--|----------------------------|--|----------------------------|--|----------------------------|--|
| | Sample Point | 101 | | 101 | | 101 | | 101 | | 101 | |
| | Description | Metal Finishing Effluent | | Metal Finishing Effluent | | Metal Finishing Effluent | | Metal Finishing Effluent | | Metal Finishing Effluent | |
| | Parameter | 553 | | 507 | | 280 | | 280 | | 35 | |
| | Description | Zinc, Total Recoverable | | Total Toxic Organics | | Mercury, Total Recoverable | | Mercury, Total Recoverable | | Arsenic, Total Recoverable | |
| | Units | ug/L | | ug/L | | ng/L | | mg/day | | ug/L | |
| Summary Values | Monthly Avg | 180 | | | | 1.7 | | 0.1404319 | | 0 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 180 | | | | 1.7 | | 0.1404319 | | <2.1 | |
| | Daily Min | 180 | | | | 1.7 | | 0.1404319 | | <2.1 | |
| Limit(s) in Effect | Monthly Avg | 1480 | 0 | | | | | | | | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 2610 | 0 | 2130 | | | | | | | |
| | Daily Min | | | | | | | | | | |
| QA/QC Information | LOD | 3.6 | | | | 0.2 | | | | 2.1 | |
| | LOQ | 10 | | | | 0.5 | | | | 5 | |
| | QC Exceedance | N | | N | | N | | N | | N | |
| | Lab Certification | 999580010 | | | | 999580010 | | | | 999580010 | |

| | | | | | | |
|-----------------------|---------------------|----------------------------|----------------|----------------------------|-------------------------|----------------------------|
| | Sample Point | 101 | 704 | 704 | 704 | 704 |
| | Description | Metal Finishing Effluent | GWCTS Influent | GWCTS Influent | GWCTS Influent | GWCTS Influent |
| | Parameter | 35 | 211 | 35 | 457 | 280 |
| | Description | Arsenic, Total Recoverable | Flow Rate | Arsenic, Total Recoverable | Suspended Solids, Total | Mercury, Total Recoverable |
| | Units | lbs/day | gpd | ug/L | mg/L | ng/L |
| | Sample Type | CALCULATED | CONTINUOUS | 24 HR FLOW PROP | 24 HR FLOW PROP | GRAB |
| | Frequency | MONTHLY | DAILY | WEEKLY | WEEKLY | MONTHLY |
| Sample Results | Day 1 | | 0 | | | |
| | 2 | | 0 | | | |
| | 3 | | 0 | | | |
| | 4 | | 0 | | | |
| | 5 | | 0 | | | |
| | 6 | | 0 | | | |
| | 7 | | 0 | | | |
| | 8 | | 0 | | | |
| | 9 | | | 12055 | | |
| | 10 | | | 11070 | 31000 | 680 |
| | 11 | | | 7900 | | |
| | 12 | | | 2950 | | |
| | 13 | | | 5640 | | |
| | 14 | | | 0 | | |
| | 15 | 0.000399 | | 15425 | 37000 | 460 |
| | 16 | | | 12450 | | |
| | 17 | | | 18790 | | |
| | 18 | | | 17725 | | |
| | 19 | | | 9270 | | |
| | 20 | | | 0 | | |
| | 21 | | | 0 | | |
| | 22 | | | 7870 | | |
| | 23 | | | 7035 | 8900 | 120 |
| | 24 | | | 17925 | | 7.5 |
| | 25 | | | 2860 | | |
| | 26 | | | 19300 | | |
| | 27 | | | 0 | | |
| | 28 | | | 0 | | |
| | 29 | | | 11505 | | |
| | 30 | | | 23030 | | |
| | 31 | | | 27685 | | |

| | | | | | | |
|---------------------------|--------------------------|----------------------------|----------------|----------------------------|-------------------------|----------------------------|
| | Sample Point | 101 | 704 | 704 | 704 | 704 |
| | Description | Metal Finishing Effluent | GWCTS Influent | GWCTS Influent | GWCTS Influent | GWCTS Influent |
| | Parameter | 35 | 211 | 35 | 457 | 280 |
| | Description | Arsenic, Total Recoverable | Flow Rate | Arsenic, Total Recoverable | Suspended Solids, Total | Mercury, Total Recoverable |
| | Units | lbs/day | gpd | ug/L | mg/L | ng/L |
| Summary Values | Monthly Avg | 0.000399 | 7435 | 25633.3333333333 | 420 | 7.5 |
| | Monthly Total | | | | | |
| | Daily Max | 0.000399 | 27685 | 37000 | 680 | 7.5 |
| | Daily Min | 0.000399 | 0 | 8900 | 120 | 7.5 |
| Limit(s) in Effect | Monthly Avg | | | | | |
| | Monthly Total | | | | | |
| | Daily Max | | | | | |
| | Daily Min | | | | | |
| QA/QC Information | LOD | | | 210 | | 0.2 |
| | LOQ | | | 500 | | 0.5 |
| | QC Exceedance | N | N | N | N | N |
| | Lab Certification | | | 999580010 | 999580010 | 999580010 |

| | | | | | | | |
|-----------------------|---------------------|-----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----|
| | Sample Point | 107 | 004 | 004 | 004 | 004 | |
| | Description | Mercury Field Blank Results | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | |
| | Parameter | 280 | 211 | 373 | 374 | 112 | |
| | Description | Mercury, Total Recoverable | Flow Rate | pH (Maximum) | pH (Minimum) | Chlorine, Total Residual | |
| | Units | ng/L | MGD | su | su | ug/L | |
| | Sample Type | BLANK | CONTINUOUS | CONTINUOUS | CONTINUOUS | GRAB | |
| | Frequency | MONTHLY | DAILY | DAILY | DAILY | MONTHLY | |
| Sample Results | Day 1 | | 0 | | | | |
| | 2 | | 0 | | | | |
| | 3 | | 0 | | | | |
| | 4 | | 0 | | | | |
| | 5 | | 0 | | | | |
| | 6 | | 0 | | | | |
| | 7 | | 0 | | | | |
| | 8 | | 0 | | | | |
| | 9 | | | 0.045420 | 8.1 | 6.0 | |
| | 10 | | | 0.041300 | 8.1 | 6.0 | |
| | 11 | | | 0.040530 | 7.3 | 6.2 | |
| | 12 | | | 0.014180 | 7.0 | 6.3 | |
| | 13 | | | 0.010595 | 6.7 | 6.2 | |
| | 14 | | | 0 | | | |
| | 15 | | | 0.059215 | 7.1 | 6.1 | |
| | 16 | | | 0.041660 | 6.8 | 6.0 | |
| | 17 | | | 0.044315 | 6.7 | 6.3 | |
| | 18 | | | 0.047800 | 6.9 | 6.2 | |
| | 19 | | | 0.017335 | 6.7 | 6.1 | |
| | 20 | | | 0.007570 | 6.9 | 6.3 | |
| | 21 | | | 0 | | | |
| | 22 | | | 0.038425 | 6.8 | 6.5 | |
| | 23 | | | 0.054570 | 7.0 | 6.6 | |
| | 24 | | <0.20 | 0.055280 | 7.1 | 6.3 | <9 |
| | 25 | | | 0.045630 | 7.7 | 5.7 | |
| | 26 | | | 0.027440 | 7.8 | 6.3 | |
| | 27 | | | 0.003345 | 6.7 | 6.3 | |
| | 28 | | | 0 | | | |
| | 29 | | | 0.058300 | 6.6 | 6.1 | |
| | 30 | | | 0.059700 | 6.4 | 6.1 | |
| | 31 | | | 0.056560 | 7.4 | 6.0 | |

| | | | | | | | | | | | |
|---------------------------|--------------------------|-----------------------------|--|--------------------------|--|--------------------------|---|--------------------------|---|--------------------------|---|
| | Sample Point | 107 | | 004 | | 004 | | 004 | | 004 | |
| | Description | Mercury Field Blank Results | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | |
| | Parameter | 280 | | 211 | | 373 | | 374 | | 112 | |
| | Description | Mercury, Total Recoverable | | Flow Rate | | pH (Maximum) | | pH (Minimum) | | Chlorine, Total Residual | |
| | Units | ng/L | | MGD | | su | | su | | ug/L | |
| Summary Values | Monthly Avg | 0 | | 0.024811935 | | 7.09 | | 6.18 | | 0 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | <0.2 | | 0.0597 | | 8.1 | | 6.6 | | <9 | |
| | Daily Min | <0.2 | | 0 | | 6.4 | | 5.7 | | <9 | |
| Limit(s) in Effect | Monthly Avg | | | | | | | | | 38 | 0 |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | | | | | 9 | 0 | | | 38 | 0 |
| | Daily Min | | | | | | | 6 | 5 | | |
| QA/QC Information | LOD | 0.2 | | | | | | | | 30 | |
| | LOQ | 0.5 | | | | | | | | 100 | |
| | QC Exceedance | N | | N | | N | | N | | N | |
| | Lab Certification | 999580010 | | | | | | | | | |

| | | | | | | |
|-----------------------|---------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | Sample Point | 004 | 004 | 004 | 004 | 004 |
| | Description | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW |
| | Parameter | 35 | 35 | 280 | 280 | 87 |
| | Description | Arsenic, Total Recoverable | Arsenic, Total Recoverable | Mercury, Total Recoverable | Mercury, Total Recoverable | Cadmium, Total Recoverable |
| | Units | ug/L | lbs/day | ng/L | mg/day | ug/L |
| | Sample Type | 24 HR FLOW PROP | CALCULATED | GRAB | CALCULATED | 24 HR FLOW PROP |
| | Frequency | MONTHLY | MONTHLY | MONTHLY | MONTHLY | MONTHLY |
| Sample Results | Day 1 | | | | | |
| | 2 | | | | | |
| | 3 | | | | | |
| | 4 | | | | | |
| | 5 | | | | | |
| | 6 | | | | | |
| | 7 | | | | | |
| | 8 | | | | | |
| | 9 | | | | | |
| | 10 | 2.5 | 0.00085 | | | <0.49 |
| | 11 | | | | | |
| | 12 | | | | | |
| | 13 | | | | | |
| | 14 | | | | | |
| | 15 | | | | | |
| | 16 | | | | | |
| | 17 | | | | | |
| | 18 | | | | | |
| | 19 | | | | | |
| | 20 | | | | | |
| | 21 | | | | | |
| | 22 | | | | | |
| | 23 | | | | | |
| | 24 | | | 0.66 | 0.13827726 | |
| | 25 | | | | | |
| | 26 | | | | | |
| | 27 | | | | | |
| | 28 | | | | | |
| | 29 | | | | | |
| | 30 | | | | | |
| | 31 | | | | | |

| | | | | | | | | | | | |
|---------------------------|--------------------------|-------------------------------|---|-------------------------------|---|-------------------------------|---|-------------------------------|----|-------------------------------|--|
| | Sample Point | 004 | | 004 | | 004 | | 004 | | 004 | |
| | Description | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | |
| | Parameter | 35 | | 35 | | 280 | | 280 | | 87 | |
| | Description | Arsenic, Total Recoverable | | Arsenic, Total Recoverable | | Mercury, Total Recoverable | | Mercury, Total Recoverable | | Cadmium, Total Recoverable | |
| | Units | ug/L | | lbs/day | | ng/L | | mg/day | | ug/L | |
| Summary Values | Monthly Avg | 2.5 | | 0.00085 | | 0.66 | | 0.13827726 | | 0 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 2.5 | | 0.00085 | | 0.66 | | 0.13827726 | | <0.49 | |
| | Daily Min | 2.5 | | 0.00085 | | 0.66 | | 0.13827726 | | <0.49 | |
| Limit(s) in Effect | Monthly Avg | | | | | | | | 57 | 0 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 194 | 0 | 0.22 | 0 | 18 | 0 | | 57 | 0 | |
| | Daily Min | | | | | | | | | | |
| QA/QC Information | LOD | 2.1 | | | | 0.2 | | | | 0.49 | |
| | LOQ | 5 | | | | 0.5 | | | | 1 | |
| | QC Exceedance | N | | N | | N | | N | | N | |
| | Lab Certification | 999580010 | | | | 999580010 | | | | 999580010 | |

| | | | | | | |
|-----------------------|---------------------|-------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| | Sample Point | 004 | 004 | 004 | 004 | 004 |
| | Description | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW |
| | Parameter | 87 | 147 | 147 | 315 | 315 |
| | Description | Cadmium, Total Recoverable | Copper, Total Recoverable | Copper, Total Recoverable | Nickel, Total Recoverable | Nickel, Total Recoverable |
| | Units | lbs/day | ug/L | lbs/day | ug/L | lbs/day |
| | Sample Type | CALCULATED | 24 HR FLOW PROP | CALCULATED | 24 HR FLOW PROP | CALCULATED |
| | Frequency | MONTHLY | MONTHLY | MONTHLY | MONTHLY | MONTHLY |
| Sample Results | Day 1 | | | | | |
| | 2 | | | | | |
| | 3 | | | | | |
| | 4 | | | | | |
| | 5 | | | | | |
| | 6 | | | | | |
| | 7 | | | | | |
| | 8 | | | | | |
| | 9 | | | | | |
| | 10 | 0.1666 | 4.1 | 0.001394 | 1.8 | 0.000612 |
| | 11 | | | | | |
| | 12 | | | | | |
| | 13 | | | | | |
| | 14 | | | | | |
| | 15 | | | | | |
| | 16 | | | | | |
| | 17 | | | | | |
| | 18 | | | | | |
| | 19 | | | | | |
| | 20 | | | | | |
| | 21 | | | | | |
| | 22 | | | | | |
| | 23 | | | | | |
| | 24 | | | | | |
| | 25 | | | | | |
| | 26 | | | | | |
| | 27 | | | | | |
| | 28 | | | | | |
| | 29 | | | | | |
| | 30 | | | | | |
| | 31 | | | | | |

| | | | | | | | | | | | |
|---------------------------|--------------------------|-------------------------------|---|------------------------------|---|------------------------------|---|------------------------------|---|------------------------------|---|
| | Sample Point | 004 | | 004 | | 004 | | 004 | | 004 | |
| | Description | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | |
| | Parameter | 87 | | 147 | | 147 | | 315 | | 315 | |
| | Description | Cadmium, Total Recoverable | | Copper, Total Recoverable | | Copper, Total Recoverable | | Nickel, Total Recoverable | | Nickel, Total Recoverable | |
| | Units | lbs/day | | ug/L | | lbs/day | | ug/L | | lbs/day | |
| Summary Values | Monthly Avg | 0.1666 | | 4.1 | | 0.001394 | | 1.8 | | 0.000612 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 0.1666 | | 4.1 | | 0.001394 | | 1.8 | | 0.000612 | |
| | Daily Min | 0.1666 | | 4.1 | | 0.001394 | | 1.8 | | 0.000612 | |
| Limit(s) in Effect | Monthly Avg | | | 69 | 0 | | | 2000 | 0 | | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 0.23 | 0 | 69 | 0 | 0.28 | 0 | 2000 | 0 | 8.1 | 0 |
| | Daily Min | | | | | | | | | | |
| QA/QC Information | LOD | | | 1.7 | | | | 1.5 | | | |
| | LOQ | | | 5 | | | | 5 | | | |
| | QC Exceedance | N | | N | | N | | N | | N | |
| | Lab Certification | | | 999580010 | | | | 999580010 | | | |

| | | | | | | |
|-----------------------|---------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| | Sample Point | 004 | 004 | 004 | 004 | 004 |
| | Description | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW |
| | Parameter | 553 | 553 | 152 | 152 | 231 |
| | Description | Zinc, Total Recoverable | Zinc, Total Recoverable | Cyanide, Amenable | Cyanide, Amenable | Hardness, Total as CaCO3 |
| | Units | ug/L | lbs/day | ug/L | lbs/day | mg/L |
| | Sample Type | 24 HR FLOW PROP | CALCULATED | 24 HR FLOW PROP | CALCULATED | 24 HR FLOW PROP |
| | Frequency | MONTHLY | MONTHLY | MONTHLY | MONTHLY | MONTHLY |
| Sample Results | Day 1 | | | | | |
| | 2 | | | | | |
| | 3 | | | | | |
| | 4 | | | | | |
| | 5 | | | | | |
| | 6 | | | | | |
| | 7 | | | | | |
| | 8 | | | | | |
| | 9 | | | | | |
| | 10 | 15 | 0.0051 | <5.0 | 0.0017 | 100 |
| | 11 | | | | | |
| | 12 | | | | | |
| | 13 | | | | | |
| | 14 | | | | | |
| | 15 | | | | | |
| | 16 | | | | | |
| | 17 | | | | | |
| | 18 | | | | | |
| | 19 | | | | | |
| | 20 | | | | | |
| | 21 | | | | | |
| | 22 | | | | | |
| | 23 | | | | | |
| | 24 | | | | | |
| | 25 | | | | | |
| | 26 | | | | | |
| | 27 | | | | | |
| | 28 | | | | | |
| | 29 | | | | | |
| | 30 | | | | | |
| | 31 | | | | | |

| | | | | | | | | | | | |
|---------------------------|--------------------------|-----------------------------|---|-----------------------------|---|-----------------------------|---|-----------------------------|---|-----------------------------|--|
| | Sample Point | 004 | | 004 | | 004 | | 004 | | 004 | |
| | Description | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | |
| | Parameter | 553 | | 553 | | 152 | | 152 | | 231 | |
| | Description | Zinc, Total Recoverable | | Zinc, Total Recoverable | | Cyanide, Amenable | | Cyanide, Amenable | | Hardness, Total as CaCO3 | |
| | Units | ug/L | | lbs/day | | ug/L | | lbs/day | | mg/L | |
| Summary Values | Monthly Avg | 15 | | 0.0051 | | 0 | | 0.0017 | | 100 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 15 | | 0.0051 | | <5 | | 0.0017 | | 100 | |
| | Daily Min | 15 | | 0.0051 | | <5 | | 0.0017 | | 100 | |
| Limit(s) in Effect | Monthly Avg | 520 | 0 | | | 92 | 0 | | | | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 520 | 0 | 2.1 | 0 | 92 | 0 | 0.37 | 0 | | |
| | Daily Min | | | | | | | | | | |
| QA/QC Information | LOD | 3.6 | | | | 3.6 | | | | | |
| | LOQ | 10 | | | | 5 | | | | | |
| | QC Exceedance | N | | N | | N | | N | | N | |
| | Lab Certification | 999580010 | | | | 999580010 | | | | 999580010 | |

| | | | | | | |
|-----------------------|---------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|----------------|
| | Sample Point | 004 | 004 | 004 | 004 | 108 |
| | Description | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | GWCTS Effluent |
| | Parameter | 480 | 1352 | 1353 | 1353 | 211 |
| | Description | Temperature Maximum | PFOA | PFOS | PFOS | Flow Rate |
| | Units | degF | ng/L | ng/L | mg/day | MGD |
| | Sample Type | MEASURE | 24 HR FLOW PROP | 24 HR FLOW PROP | CALCULATED | CONTINUOUS |
| | Frequency | WEEKLY | MONTHLY | MONTHLY | MONTHLY | DAILY |
| Sample Results | Day 1 | | | | | 0 |
| | 2 | | | | | 0 |
| | 3 | | | | | 0 |
| | 4 | | | | | 0 |
| | 5 | | | | | 0 |
| | 6 | | | | | 0 |
| | 7 | | | | | 0 |
| | 8 | | | | | 0 |
| | 9 | 85 | | | | 0.007480 |
| | 10 | 85 | 2.7 | 0.76 | 0.11896052 | 0.010630 |
| | 11 | 86 | | | | 0.007645 |
| | 12 | 89 | | | | 0.002340 |
| | 13 | 89 | | | | 0.005325 |
| | 14 | | | | | 0 |
| | 15 | 89 | | | | 0.014035 |
| | 16 | 86 | | | | 0.009395 |
| | 17 | 87 | | | | 0.016385 |
| | 18 | 80 | | | | 0.015335 |
| | 19 | 84 | | | | 0.006845 |
| | 20 | | | | | 0 |
| | 21 | | | | | 0 |
| | 22 | 86 | | | | 0.005220 |
| | 23 | 84 | | | | 0.008655 |
| | 24 | 82 | | | | 0.015745 |
| | 25 | 85 | | | | 0.018620 |
| | 26 | 83 | | | | 0.014055 |
| | 27 | | | | | 0 |
| | 28 | | | | | 0 |
| | 29 | 86 | | | | 0.010200 |
| | 30 | 90 | | | | 0.019670 |
| | 31 | 88 | | | | 0.022140 |

| | | | | | | | | | | | |
|---------------------------|--------------------------|-----------------------------|--|-----------------------------|--|-----------------------------|---|-----------------------------|---|----------------|--|
| | Sample Point | 004 | | 004 | | 004 | | 004 | | 108 | |
| | Description | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | GWCTS Effluent | |
| | Parameter | 480 | | 1352 | | 1353 | | 1353 | | 211 | |
| | Description | Temperature Maximum | | PFOA | | PFOS | | PFOS | | Flow Rate | |
| | Units | degF | | ng/L | | ng/L | | mg/day | | MGD | |
| Summary Values | Monthly Avg | 85.777777778 | | 2.7 | | 0.76 | | 0.11896052 | | 0.006765161 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 90 | | 2.7 | | 0.76 | | 0.11896052 | | 0.02214 | |
| | Daily Min | 80 | | 2.7 | | 0.76 | | 0.11896052 | | 0 | |
| Limit(s) in Effect | Monthly Avg | | | | | 11 | 0 | 2.1 | 0 | | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | | | | | 11 | 0 | | | | |
| | Daily Min | | | | | | | | | | |
| QA/QC Information | LOD | | | 0.88 | | 0.56 | | | | | |
| | LOQ | | | 2.1 | | 2.1 | | | | | |
| | QC Exceedance | N | | N | | N | | N | | N | |
| | Lab Certification | | | 998204680 | | 998204680 | | | | | |

| | | | | | | |
|-----------------------|---------------------|-------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| | Sample Point | 108 | 108 | 108 | 108 | 108 |
| | Description | GWCTS Effluent | GWCTS Effluent | GWCTS Effluent | GWCTS Effluent | GWCTS Effluent |
| | Parameter | 457 | 35 | 35 | 280 | 280 |
| | Description | Suspended Solids, Total | Arsenic, Total Recoverable | Arsenic, Total Recoverable | Mercury, Total Recoverable | Mercury, Total Recoverable |
| | Units | mg/L | ug/L | lbs/day | ng/L | mg/day |
| | Sample Type | 24 HR FLOW PROP | 24 HR FLOW PROP | CALCULATED | 24 HR FLOW PROP | CALCULATED |
| | Frequency | WEEKLY | WEEKLY | WEEKLY | MONTHLY | MONTHLY |
| Sample Results | Day 1 | | | | | |
| | 2 | | | | | |
| | 3 | | | | | |
| | 4 | | | | | |
| | 5 | | | | | |
| | 6 | | | | | |
| | 7 | | | | | |
| | 8 | | | | | |
| | 9 | | | | | |
| | 10 | <1.9 | <2.1 | 0.000189 | | |
| | 11 | | | | | |
| | 12 | | | | | |
| | 13 | | | | | |
| | 14 | | | | | |
| | 15 | <1.9 | <2.1 | 0.000252 | | |
| | 16 | | | | | |
| | 17 | | | | | |
| | 18 | | | | | |
| | 19 | | | | | |
| | 20 | | | | | |
| | 21 | | | | | |
| | 22 | | | | | |
| | 23 | <1.9 | 2.6 | 0.000182 | | |
| | 24 | | | | 0.42 | 0.02506308 |
| | 25 | | | | | |
| | 26 | | | | | |
| | 27 | | | | | |
| | 28 | | | | | |
| | 29 | | | | | |
| | 30 | | | | | |
| | 31 | | | | | |

| | | | | | | | | | | | |
|---------------------------|--------------------------|-------------------------|--|----------------------------|---|----------------------------|---|----------------------------|---|----------------------------|--|
| | Sample Point | 108 | | 108 | | 108 | | 108 | | 108 | |
| | Description | GWCTS Effluent | | GWCTS Effluent | | GWCTS Effluent | | GWCTS Effluent | | GWCTS Effluent | |
| | Parameter | 457 | | 35 | | 35 | | 280 | | 280 | |
| | Description | Suspended Solids, Total | | Arsenic, Total Recoverable | | Arsenic, Total Recoverable | | Mercury, Total Recoverable | | Mercury, Total Recoverable | |
| | Units | mg/L | | ug/L | | lbs/day | | ng/L | | mg/day | |
| Summary Values | Monthly Avg | 0 | | 0.866666667 | | 0.000207667 | | 0.42 | | 0.02506308 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | <1.9 | | 2.6 | | 0.000252 | | 0.42 | | 0.02506308 | |
| | Daily Min | <1.9 | | <2.1 | | 0.000182 | | 0.42 | | 0.02506308 | |
| Limit(s) in Effect | Monthly Avg | | | | | | | | | | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | | | 500 | 0 | 0.17 | 0 | 24 | 0 | | |
| | Daily Min | | | | | | | | | | |
| QA/QC Information | LOD | | | 2.1 | | | | 0.2 | | | |
| | LOQ | | | 5 | | | | 0.5 | | | |
| | QC Exceedance | N | | N | | N | | N | | N | |
| | Lab Certification | 999580010 | | 999580010 | | | | 999580010 | | | |

| | | | |
|-----------------------|---------------------|-----------------|-----------------|
| | Sample Point | 108 | 108 |
| | Description | GWCTS Effluent | GWCTS Effluent |
| | Parameter | 1352 | 1353 |
| | Description | PFOA | PFOS |
| | Units | ng/L | ng/L |
| | Sample Type | 24 HR FLOW PROP | 24 HR FLOW PROP |
| | Frequency | MONTHLY | MONTHLY |
| Sample Results | Day 1 | | |
| | 2 | | |
| | 3 | | |
| | 4 | | |
| | 5 | | |
| | 6 | | |
| | 7 | | |
| | 8 | | |
| | 9 | | |
| | 10 | | |
| | 11 | | |
| | 12 | | |
| | 13 | | |
| | 14 | | |
| | 15 | <0.75 | <0.48 |
| | 16 | | |
| | 17 | | |
| | 18 | | |
| | 19 | | |
| | 20 | | |
| | 21 | | |
| | 22 | | |
| | 23 | | |
| | 24 | | |
| | 25 | | |
| | 26 | | |
| | 27 | | |
| | 28 | | |
| | 29 | | |
| | 30 | | |
| | 31 | | |

| | | | |
|---------------------------|--------------------------|----------------|----------------|
| | Sample Point | 108 | 108 |
| | Description | GWCTS Effluent | GWCTS Effluent |
| | Parameter | 1352 | 1353 |
| | Description | PFOA | PFOS |
| | Units | ng/L | ng/L |
| Summary Values | Monthly Avg | 0 | 0 |
| | Monthly Total | | |
| | Daily Max | <0.75 | <0.48 |
| | Daily Min | <0.75 | <0.48 |
| Limit(s) in Effect | Monthly Avg | | |
| | Monthly Total | | |
| | Daily Max | | |
| | Daily Min | | |
| QA/QC Information | LOD | 0.75 | 0.48 |
| | LOQ | 1.8 | 1.8 |
| | QC Exceedance | N | N |
| | Lab Certification | 998204680 | 998204680 |

Footnotes (DNR Use Only; Instructions for completing this form that are unique for your facility may be displayed here.)

General Remarks

The Groundwater system was down due to maintenance issues and the Holiday July 1-8.

Laboratory Quality Control Comments

We did have the pH drop below or at 6.0 a couple times at OF004, but the system does into recycle

Exceedence Comments

pH went low but the system is set to go in recycle so nothing went out. pH probes were checked.

Submitted by Anne Fleury(afleury16) on 8/15/2024 12:19:23 PM

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: TYCO FIRE PRODUCTS LP
Contact Address: □□
□□, □□
Facility Contact: , □□
Phone Number: □□
Reporting Period: 08/01/2024 - 08/31/2024
Form Due Date: 09/21/2024
Permit Number: 0001040

| | |
|-----------------|---------------------------|
| Date Received: | |
| DOC: | 550628 |
| FIN: | 7245 |
| FID: | 438039470 |
| Region: | Northeast Region |
| Permit Drafter: | Laura K Rodriguez Alvarez |
| Reviewer: | Laura A Gerold |
| Office: | Green Bay |

Sample Point(s) active?

- No - 703 sample point (Menominee River Intake)
- Yes - 101 sample point (Metal Finishing Effluent)
- Yes - 704 sample point (GWCTS Influent)
- Yes - 107 sample point (Mercury Field Blank Results)
- Yes - 004 sample point (Combined Process WW & GW)
- Yes - 108 sample point (GWCTS Effluent)

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: TYCO FIRE PRODUCTS LP
 Contact Address: □□ □□ , □□
 Facility Contact: , □□
 Phone Number: □□
 Reporting Period: 08/01/2024 - 08/31/2024
 Form Due Date: 09/21/2024
 Permit Number: 0001040

Date Received:
 DOC: 550628
 FIN: 7245
 FID: 438039470
 Region: Northeast Region
 Permit Drafter: Laura K Rodriguez Alvarez
 Reviewer: Laura A Gerold
 Office: Green Bay

| Sample Point | 101 | 101 | 101 | 101 | 101 |
|----------------|--------------------------|--------------------------|--------------------------|----------------------------------|--|
| Description | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent |
| Parameter | 211 | 373 | 374 | 379 | 376 |
| Description | Flow Rate | pH (Maximum) | pH (Minimum) | pH Total Exceedance Time Minutes | pH Exceedances Greater Than 60 Minutes |
| Units | MGD | su | su | minutes | Number |
| Sample Type | CONTINUOUS | CONTINUOUS | CONTINUOUS | CONTINUOUS | CONTINUOUS |
| Frequency | DAILY | DAILY | DAILY | DAILY | DAILY |
| Sample Results | Day 1 | 0.016343 | 8.0 | 7.3 | |
| | 2 | 0.010025 | 8.4 | 6.8 | |
| | 3 | 0.003251 | 8.8 | 6.7 | |
| | 4 | 0 | | | |
| | 5 | 0.014747 | 7.8 | 7.0 | |
| | 6 | 0.011169 | 8.2 | 6.6 | |
| | 7 | 0.015788 | 8.0 | 7.2 | |
| | 8 | 0.015977 | 8.4 | 6.9 | |
| | 9 | 0.006720 | 7.6 | 6.9 | |
| | 10 | 0.003584 | 7.8 | 7.0 | |
| | 11 | 0 | | | |
| | 12 | 0.009487 | 7.5 | 6.8 | |
| | 13 | 0.013179 | 7.8 | 6.5 | |
| | 14 | 0.010437 | 8.2 | 7.0 | |
| | 15 | 0.028240 | 7.8 | 6.6 | |
| | 16 | 0.015408 | 8.0 | 6.3 | |
| | 17 | 0.004972 | 8.2 | 7.2 | |
| | 18 | 0 | | | |
| | 19 | 0.042192 | 7.3 | 6.6 | |
| | 20 | 0.061901 | 7.3 | 6.6 | |
| | 21 | 0.048975 | 7.5 | 6.2 | |
| | 22 | 0.034466 | 7.9 | 6.4 | |
| | 23 | 0.016957 | 7.9 | 6.5 | |
| | 24 | 0.006794 | 8.2 | 6.8 | |
| | 25 | 0 | | | |
| | 26 | 0.033090 | 7.6 | 6.6 | |
| | 27 | 0.050695 | 7.2 | 6.5 | |
| | 28 | 0.045229 | 7.6 | 6.9 | |
| | 29 | 0.032108 | 7.9 | 7.1 | |
| | 30 | 0.010825 | 7.2 | 6.8 | |
| | 31 | 0 | | | |

| | | | | | | |
|---------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------------------|--|
| | Sample Point | 101 | 101 | 101 | 101 | 101 |
| | Description | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent |
| | Parameter | 211 | 373 | 374 | 379 | 376 |
| | Description | Flow Rate | pH (Maximum) | pH (Minimum) | pH Total Exceedance Time Minutes | pH Exceedances Greater Than 60 Minutes |
| | Units | MGD | su | su | minutes | Number |
| Summary Values | Monthly Avg | 0.018147065 | 7.85 | 6.761538462 | | |
| | Monthly Total | | | | | |
| | Daily Max | 0.061901 | 8.8 | 7.3 | | |
| | Daily Min | 0 | 7.2 | 6.2 | | |
| Limit(s) in Effect | Monthly Avg | | | | | |
| | Monthly Total | | | | 446 | 0 |
| | Daily Max | | 9 | 0 | | |
| | Daily Min | | | 6 | 0 | |
| QA/QC Information | LOD | | | | | |
| | LOQ | | | | | |
| | QC Exceedance | N | N | N | N | N |
| | Lab Certification | | | | | |

| | | | | | | |
|-----------------------|---------------------|--------------------------|--------------------------|----------------------------|---------------------------|---------------------------|
| | Sample Point | 101 | 101 | 101 | 101 | 101 |
| | Description | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent |
| | Parameter | 457 | 651 | 87 | 147 | 315 |
| | Description | Suspended Solids, Total | Oil & Grease (Hexane) | Cadmium, Total Recoverable | Copper, Total Recoverable | Nickel, Total Recoverable |
| | Units | mg/L | mg/L | ug/L | ug/L | ug/L |
| | Sample Type | 24 HR FLOW PROP | GRAB | 24 HR FLOW PROP | 24 HR FLOW PROP | 24 HR FLOW PROP |
| | Frequency | 3/WEEK | MONTHLY | MONTHLY | MONTHLY | MONTHLY |
| Sample Results | Day 1 | | | | | |
| | 2 | | | | | |
| | 3 | | | | | |
| | 4 | | | | | |
| | 5 | 11.0 | | | | |
| | 6 | 3.8 | | | | |
| | 7 | 2.8 | | | | |
| | 8 | | | | | |
| | 9 | | | | | |
| | 10 | | | | | |
| | 11 | | | | | |
| | 12 | 4.8 | | | | |
| | 13 | 2.0 | | <0.49 | 5.3 | 3.9 |
| | 14 | <1.9 | 2.9 | | | |
| | 15 | | | | | |
| | 16 | | | | | |
| | 17 | | | | | |
| | 18 | | | | | |
| | 19 | <1.9 | | | | |
| | 20 | <1.9 | | | | |
| | 21 | <1.9 | | | | |
| | 22 | | | | | |
| | 23 | | | | | |
| | 24 | | | | | |
| | 25 | | | | | |
| | 26 | 2.6 | | | | |
| | 27 | 2.0 | | | | |
| | 28 | 2.6 | | | | |
| | 29 | | | | | |
| | 30 | | | | | |
| | 31 | | | | | |

| | | | | | | | | | | | |
|---------------------------|--------------------------|--------------------------|---|--------------------------|---|----------------------------|---|---------------------------|---|---------------------------|---|
| | Sample Point | 101 | | 101 | | 101 | | 101 | | 101 | |
| | Description | Metal Finishing Effluent | | Metal Finishing Effluent | | Metal Finishing Effluent | | Metal Finishing Effluent | | Metal Finishing Effluent | |
| | Parameter | 457 | | 651 | | 87 | | 147 | | 315 | |
| | Description | Suspended Solids, Total | | Oil & Grease (Hexane) | | Cadmium, Total Recoverable | | Copper, Total Recoverable | | Nickel, Total Recoverable | |
| | Units | mg/L | | mg/L | | ug/L | | ug/L | | ug/L | |
| Summary Values | Monthly Avg | 2.6333333333 | | 2.9 | | 0 | | 5.3 | | 3.9 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 11 | | 2.9 | | <0.49 | | 5.3 | | 3.9 | |
| | Daily Min | <1.9 | | 2.9 | | <0.49 | | 5.3 | | 3.9 | |
| Limit(s) in Effect | Monthly Avg | 31 | 0 | 26 | 0 | 260 | 0 | 2070 | 0 | 2380 | 0 |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 60 | 0 | 52 | 0 | 690 | 0 | 3380 | 0 | 3980 | 0 |
| | Daily Min | | | | | | | | | | |
| QA/QC Information | LOD | | | 1.3 | | 0.49 | | 1.7 | | 1.5 | |
| | LOQ | | | 5 | | 1 | | 5 | | 5 | |
| | QC Exceedance | N | | N | | N | | N | | N | |
| | Lab Certification | 999580010 | | 999580010 | | 999580010 | | 999580010 | | 999580010 | |

| | | | | | | | |
|-----------------------|---------------------|--------------------------|--------------------------|----------------------------|----------------------------|----------------------------|------|
| | Sample Point | 101 | 101 | 101 | 101 | 101 | |
| | Description | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent | Metal Finishing Effluent | |
| | Parameter | 553 | 507 | 280 | 280 | 35 | |
| | Description | Zinc, Total Recoverable | Total Toxic Organics | Mercury, Total Recoverable | Mercury, Total Recoverable | Arsenic, Total Recoverable | |
| | Units | ug/L | ug/L | ng/L | mg/day | ug/L | |
| | Sample Type | 24 HR FLOW PROP | 24 HR FLOW PROP | GRAB | CALCULATED | 24 HR FLOW PROP | |
| | Frequency | MONTHLY | MONTHLY | MONTHLY | MONTHLY | MONTHLY | |
| Sample Results | Day 1 | | | | | | |
| | 2 | | | | | | |
| | 3 | | | | | | |
| | 4 | | | | | | |
| | 5 | | | | | | |
| | 6 | | | | | | |
| | 7 | | | | | | |
| | 8 | | | | | | |
| | 9 | | | | | | |
| | 10 | | | | | | |
| | 11 | | | | | | |
| | 12 | | | | | | |
| | 13 | | 100 | | | | <2.1 |
| | 14 | | | | | | |
| | 15 | | | | | | |
| | 16 | | | | | | |
| | 17 | | | | | | |
| | 18 | | | | | | |
| | 19 | | | | | | |
| | 20 | | | | | | |
| | 21 | | | | 0.81 | 0.15034815 | |
| | 22 | | | | | | |
| | 23 | | | | | | |
| | 24 | | | | | | |
| | 25 | | | | | | |
| | 26 | | | | | | |
| | 27 | | | | | | |
| | 28 | | | | | | |
| | 29 | | | | | | |
| | 30 | | | | | | |
| | 31 | | | | | | |

| | | | | | | | | | | | |
|---------------------------|--------------------------|--------------------------|---|--------------------------|--|----------------------------|--|----------------------------|--|----------------------------|--|
| | Sample Point | 101 | | 101 | | 101 | | 101 | | 101 | |
| | Description | Metal Finishing Effluent | | Metal Finishing Effluent | | Metal Finishing Effluent | | Metal Finishing Effluent | | Metal Finishing Effluent | |
| | Parameter | 553 | | 507 | | 280 | | 280 | | 35 | |
| | Description | Zinc, Total Recoverable | | Total Toxic Organics | | Mercury, Total Recoverable | | Mercury, Total Recoverable | | Arsenic, Total Recoverable | |
| | Units | ug/L | | ug/L | | ng/L | | mg/day | | ug/L | |
| Summary Values | Monthly Avg | 100 | | | | 0.81 | | 0.15034815 | | 0 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 100 | | | | 0.81 | | 0.15034815 | | <2.1 | |
| | Daily Min | 100 | | | | 0.81 | | 0.15034815 | | <2.1 | |
| Limit(s) in Effect | Monthly Avg | 1480 | 0 | | | | | | | | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 2610 | 0 | 2130 | | | | | | | |
| | Daily Min | | | | | | | | | | |
| QA/QC Information | LOD | 3.6 | | | | 0.2 | | | | 2.1 | |
| | LOQ | 10 | | | | 0.5 | | | | 5 | |
| | QC Exceedance | N | | N | | N | | N | | N | |
| | Lab Certification | 999580010 | | | | 999580010 | | | | 999580010 | |

| | | | | | | |
|-----------------------|---------------------|----------------------------|----------------|----------------------------|-------------------------|----------------------------|
| | Sample Point | 101 | 704 | 704 | 704 | 704 |
| | Description | Metal Finishing Effluent | GWCTS Influent | GWCTS Influent | GWCTS Influent | GWCTS Influent |
| | Parameter | 35 | 211 | 35 | 457 | 280 |
| | Description | Arsenic, Total Recoverable | Flow Rate | Arsenic, Total Recoverable | Suspended Solids, Total | Mercury, Total Recoverable |
| | Units | lbs/day | gpd | ug/L | mg/L | ng/L |
| | Sample Type | CALCULATED | CONTINUOUS | 24 HR FLOW PROP | 24 HR FLOW PROP | GRAB |
| | Frequency | MONTHLY | DAILY | WEEKLY | WEEKLY | MONTHLY |
| Sample Results | Day 1 | | 24035 | 31000 | 25 | |
| | 2 | | 0 | | | |
| | 3 | | 0 | | | |
| | 4 | | 0 | | | |
| | 5 | | 14275 | | | |
| | 6 | | 18835 | | | |
| | 7 | | 8770 | | | |
| | 8 | | 16375 | | | |
| | 9 | | 7980 | | | |
| | 10 | | 0 | | | |
| | 11 | | 0 | | | |
| | 12 | | 12030 | | | |
| | 13 | 0.000231 | 22205 | 13000 | 34 | |
| | 14 | | 8695 | | | |
| | 15 | | 0 | | | |
| | 16 | | 2775 | | | |
| | 17 | | 0 | | | |
| | 18 | | 0 | | | |
| | 19 | | 8410 | | | |
| | 20 | | 15080 | 20000 | 58 | |
| | 21 | | 15825 | | | |
| | 22 | | 15395 | | | |
| | 23 | | 16325 | | | |
| | 24 | | 16455 | | | |
| | 25 | | 9540 | | | |
| | 26 | | 6385 | | | |
| | 27 | | 16595 | 17000 | 33 | |
| | 28 | | 16360 | | | 15 |
| | 29 | | 12675 | | | |
| | 30 | | 8490 | | | |
| | 31 | | 0 | | | |

| | | | | | | |
|---------------------------|--------------------------|----------------------------|----------------|----------------------------|-------------------------|----------------------------|
| | Sample Point | 101 | 704 | 704 | 704 | 704 |
| | Description | Metal Finishing Effluent | GWCTS Influent | GWCTS Influent | GWCTS Influent | GWCTS Influent |
| | Parameter | 35 | 211 | 35 | 457 | 280 |
| | Description | Arsenic, Total Recoverable | Flow Rate | Arsenic, Total Recoverable | Suspended Solids, Total | Mercury, Total Recoverable |
| | Units | lbs/day | gpd | ug/L | mg/L | ng/L |
| Summary Values | Monthly Avg | 0.000231 | 9468.064516129 | 20250 | 37.5 | 15 |
| | Monthly Total | | | | | |
| | Daily Max | 0.000231 | 24035 | 31000 | 58 | 15 |
| | Daily Min | 0.000231 | 0 | 13000 | 25 | 15 |
| Limit(s) in Effect | Monthly Avg | | | | | |
| | Monthly Total | | | | | |
| | Daily Max | | | | | |
| | Daily Min | | | | | |
| QA/QC Information | LOD | | | 100 | | 0.2 |
| | LOQ | | | 500 | | 0.5 |
| | QC Exceedance | N | N | N | N | N |
| | Lab Certification | | | 999580010 | 999580010 | 999580010 |

| | | | | | | |
|-----------------------|---------------------|-----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | Sample Point | 107 | 004 | 004 | 004 | 004 |
| | Description | Mercury Field Blank Results | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW |
| | Parameter | 280 | 211 | 373 | 374 | 112 |
| | Description | Mercury, Total Recoverable | Flow Rate | pH (Maximum) | pH (Minimum) | Chlorine, Total Residual |
| | Units | ng/L | MGD | su | su | ug/L |
| | Sample Type | BLANK | CONTINUOUS | CONTINUOUS | CONTINUOUS | GRAB |
| | Frequency | MONTHLY | DAILY | DAILY | DAILY | MONTHLY |
| Sample Results | Day 1 | | 0.051485 | 7.0 | 6.4 | |
| | 2 | | 0.022250 | 6.5 | 6.1 | |
| | 3 | | 0.007045 | 6.1 | 5.9 | |
| | 4 | | 0 | | | |
| | 5 | | 0.048400 | 7.7 | 5.9 | |
| | 6 | | 0.042980 | 6.6 | 6.1 | |
| | 7 | | 0.042450 | 8.4 | 6.0 | |
| | 8 | | 0.055280 | 7.8 | 6.2 | |
| | 9 | | 0.017455 | 7.0 | 6.0 | |
| | 10 | | 0.008745 | 6.5 | 6.3 | |
| | 11 | | 0 | | | |
| | 12 | | 0.040420 | 6.7 | 5.8 | |
| | 13 | | 0.046870 | 6.7 | 6.3 | |
| | 14 | | 0.033660 | 7.9 | 6.4 | |
| | 15 | | 0.031630 | 7.5 | 6.8 | |
| | 16 | | 0.015390 | 7.0 | 6.3 | |
| | 17 | | 0.004310 | 6.5 | 6.2 | |
| | 18 | | 0 | | | |
| | 19 | | 0.048080 | 6.9 | 5.7 | |
| | 20 | | 0.068195 | 6.9 | 6.5 | |
| | 21 | <0.20 | 0.054295 | 6.7 | 6.3 | |
| | 22 | | 0.045415 | 7.4 | 6.3 | <5 |
| | 23 | | 0.027295 | 6.7 | 6.4 | |
| | 24 | | 0.019595 | 6.7 | 6.0 | |
| | 25 | | 7960 | 8.9 | 5.8 | |
| | 26 | | 0.039815 | 6.6 | 5.3 | |
| | 27 | | 0.062105 | 7.2 | 6.2 | |
| | 28 | | 0.053375 | 7.4 | 6.4 | |
| | 29 | | 0.038645 | 7.4 | 6.3 | |
| | 30 | | 0.018560 | 6.4 | 6.1 | |
| | 31 | | 0 | | | |

| | | | | | | |
|---------------------------|--------------------------|-----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | Sample Point | 107 | 004 | 004 | 004 | 004 |
| | Description | Mercury Field Blank Results | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW |
| | Parameter | 280 | 211 | 373 | 374 | 112 |
| | Description | Mercury, Total Recoverable | Flow Rate | pH (Maximum) | pH (Minimum) | Chlorine, Total Residual |
| | Units | ng/L | MGD | su | su | ug/L |
| Summary Values | Monthly Avg | 0 | 256.804636935 | 7.077777778 | 6.148148148 | 0 |
| | Monthly Total | | | | | |
| | Daily Max | <0.2 | 7960 | 8.9 | 6.8 | <5 |
| | Daily Min | <0.2 | 0 | 6.1 | 5.3 | <5 |
| Limit(s) in Effect | Monthly Avg | | | | | 38 0 |
| | Monthly Total | | | | | |
| | Daily Max | | | 9 0 | | 38 0 |
| | Daily Min | | | | 6 9 | |
| QA/QC Information | LOD | 0.2 | | | | 30 |
| | LOQ | 0.5 | | | | 100 |
| | QC Exceedance | N | N | N | N | N |
| | Lab Certification | 999580010 | | | | |

| | | | | | | | |
|-----------------------|---------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------|
| | Sample Point | 004 | 004 | 004 | 004 | 004 | |
| | Description | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | |
| | Parameter | 35 | 35 | 280 | 280 | 87 | |
| | Description | Arsenic, Total Recoverable | Arsenic, Total Recoverable | Mercury, Total Recoverable | Mercury, Total Recoverable | Cadmium, Total Recoverable | |
| | Units | ug/L | lbs/day | ng/L | mg/day | ug/L | |
| | Sample Type | 24 HR FLOW PROP | CALCULATED | GRAB | CALCULATED | 24 HR FLOW PROP | |
| | Frequency | MONTHLY | MONTHLY | MONTHLY | MONTHLY | MONTHLY | |
| Sample Results | Day 1 | | | | | | |
| | 2 | | | | | | |
| | 3 | | | | | | |
| | 4 | | | | | | |
| | 5 | | | | | | |
| | 6 | | | | | | |
| | 7 | | | | | | |
| | 8 | | | | | | |
| | 9 | | | | | | |
| | 10 | | | | | | |
| | 11 | | | | | | |
| | 12 | | | | | | |
| | 13 | | <2.1 | 0.000819 | | | <0.49 |
| | 14 | | | | | | |
| | 15 | | | | | | |
| | 16 | | | | | | |
| | 17 | | | | | | |
| | 18 | | | | | | |
| | 19 | | | | | | |
| | 20 | | | | | | |
| | 21 | | | | 0.61 | 0.12552458 | |
| | 22 | | | | | | |
| | 23 | | | | | | |
| | 24 | | | | | | |
| | 25 | | | | | | |
| | 26 | | | | | | |
| | 27 | | | | | | |
| | 28 | | | | | | |
| | 29 | | | | | | |
| | 30 | | | | | | |
| | 31 | | | | | | |

| | | | | | | | | | | | |
|---------------------------|--------------------------|-------------------------------|---|-------------------------------|---|-------------------------------|---|-------------------------------|----|-------------------------------|--|
| | Sample Point | 004 | | 004 | | 004 | | 004 | | 004 | |
| | Description | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | |
| | Parameter | 35 | | 35 | | 280 | | 280 | | 87 | |
| | Description | Arsenic, Total Recoverable | | Arsenic, Total Recoverable | | Mercury, Total Recoverable | | Mercury, Total Recoverable | | Cadmium, Total Recoverable | |
| | Units | ug/L | | lbs/day | | ng/L | | mg/day | | ug/L | |
| Summary Values | Monthly Avg | 0 | | 0.000819 | | 0.61 | | 0.12552458 | | 0 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | <2.1 | | 0.000819 | | 0.61 | | 0.12552458 | | <0.49 | |
| | Daily Min | <2.1 | | 0.000819 | | 0.61 | | 0.12552458 | | <0.49 | |
| Limit(s) in Effect | Monthly Avg | | | | | | | | 57 | 0 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 194 | 0 | 0.22 | 0 | 18 | 0 | | 57 | 0 | |
| | Daily Min | | | | | | | | | | |
| QA/QC Information | LOD | 2.1 | | | | 0.2 | | | | 0.49 | |
| | LOQ | 5 | | | | 0.5 | | | | 1 | |
| | QC Exceedance | N | | N | | N | | N | | N | |
| | Lab Certification | 999580010 | | | | 999580010 | | | | 999580010 | |

| | | | | | | | |
|-----------------------|---------------------|-------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|----------|
| | Sample Point | 004 | 004 | 004 | 004 | 004 | |
| | Description | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | |
| | Parameter | 87 | 147 | 147 | 315 | 315 | |
| | Description | Cadmium, Total Recoverable | Copper, Total Recoverable | Copper, Total Recoverable | Nickel, Total Recoverable | Nickel, Total Recoverable | |
| | Units | lbs/day | ug/L | lbs/day | ug/L | lbs/day | |
| | Sample Type | CALCULATED | 24 HR FLOW PROP | CALCULATED | 24 HR FLOW PROP | CALCULATED | |
| | Frequency | MONTHLY | MONTHLY | MONTHLY | MONTHLY | MONTHLY | |
| Sample Results | Day 1 | | | | | | |
| | 2 | | | | | | |
| | 3 | | | | | | |
| | 4 | | | | | | |
| | 5 | | | | | | |
| | 6 | | | | | | |
| | 7 | | | | | | |
| | 8 | | | | | | |
| | 9 | | | | | | |
| | 10 | | | | | | |
| | 11 | | | | | | |
| | 12 | | | | | | |
| | | 13 | 0.0001911 | 2.3 | 0.000897 | 3.3 | 0.001287 |
| | | 14 | | | | | |
| | | 15 | | | | | |
| | | 16 | | | | | |
| | | 17 | | | | | |
| | | 18 | | | | | |
| | | 19 | | | | | |
| | | 20 | | | | | |
| | | 21 | | | | | |
| | | 22 | | | | | |
| | | 23 | | | | | |
| | | 24 | | | | | |
| | | 25 | | | | | |
| | | 26 | | | | | |
| | | 27 | | | | | |
| | | 28 | | | | | |
| | | 29 | | | | | |
| | | 30 | | | | | |
| | | 31 | | | | | |

| | Sample Point | 004 | | 004 | | 004 | | 004 | | 004 | |
|---------------------------|-------------------|-------------------------------|---|------------------------------|---|------------------------------|---|------------------------------|---|------------------------------|---|
| | Description | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | |
| | Parameter | 87 | | 147 | | 147 | | 315 | | 315 | |
| | Description | Cadmium, Total Recoverable | | Copper, Total Recoverable | | Copper, Total Recoverable | | Nickel, Total Recoverable | | Nickel, Total Recoverable | |
| | Units | lbs/day | | ug/L | | lbs/day | | ug/L | | lbs/day | |
| Summary Values | Monthly Avg | 0.0001911 | | 2.3 | | 0.000897 | | 3.3 | | 0.001287 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 0.0001911 | | 2.3 | | 0.000897 | | 3.3 | | 0.001287 | |
| | Daily Min | 0.0001911 | | 2.3 | | 0.000897 | | 3.3 | | 0.001287 | |
| Limit(s) in Effect | Monthly Avg | | | 69 | 0 | | | 2000 | 0 | | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 0.23 | 0 | 69 | 0 | 0.28 | 0 | 2000 | 0 | 8.1 | 0 |
| | Daily Min | | | | | | | | | | |
| QA/QC Information | LOD | | | 1.7 | | | | 1.5 | | | |
| | LOQ | | | 5 | | | | 5 | | | |
| | QC Exceedance | N | | N | | N | | N | | N | |
| | Lab Certification | | | 999580010 | | | | 999580010 | | | |

| | | | | | | | |
|-----------------------|---------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----|
| | Sample Point | 004 | 004 | 004 | 004 | 004 | |
| | Description | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | |
| | Parameter | 553 | 553 | 152 | 152 | 231 | |
| | Description | Zinc, Total Recoverable | Zinc, Total Recoverable | Cyanide, Amenable | Cyanide, Amenable | Hardness, Total as CaCO3 | |
| | Units | ug/L | lbs/day | ug/L | lbs/day | mg/L | |
| | Sample Type | 24 HR FLOW PROP | CALCULATED | 24 HR FLOW PROP | CALCULATED | 24 HR FLOW PROP | |
| | Frequency | MONTHLY | MONTHLY | MONTHLY | MONTHLY | MONTHLY | |
| Sample Results | Day 1 | | | | | | |
| | 2 | | | | | | |
| | 3 | | | | | | |
| | 4 | | | | | | |
| | 5 | | | | | | |
| | 6 | | | | | | |
| | 7 | | | | | | |
| | 8 | | | | | | |
| | 9 | | | | | | |
| | 10 | | | | | | |
| | 11 | | | | | | |
| | 12 | | | | | | |
| | 13 | | 20 | 0.0078 | <5.0 | 0.00195 | 280 |
| | 14 | | | | | | |
| | 15 | | | | | | |
| | 16 | | | | | | |
| | 17 | | | | | | |
| | 18 | | | | | | |
| | 19 | | | | | | |
| | 20 | | | | | | |
| | 21 | | | | | | |
| | 22 | | | | | | |
| | 23 | | | | | | |
| | 24 | | | | | | |
| | 25 | | | | | | |
| | 26 | | | | | | |
| | 27 | | | | | | |
| | 28 | | | | | | |
| | 29 | | | | | | |
| | 30 | | | | | | |
| | 31 | | | | | | |

| | | | | | | | | | | | |
|---------------------------|--------------------------|-----------------------------|---|-----------------------------|---|-----------------------------|---|-----------------------------|---|-----------------------------|--|
| | Sample Point | 004 | | 004 | | 004 | | 004 | | 004 | |
| | Description | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | |
| | Parameter | 553 | | 553 | | 152 | | 152 | | 231 | |
| | Description | Zinc, Total Recoverable | | Zinc, Total Recoverable | | Cyanide, Amenable | | Cyanide, Amenable | | Hardness, Total as CaCO3 | |
| | Units | ug/L | | lbs/day | | ug/L | | lbs/day | | mg/L | |
| Summary Values | Monthly Avg | 20 | | 0.0078 | | 0 | | 0.00195 | | 280 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 20 | | 0.0078 | | <5 | | 0.00195 | | 280 | |
| | Daily Min | 20 | | 0.0078 | | <5 | | 0.00195 | | 280 | |
| Limit(s) in Effect | Monthly Avg | 520 | 0 | | | 92 | 0 | | | | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 520 | 0 | 2.1 | 0 | 92 | 0 | 0.37 | 0 | | |
| | Daily Min | | | | | | | | | | |
| QA/QC Information | LOD | 3.6 | | | | 3.6 | | | | | |
| | LOQ | 10 | | | | 5 | | | | | |
| | QC Exceedance | N | | N | | N | | N | | N | |
| | Lab Certification | 999580010 | | | | 999580010 | | | | 999580010 | |

| | | | | | | |
|-----------------------|---------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|----------------|
| | Sample Point | 004 | 004 | 004 | 004 | 108 |
| | Description | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | Combined Process WW & GW | GWCTS Effluent |
| | Parameter | 480 | 1352 | 1353 | 1353 | 211 |
| | Description | Temperature Maximum | PFOA | PFOS | PFOS | Flow Rate |
| | Units | degF | ng/L | ng/L | mg/day | MGD |
| | Sample Type | MEASURE | 24 HR FLOW PROP | 24 HR FLOW PROP | CALCULATED | CONTINUOUS |
| | Frequency | WEEKLY | MONTHLY | MONTHLY | MONTHLY | DAILY |
| Sample Results | Day 1 | 86 | | | | 0.019295 |
| | 2 | 92 | | | | 0.000750 |
| | 3 | 90 | | | | 0 |
| | 4 | | | | | 0 |
| | 5 | 84 | | | | 0.013800 |
| | 6 | 80 | | | | 0.016105 |
| | 7 | 87 | | | | 0.005925 |
| | 8 | 84 | | | | 0.016615 |
| | 9 | 82 | | | | 0.005275 |
| | 10 | 81 | | | | 0 |
| | 11 | | | | | 0 |
| | 12 | 85 | | | | 0.013640 |
| | 13 | 87 | 6.7 | 1.2 | 0.2131644 | 0.018070 |
| | 14 | 88 | | | | 0.009265 |
| | 15 | 86 | | | | 0 |
| | 16 | 85 | | | | 0.001885 |
| | 17 | 84 | | | | 0 |
| | 18 | | | | | 0 |
| | 19 | 83 | | | | 0.007535 |
| | 20 | 79 | | | | 0.015100 |
| | 21 | 79 | | | | 0.014090 |
| | 22 | 82 | | | | 0.013175 |
| | 23 | 81 | | | | 0.014590 |
| | 24 | 85 | | | | 0.013520 |
| | 25 | | | | | 0.007950 |
| | 26 | 91 | | | | 0.006820 |
| | 27 | 87 | | | | 0.015840 |
| | 28 | 83 | | | | 0.012020 |
| | 29 | 81 | | | | 0.012245 |
| | 30 | 85 | | | | 0.008545 |
| | 31 | | | | | 0 |

| | | | | | | | | | | | |
|---------------------------|--------------------------|-----------------------------|--|-----------------------------|--|-----------------------------|---|-----------------------------|---|----------------|--|
| | Sample Point | 004 | | 004 | | 004 | | 004 | | 108 | |
| | Description | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | Combined Process WW & GW | | GWCTS Effluent | |
| | Parameter | 480 | | 1352 | | 1353 | | 1353 | | 211 | |
| | Description | Temperature Maximum | | PFOA | | PFOS | | PFOS | | Flow Rate | |
| | Units | degF | | ng/L | | ng/L | | mg/day | | MGD | |
| Summary Values | Monthly Avg | 84.5 | | 6.7 | | 1.2 | | 0.2131644 | | 0.008453387 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | 92 | | 6.7 | | 1.2 | | 0.2131644 | | 0.019295 | |
| | Daily Min | 79 | | 6.7 | | 1.2 | | 0.2131644 | | 0 | |
| Limit(s) in Effect | Monthly Avg | | | | | 11 | 0 | 2.1 | 0 | | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | | | | | 11 | 0 | | | | |
| | Daily Min | | | | | | | | | | |
| QA/QC Information | LOD | | | 0.72 | | 0.45 | | | | | |
| | LOQ | | | 1.7 | | 1.7 | | | | | |
| | QC Exceedance | N | | N | | N | | N | | N | |
| | Lab Certification | | | 998204680 | | 998204680 | | | | | |

| | | | | | | |
|-----------------------|---------------------|-------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| | Sample Point | 108 | 108 | 108 | 108 | 108 |
| | Description | GWCTS Effluent | GWCTS Effluent | GWCTS Effluent | GWCTS Effluent | GWCTS Effluent |
| | Parameter | 457 | 35 | 35 | 280 | 280 |
| | Description | Suspended Solids, Total | Arsenic, Total Recoverable | Arsenic, Total Recoverable | Mercury, Total Recoverable | Mercury, Total Recoverable |
| | Units | mg/L | ug/L | lbs/day | ng/L | mg/day |
| | Sample Type | 24 HR FLOW PROP | 24 HR FLOW PROP | CALCULATED | 24 HR FLOW PROP | CALCULATED |
| | Frequency | WEEKLY | WEEKLY | WEEKLY | MONTHLY | MONTHLY |
| Sample Results | Day 1 | <1.9 | 2.8 | 0.001204 | | |
| | 2 | | | | | |
| | 3 | | | | | |
| | 4 | | | | | |
| | 5 | | | | | |
| | 6 | | | | | |
| | 7 | | | | | |
| | 8 | | | | | |
| | 9 | | | | | |
| | 10 | | | | | |
| | 11 | | | | | |
| | 12 | | | | | |
| | 13 | <1.9 | <2.1 | 0.000315 | | |
| | 14 | | | | | |
| | 15 | | | | | |
| | 16 | | | | | |
| | 17 | | | | | |
| | 18 | | | | | |
| | 19 | | | | | |
| | 20 | <1.9 | <2.1 | 0.000273 | | |
| | 21 | | | | 0.46 | 0.02456446 |
| | 22 | | | | | |
| | 23 | | | | | |
| | 24 | | | | | |
| | 25 | | | | | |
| | 26 | | | | | |
| | 27 | <1.9 | <2.1 | 0.000273 | | |
| | 28 | | | | | |
| | 29 | | | | | |
| | 30 | | | | | |
| | 31 | | | | | |

| | | | | | | | | | | | |
|---------------------------|--------------------------|-------------------------|--|----------------------------|---|----------------------------|---|----------------------------|---|----------------------------|--|
| | Sample Point | 108 | | 108 | | 108 | | 108 | | 108 | |
| | Description | GWCTS Effluent | | GWCTS Effluent | | GWCTS Effluent | | GWCTS Effluent | | GWCTS Effluent | |
| | Parameter | 457 | | 35 | | 35 | | 280 | | 280 | |
| | Description | Suspended Solids, Total | | Arsenic, Total Recoverable | | Arsenic, Total Recoverable | | Mercury, Total Recoverable | | Mercury, Total Recoverable | |
| | Units | mg/L | | ug/L | | lbs/day | | ng/L | | mg/day | |
| Summary Values | Monthly Avg | 0 | | 0.7 | | 0.00051625 | | 0.46 | | 0.02456446 | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | <1.9 | | 2.8 | | 0.001204 | | 0.46 | | 0.02456446 | |
| | Daily Min | <1.9 | | <2.1 | | 0.000273 | | 0.46 | | 0.02456446 | |
| Limit(s) in Effect | Monthly Avg | | | | | | | | | | |
| | Monthly Total | | | | | | | | | | |
| | Daily Max | | | 500 | 0 | 0.17 | 0 | 24 | 0 | | |
| | Daily Min | | | | | | | | | | |
| QA/QC Information | LOD | | | 2.1 | | | | 0.2 | | | |
| | LOQ | | | 5 | | | | 0.5 | | | |
| | QC Exceedance | N | | N | | N | | N | | N | |
| | Lab Certification | 999580010 | | 999580010 | | | | 999580010 | | | |

| | | | |
|-----------------------|---------------------|-----------------|-----------------|
| | Sample Point | 108 | 108 |
| | Description | GWCTS Effluent | GWCTS Effluent |
| | Parameter | 1352 | 1353 |
| | Description | PFOA | PFOS |
| | Units | ng/L | ng/L |
| | Sample Type | 24 HR FLOW PROP | 24 HR FLOW PROP |
| | Frequency | MONTHLY | MONTHLY |
| Sample Results | Day 1 | <0.79 | <0.50 |
| | 2 | | |
| | 3 | | |
| | 4 | | |
| | 5 | | |
| | 6 | | |
| | 7 | | |
| | 8 | | |
| | 9 | | |
| | 10 | | |
| | 11 | | |
| | 12 | | |
| | 13 | | |
| | 14 | | |
| | 15 | | |
| | 16 | | |
| | 17 | | |
| | 18 | | |
| | 19 | | |
| | 20 | | |
| | 21 | | |
| | 22 | | |
| | 23 | | |
| | 24 | | |
| | 25 | | |
| | 26 | | |
| | 27 | | |
| | 28 | | |
| | 29 | | |
| | 30 | | |
| | 31 | | |

| | | | |
|---------------------------|--------------------------|----------------|----------------|
| | Sample Point | 108 | 108 |
| | Description | GWCTS Effluent | GWCTS Effluent |
| | Parameter | 1352 | 1353 |
| | Description | PFOA | PFOS |
| | Units | ng/L | ng/L |
| Summary Values | Monthly Avg | 0 | 0 |
| | Monthly Total | | |
| | Daily Max | <0.79 | <0.5 |
| | Daily Min | <0.79 | <0.5 |
| Limit(s) in Effect | Monthly Avg | | |
| | Monthly Total | | |
| | Daily Max | | |
| | Daily Min | | |
| QA/QC Information | LOD | 0.79 | 0.5 |
| | LOQ | 1.9 | 1.9 |
| | QC Exceedance | N | N |
| | Lab Certification | 998204680 | 998204680 |

Footnotes (DNR Use Only; Instructions for completing this form that are unique for your facility may be displayed here.)

General Remarks

Laboratory Quality Control Comments

OF004 had low pH issues a few times but nothing went out because the system goes into recycle.

Exceedence Comments

when the pH probe hits 6.0 it goes in recycle so nothing went out. Still working on this issue.

Submitted by Anne Fleury(afleury16) on 9/17/2024 12:34:21 PM

Attachment 3

2024 PDP Groundwater Elevation Monitoring

Attachment 3. 2024 Pump Down Program Groundwater Elevation Monitoring
Tyco Fire Products LP, Marinette, Wisconsin

| | |
|------------------|-------|
| Target Elevation | 577.9 |
|------------------|-------|

| Well ID | Mean Conductivity (mS/cm-measured) Last 5 Years | January 3, 2024 | | January 8, 2024 | | January 23, 2024 | | January 30, 2024 | | February 6, 2024 | | February 13, 2024 | | February 19, 2024 | | February 27, 2024 | | March 4, 2024 | | March 12, 2024 | | March 20, 2024 | | March 26, 2024 | | April 2, 2024 | |
|---|---|-----------------|--|-----------------|--|------------------|--|------------------|--|------------------|--|-------------------|--|-------------------|--|-------------------|--|---------------|--|----------------|--|----------------|--|----------------|--|---------------|--|
| | | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) |
| Wells Inside Former Salt Vault | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW001M | 6.394 | 10.42 | 576.72 | 10.20 | 576.94 | 9.78 | 577.36 | 10.47 | 576.67 | 10.17 | 576.97 | 9.94 | 577.20 | 10.22 | 576.92 | 10.62 | 576.52 | 10.79 | 576.35 | 10.84 | 576.30 | 10.85 | 576.29 | 10.53 | 576.61 | 10.70 | 576.44 |
| MW001S | 6.023 | 10.68 | 576.53 | 10.43 | 576.78 | 9.88 | 577.33 | 10.75 | 576.46 | 10.41 | 576.80 | 10.18 | 577.03 | 10.89 | 576.32 | 10.91 | 576.30 | 11.08 | 576.13 | 11.14 | 576.07 | 11.10 | 576.11 | 10.77 | 576.44 | 10.97 | 576.24 |
| MW002M-R | 14.800 | 13.73 | 576.67 | 13.53 | 576.87 | 13.10 | 577.31 | 13.76 | 576.64 | 13.51 | 576.89 | 13.26 | 577.14 | 13.94 | 576.46 | 13.90 | 576.50 | 14.14 | 576.26 | 14.17 | 576.23 | 14.14 | 576.26 | 13.90 | 576.50 | 14.02 | 576.38 |
| MW002S-R | 3.467 | 13.66 | 576.62 | 13.46 | 576.82 | 13.03 | 577.25 | 13.67 | 576.61 | 13.43 | 576.85 | 13.19 | 577.09 | 13.87 | 576.41 | 13.89 | 576.39 | 14.08 | 576.20 | 14.11 | 576.17 | 14.08 | 576.20 | 13.85 | 576.43 | 13.97 | 576.31 |
| MW031M | 8.950 | 11.16 | 576.80 | 10.98 | 576.98 | 10.49 | 577.47 | 11.23 | 576.73 | 10.90 | 577.06 | 10.69 | 577.27 | 11.46 | 576.49 | 11.49 | 576.46 | 11.61 | 576.34 | 11.69 | 576.26 | 11.63 | 576.32 | 11.26 | 576.70 | 11.46 | 576.49 |
| MW031S | 1.014 | 12.35 | 576.52 | 12.08 | 576.79 | 11.62 | 577.25 | 11.57 | 577.30 | 11.17 | 577.70 | 11.23 | 577.64 | 11.80 | 577.07 | 12.11 | 576.76 | 12.47 | 576.40 | 12.67 | 576.20 | 12.73 | 576.14 | 12.66 | 576.21 | 12.67 | 576.20 |
| MW113S | 0.791 | 13.60 | 576.66 | 13.39 | 576.87 | 12.96 | 577.30 | 13.55 | 576.71 | 13.33 | 576.93 | 13.12 | 577.14 | 13.77 | 576.49 | 13.77 | 576.49 | 13.96 | 576.30 | 14.00 | 576.26 | 14.02 | 576.24 | 13.76 | 576.50 | 13.87 | 576.39 |
| MW113M | 0.742 | 11.77 | 578.46 | 11.69 | 578.54 | 11.46 | 578.77 | 11.58 | 578.65 | 11.48 | 578.75 | 11.37 | 578.86 | 11.81 | 578.42 | 11.84 | 578.39 | 11.91 | 578.32 | 11.96 | 578.27 | 12.04 | 578.19 | 11.59 | 578.64 | 11.74 | 578.49 |
| MW115P | 1.909 | 12.29 | 576.78 | 12.18 | 576.89 | 11.76 | 577.31 | 11.73 | 577.34 | 11.76 | 577.31 | 11.51 | 577.56 | 12.15 | 576.92 | 12.33 | 576.74 | 12.51 | 576.56 | 12.59 | 576.48 | 12.54 | 576.53 | 12.29 | 576.78 | 12.42 | 576.65 |
| MW115S | 1.335 | 12.43 | 576.52 | 12.17 | 576.78 | 11.71 | 577.24 | 11.74 | 577.21 | 12.18 | 576.77 | 11.91 | 577.04 | 12.70 | 576.25 | 12.69 | 576.26 | 12.88 | 576.07 | 12.90 | 576.05 | 12.92 | 576.03 | 12.57 | 576.38 | 12.65 | 576.30 |
| MW116P | 4.295 | 12.95 | 576.90 | 12.94 | 576.91 | 12.90 | 576.95 | 12.70 | 577.15 | 12.86 | 576.99 | 12.79 | 577.06 | 12.82 | 577.03 | 12.84 | 577.01 | 12.89 | 576.96 | 12.90 | 576.95 | 12.91 | 576.94 | 12.82 | 577.03 | 12.84 | 577.01 |
| MW116S | 1.716 | 13.28 | 576.55 | 13.03 | 576.80 | 12.58 | 577.25 | 13.02 | 576.81 | 13.17 | 576.66 | 12.78 | 577.05 | 13.61 | 576.22 | 13.54 | 576.29 | 13.79 | 576.04 | 13.81 | 576.02 | 13.75 | 576.08 | 13.50 | 576.33 | 13.59 | 576.24 |
| MW119D | 6.257 | 9.33 | 579.39 | 9.36 | 579.36 | 9.42 | 579.30 | 9.41 | 579.31 | 9.41 | 579.31 | 9.40 | 579.32 | 9.44 | 579.28 | 9.45 | 579.27 | 9.51 | 579.21 | 9.52 | 579.20 | 9.58 | 579.14 | 9.56 | 579.16 | 9.54 | 579.18 |
| EW-3 | No Data | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EW-10 | No Data | 10.38 | 576.67 | 10.24 | 576.81 | 9.77 | 577.28 | 10.31 | 576.74 | 10.07 | 576.98 | 9.90 | 577.15 | 10.68 | 576.37 | 10.73 | 576.32 | 10.87 | 576.18 | 10.96 | 576.09 | 10.81 | 576.24 | 10.52 | 576.53 | 10.68 | 576.37 |
| EW-11 | 3.066 | 9.36 | 577.32 | 9.21 | 577.47 | 8.76 | 577.92 | 9.23 | 577.45 | 9.01 | 577.67 | 8.86 | 577.82 | 9.44 | 577.24 | 9.49 | 577.19 | 9.64 | 577.04 | 9.66 | 577.02 | 9.71 | 576.97 | 9.34 | 577.34 | 9.49 | 577.19 |
| EW-13 | 5.580 | 8.46 | 576.65 | 8.38 | 576.73 | 7.89 | 577.22 | 8.33 | 576.78 | 8.15 | 576.96 | 8.00 | 577.11 | 8.72 | 576.39 | 8.78 | 576.33 | 8.90 | 576.21 | 9.00 | 576.10 | 8.82 | 576.29 | 8.63 | 576.48 | 8.61 | 576.50 |
| EW-14 | 5.011 | 9.43 | 576.64 | 9.30 | 576.77 | 8.81 | 577.27 | 9.57 | 576.50 | 9.25 | 576.82 | 8.97 | 577.11 | 9.80 | 576.27 | 9.82 | 576.25 | 9.97 | 576.10 | 10.02 | 576.05 | 9.89 | 576.18 | 9.60 | 576.47 | 9.77 | 576.30 |
| Wells Inside Former 8th Street Slip | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW034M | 0.53 | 12.42 | 575.80 | 11.94 | 576.28 | 11.71 | 576.51 | 11.66 | 576.56 | 12.37 | 575.85 | 12.38 | 575.84 | 12.79 | 575.43 | 12.65 | 575.57 | 13.13 | 575.09 | 13.08 | 575.14 | 13.34 | 574.88 | 13.14 | 575.08 | 13.16 | 575.06 |
| MW034S | 1.991 | 12.61 | 575.57 | 12.27 | 576.17 | 12.01 | 576.17 | 11.95 | 576.23 | 12.53 | 575.65 | 12.56 | 575.62 | 12.99 | 575.19 | 12.82 | 575.36 | 13.42 | 574.76 | 13.37 | 574.81 | 13.60 | 574.58 | 13.46 | 574.72 | 13.47 | 574.71 |
| MW036M | 30.975 | 12.79 | 575.70 | 12.78 | 575.71 | 12.53 | 575.97 | 12.69 | 575.81 | 12.86 | 575.63 | 12.95 | 575.54 | 13.33 | 575.16 | 13.37 | 575.12 | 13.65 | 574.83 | 13.75 | 574.73 | 13.83 | 574.65 | 13.85 | 574.63 | 13.94 | 574.54 |
| MW036S | 0.921 | 12.30 | 575.95 | 12.30 | 575.95 | 12.05 | 576.20 | 12.18 | 576.07 | 12.38 | 575.87 | 12.45 | 575.80 | 12.87 | 575.38 | 12.83 | 575.42 | 13.19 | 575.06 | 13.31 | 574.94 | 13.41 | 574.84 | 13.39 | 574.86 | 13.46 | 574.79 |
| MW038M | 0.124 | 10.06 | 576.08 | 10.08 | 576.06 | 9.88 | 576.26 | 10.16 | 575.98 | 10.27 | 575.87 | 10.33 | 575.81 | 10.82 | 575.32 | 10.94 | 575.20 | 11.11 | 575.03 | 11.31 | 574.83 | 11.24 | 574.90 | 11.29 | 574.85 | 11.51 | 574.63 |
| MW038S | 1.213 | 11.78 | 576.04 | 11.79 | 576.03 | 11.58 | 576.24 | 11.95 | 575.87 | 12.02 | 575.80 | 12.10 | 575.72 | 12.57 | 575.25 | 12.67 | 575.15 | 12.93 | 574.89 | 13.06 | 574.76 | 12.98 | 574.84 | 13.08 | 574.74 | 13.27 | 574.55 |
| MW120D | 11.349 | 9.14 | 579.63 | 9.12 | 579.65 | 9.06 | 579.71 | 9.11 | 579.66 | 9.12 | 579.65 | 9.11 | 579.66 | 9.16 | 579.61 | 9.29 | 579.47 | 8.99 | 579.78 | 9.32 | 579.44 | 9.76 | 579.00 | 9.65 | 579.11 | 9.73 | 579.03 |
| MW120M | 28.409 | 13.09 | 575.73 | 13.08 | 575.74 | 12.89 | 575.94 | 12.77 | 576.06 | 12.96 | 575.86 | 12.99 | 575.83 | 13.31 | 575.51 | 13.21 | 575.61 | 13.57 | 575.25 | 13.59 | 575.23 | 13.87 | 574.94 | 13.70 | 575.11 | 13.32 | 575.50 |
| MW120S | 2.867 | 12.36 | 576.16 | 12.49 | 576.03 | 12.35 | 576.17 | 12.12 | 576.40 | 12.16 | 576.36 | 12.13 | 576.39 | 12.42 | 576.10 | 12.32 | 576.20 | 12.64 | 575.88 | 12.58 | 575.94 | 12.95 | 575.57 | 12.65 | 575.87 | 12.45 | 576.07 |
| EW-2 | No Data | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EW-8 | No Data | 8.21 | 575.89 | 8.17 | 575.93 | 7.98 | 576.12 | 10.68 | 573.41 | 10.69 | 573.40 | 10.70 | 573.39 | 12.13 | 571.96 | 11.92 | 572.17 | 12.09 | 572.00 | 12.33 | 571.76 | 12.45 | 571.64 | 12.11 | 571.98 | 12.80 | 571.29 |
| EW-9 | 4.234 | 10.04 | 573.32 | 9.51 | 573.85 | 7.19 | 576.17 | 7.18 | 576.18 | 12.60 | 570.75 | 12.16 | 571.19 | 13.50 | 569.85 | 13.23 | 570.12 | 14.44 | 568.91 | 12.71 | 570.64 | 13.41 | 569.94 | 13.02 | 570.33 | 13.21 | 570.14 |
| Wells Outside Pump Down Program Area | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW004M | No Data | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW004S | 1.813 | 5.75 | 582.99 | 5.88 | 582.86 | 6.09 | 582.65 | 5.56 | 583.18 | 5.41 | 583.33 | 5.30 | 583.44 | 5.38 | 583.36 | 5.47 | 583.27 | 5.62 | 583.12 | 5.52 | 583.22 | 5.84 | 582.90 | 5.29 | 583.45 | 5.14 | 583.60 |
| MW032M | 7.113 | 6.84 | 581.47 | 6.86 | 581.45 | 7.08 | 581.23 | 6.55 | 581.76 | 6.52 | 581.79 | 6.49 | 581.82 | 6.76 | 581.55 | 6.77 | 581.54 | 6.75 | 581.56 | 6.79 | 581.52 | 7.11 | 581.20 | 6.40 | 581.91 | 6.37 | 581.94 |
| MW032S | 2.508 | 5.54 | 582.95 | 5.75 | 582.74 | 6.02 | 582.47 | 5.13 | 583.36 | 5.19 | 583.30 | 5.15 | 583.34 | 5.45 | 583.04 | 5.52 | 582.97 | 5.58 | 582.91 | 5.47 | 583.02 | 5.84 | 582.65 | 4.91 | 583.58 | 4.92 | 583.57 |
| MW033M | 10.388 | 4.52 | 582.87 | 4.65 | 582.74 | 4.85 | 582.54 | 4.28 | 583.11 | 4.16 | 583.23 | 4.07 | 583.32 | 4.22 | 583.17 | 4.29 | 583.10 | 4.43 | 582.96 | 4.32 | 583.07 | 4.62 | 582.77 | 4.03 | 583.36 | 3.88 | 583.51 |
| MW033S | 1.087 | 4.32 | 583.00 | 4.47 | 582.85 | 4.68 | 582.64 | 4.10 | 583.22 | 3.98 | 583.34 | 3.87 | 583.45 | 4.02 | 583.30 | 4.11 | 583.21 | 4.23 | 583.09 | 4.16 | 583.16 | 4.43 | 582.89 | 3.89 | 583.43 | 3.72 | 583.60 |
| MW039M | No Data | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW039S | 1.786 | 3.20 | 583.00 | 3.32 | 582.88 | 3.52 | 582.68 | 3.09 | 583.11 | 2.85 | 583.35 | 2.72 | 583.48 | 2.82 | 583.38 | 2.90 | 583.30 | 3.04 | 583.1 | | | | | | | | |

Attachment 3. 2024 Pump Down Program Groundwater Elevation Monitoring
 Tyco Fire Products LP, Marinette, Wisconsin

Target Elevation 577.9

| Well ID | Mean Conductivity (mS/cm-measured) Last 5 Years | April 9, 2024 | | April 16, 2024 | | April 23, 2024 | | April 30, 2024 | | May 7, 2024 | | May 14, 2024 | | May 21, 2024 | | May 28, 2024 | | June 5, 2024 | | June 11, 2024 | | June 17, 2024 | | July 16, 2024 | | August 7, 2024 | |
|---|---|---------------|--|----------------|--|----------------|--|----------------|--|-------------|--|--------------|--|--------------|--|--------------|--|--------------|--|---------------|--|---------------|--|---------------|--|----------------|--|
| | | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) |
| Wells Inside Former Salt Vault | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW001M | 6.394 | 10.52 | 576.62 | 10.65 | 576.49 | 10.34 | 576.80 | 10.55 | 576.59 | 10.52 | 576.62 | 10.31 | 576.83 | 10.42 | 576.72 | 10.38 | 576.76 | 9.85 | 577.29 | 10.05 | 577.09 | 10.14 | 577.00 | 9.39 | 577.75 | 9.71 | 577.43 |
| MW001S | 6.023 | 10.75 | 576.46 | 10.91 | 576.30 | 10.61 | 576.60 | 10.83 | 576.38 | 10.75 | 576.46 | 10.62 | 576.59 | 10.69 | 576.52 | 10.66 | 576.55 | 10.13 | 577.08 | 10.32 | 576.89 | 10.37 | 576.84 | 9.62 | 577.59 | 9.98 | 577.23 |
| MW002M-R | 14.800 | 13.87 | 576.53 | 13.97 | 576.43 | 13.67 | 576.73 | 13.95 | 576.45 | 13.81 | 576.59 | 13.64 | 576.76 | 13.72 | 576.68 | 13.73 | 576.67 | 13.20 | 577.20 | 13.39 | 577.01 | 13.46 | 576.94 | 12.69 | 577.72 | 13.03 | 577.38 |
| MW002S-R | 3.467 | 13.82 | 576.46 | 13.94 | 576.34 | 13.63 | 576.65 | 13.87 | 576.41 | 13.78 | 576.50 | 13.58 | 576.70 | 13.66 | 576.62 | 13.68 | 576.60 | 13.13 | 577.15 | 13.31 | 576.97 | 13.43 | 576.85 | 12.62 | 577.66 | 12.95 | 577.33 |
| MW031M | 8.950 | 11.27 | 576.68 | 11.47 | 576.48 | 11.03 | 576.93 | 11.33 | 576.62 | 11.33 | 576.62 | 11.73 | 576.22 | 11.78 | 576.17 | 11.73 | 576.22 | 10.61 | 577.35 | 10.83 | 577.13 | 10.95 | 577.01 | 10.99 | 577.87 | 10.50 | 577.46 |
| MW031S | 1.014 | 12.54 | 576.33 | 12.58 | 576.29 | 12.52 | 576.35 | 12.48 | 576.39 | 12.50 | 576.37 | 12.43 | 576.44 | 12.33 | 576.54 | 12.18 | 576.69 | 11.90 | 576.97 | 11.88 | 576.99 | 12.07 | 576.80 | 10.88 | 577.99 | 11.47 | 577.40 |
| MW113S | 0.791 | 13.73 | 576.53 | 13.83 | 576.43 | 13.53 | 576.73 | 13.77 | 576.49 | 13.73 | 576.53 | 13.49 | 576.77 | 13.52 | 576.74 | 13.59 | 576.67 | 13.06 | 577.20 | 13.21 | 577.05 | 13.37 | 576.89 | 12.54 | 577.72 | 12.88 | 577.38 |
| MW113M | 0.742 | 11.46 | 578.77 | 11.52 | 578.71 | 11.32 | 578.91 | 11.40 | 578.83 | 11.39 | 578.84 | 11.26 | 578.97 | 11.28 | 578.95 | 11.22 | 579.01 | 10.87 | 579.36 | 11.08 | 579.15 | 11.22 | 579.01 | 10.61 | 579.62 | 11.05 | 579.18 |
| MW115P | 1.909 | 12.13 | 576.94 | 11.06 | 578.01 | 10.84 | 578.23 | 11.39 | 577.68 | 11.57 | 577.50 | 11.54 | 577.53 | 11.66 | 577.41 | 11.56 | 577.51 | 11.26 | 577.81 | 11.48 | 577.59 | 11.61 | 577.46 | 11.78 | 577.29 | 11.23 | 577.84 |
| MW115S | 1.335 | 12.55 | 576.40 | 12.67 | 576.28 | 12.32 | 576.63 | 12.60 | 576.35 | 12.52 | 576.43 | 12.37 | 576.58 | 12.47 | 576.48 | 12.44 | 576.51 | 11.87 | 577.08 | 12.12 | 576.83 | 12.18 | 576.77 | 11.36 | 577.59 | 11.77 | 577.18 |
| MW116P | 4.295 | 12.59 | 577.26 | 12.69 | 577.16 | 12.61 | 577.24 | 12.59 | 577.26 | 12.67 | 577.18 | 12.58 | 577.27 | 12.48 | 577.37 | 12.43 | 577.42 | 12.27 | 577.58 | 12.27 | 577.58 | 12.22 | 577.63 | 11.80 | 578.05 | 11.81 | 578.04 |
| MW116S | 1.716 | 13.45 | 576.38 | 13.56 | 576.27 | 13.26 | 576.57 | 13.52 | 576.31 | 13.36 | 576.47 | 13.21 | 576.62 | 13.39 | 576.44 | 13.34 | 576.49 | 12.73 | 577.10 | 13.02 | 576.81 | 13.06 | 576.77 | 12.19 | 577.64 | 12.67 | 577.16 |
| MW119D | 6.257 | 9.51 | 579.21 | 9.52 | 579.20 | 9.46 | 579.26 | 9.38 | 579.34 | 9.36 | 579.36 | 9.28 | 579.44 | 9.23 | 579.49 | 9.14 | 579.58 | 9.09 | 579.63 | 9.04 | 579.68 | 9.01 | 579.71 | 8.74 | 579.98 | 8.64 | 580.08 |
| EW-3 | No Data | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| EW-10 | No Data | 10.32 | 576.73 | 10.62 | 576.43 | 10.13 | 576.92 | 10.32 | 576.73 | 10.24 | 576.81 | 9.94 | 577.11 | 9.83 | 577.22 | 9.74 | 577.31 | 9.37 | 577.68 | 9.59 | 577.46 | 9.58 | 577.47 | 9.37 | 577.68 | 9.70 | 577.35 |
| EW-11 | 3.066 | 9.28 | 577.40 | 9.40 | 577.28 | 9.11 | 577.57 | 9.31 | 577.37 | 9.23 | 577.45 | 9.06 | 577.62 | 9.15 | 577.53 | 9.12 | 577.56 | 8.65 | 578.03 | 8.85 | 577.83 | 8.92 | 577.76 | 8.23 | 578.45 | 8.62 | 578.06 |
| EW-13 | 5.580 | 8.37 | 576.74 | 8.71 | 576.40 | 8.30 | 576.81 | 8.59 | 576.52 | 8.64 | 576.47 | 8.43 | 576.68 | 8.52 | 576.59 | 8.42 | 576.69 | 7.95 | 577.16 | 8.15 | 576.96 | 8.17 | 576.94 | 7.42 | 577.69 | 7.82 | 577.29 |
| EW-14 | 5.011 | 9.52 | 576.55 | 9.77 | 576.30 | 9.31 | 576.76 | 9.64 | 576.43 | 9.62 | 576.45 | 9.40 | 576.67 | 9.53 | 576.54 | 9.47 | 576.60 | 8.86 | 577.22 | 9.17 | 576.90 | 9.28 | 576.79 | 8.33 | 577.75 | 8.81 | 577.27 |
| Wells Inside Former 8th Street Slip | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW034M | 0.53 | 13.04 | 575.18 | 12.39 | 575.83 | 12.24 | 575.98 | 12.12 | 576.10 | 12.04 | 576.18 | 11.96 | 576.26 | 12.61 | 575.61 | 12.56 | 575.66 | 12.31 | 575.91 | 12.49 | 575.73 | 12.18 | 576.04 | 11.33 | 576.89 | 12.01 | 576.21 |
| MW034S | 1.991 | 13.28 | 574.90 | 12.78 | 575.40 | 12.60 | 575.58 | 12.47 | 575.71 | 12.40 | 575.78 | 12.32 | 575.86 | 12.81 | 575.37 | 12.77 | 575.41 | 12.50 | 575.68 | 12.71 | 575.47 | 12.64 | 575.54 | 11.64 | 576.54 | 12.18 | 576.00 |
| MW036M | 30.975 | 13.82 | 574.66 | 13.67 | 574.81 | 13.40 | 575.09 | 13.33 | 575.16 | 13.25 | 575.24 | 13.14 | 575.35 | 13.15 | 575.34 | 12.86 | 575.63 | 12.50 | 576.00 | 12.64 | 575.86 | 12.87 | 575.62 | 12.93 | 575.56 | 12.49 | 576.01 |
| MW036S | 0.921 | 13.37 | 574.88 | 13.19 | 575.06 | 12.95 | 575.30 | 12.84 | 575.41 | 12.77 | 575.48 | 12.65 | 575.60 | 12.70 | 575.55 | 12.45 | 575.80 | 12.06 | 576.19 | 12.16 | 576.09 | 12.42 | 575.83 | 11.82 | 576.43 | 11.97 | 576.28 |
| MW038M | 0.124 | 11.30 | 574.84 | 11.24 | 574.90 | 10.88 | 575.26 | 10.84 | 575.30 | 10.69 | 575.45 | 10.61 | 575.53 | 10.52 | 575.62 | 10.02 | 576.12 | 9.54 | 576.60 | 9.73 | 576.41 | 10.13 | 576.01 | 9.66 | 576.48 | 9.81 | 576.33 |
| MW038S | 1.213 | 13.07 | 574.75 | 12.98 | 574.84 | 12.59 | 575.23 | 12.61 | 575.21 | 12.48 | 575.34 | 12.32 | 575.50 | 12.22 | 575.60 | 11.67 | 576.15 | 11.21 | 576.61 | 11.45 | 576.37 | 11.83 | 575.99 | 11.40 | 576.42 | 11.55 | 576.27 |
| MW120D | 11.349 | 8.97 | 579.80 | 8.70 | 580.07 | 9.00 | 579.77 | 8.48 | 580.29 | 8.28 | 580.49 | 8.44 | 580.33 | 8.42 | 580.35 | 8.39 | 580.38 | 8.22 | 580.55 | 8.24 | 580.53 | 8.05 | 580.72 | 8.25 | 580.52 | 7.99 | 580.78 |
| MW120M | 28.409 | 13.41 | 575.41 | 13.29 | 575.53 | 13.19 | 575.63 | 13.13 | 575.69 | 13.02 | 575.80 | 12.97 | 575.85 | 13.15 | 575.67 | 13.09 | 575.73 | 12.91 | 575.91 | 13.01 | 575.81 | 13.10 | 575.72 | 12.43 | 576.40 | 12.65 | 576.18 |
| MW120S | 2.867 | 12.21 | 576.31 | 12.35 | 576.17 | 12.22 | 576.30 | 12.25 | 576.27 | 12.14 | 576.38 | 12.17 | 576.35 | 12.20 | 576.32 | 12.23 | 576.29 | 12.06 | 576.46 | 12.16 | 576.36 | 12.22 | 576.30 | 11.73 | 576.79 | 11.86 | 576.66 |
| EW-2 | No Data | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| EW-8 | No Data | 12.15 | 571.94 | 12.74 | 571.35 | 12.27 | 571.82 | 12.49 | 571.60 | 12.51 | 571.58 | 12.43 | 571.66 | 12.47 | 571.62 | 8.20 | 575.90 | 7.70 | 576.40 | 11.17 | 572.92 | 8.42 | 575.68 | 11.31 | 572.78 | 11.04 | 573.05 |
| EW-9 | 4.234 | 13.05 | 570.30 | 7.95 | 575.41 | 7.74 | 575.62 | 7.62 | 575.74 | 7.67 | 575.69 | 7.52 | 575.84 | 7.35 | 575.84 | 12.35 | 571.00 | 12.38 | 570.97 | 12.12 | 571.23 | 13.74 | 569.61 | 7.86 | 575.50 | 7.81 | 575.55 |
| Wells Outside Pump Down Program Area | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW004M | No Data | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| MW004S | 1.813 | 4.55 | 584.19 | 4.72 | 584.02 | 4.49 | 584.25 | 4.36 | 584.38 | 4.35 | 584.39 | 4.30 | 584.44 | 4.37 | 584.37 | 4.06 | 584.68 | 4.02 | 584.72 | 4.39 | 584.35 | 4.68 | 584.06 | 4.32 | 584.42 | 5.28 | 583.46 |
| MW032M | 7.113 | 5.97 | 582.34 | 6.24 | 582.07 | 5.95 | 582.36 | 5.72 | 582.59 | 5.86 | 582.45 | 5.88 | 582.43 | 5.88 | 582.43 | 5.63 | 582.68 | 5.56 | 582.75 | 5.88 | 582.43 | 6.00 | 582.31 | 5.74 | 582.57 | 6.30 | 582.01 |
| MW032S | 2.508 | 4.40 | 584.09 | 4.80 | 583.69 | 4.43 | 584.06 | 4.24 | 584.25 | 4.37 | 584.12 | 4.43 | 584.06 | 4.46 | 584.03 | 4.03 | 584.46 | 4.15 | 584.34 | 5.55 | 582.94 | 4.79 | 583.70 | 4.55 | 583.94 | 5.46 | 583.03 |
| MW033M | 10.388 | 3.29 | 584.10 | 3.52 | 583.87 | 3.29 | 584.10 | 3.13 | 584.26 | 3.15 | 584.24 | 3.12 | 584.27 | 3.23 | 584.16 | 2.81 | 584.59 | 2.88 | 584.52 | 3.24 | 584.15 | 3.15 | 584.24 | 3.20 | 584.19 | 4.14 | 583.25 |
| MW033S | 1.087 | 3.11 | 584.21 | 3.36 | 583.96 | 3.20 | 584.12 | 2.94 | 584.38 | 4.38 | 582.94 | 4.14 | 583.18 | 3.01 | 584.31 | 3.53 | 583.79 | 3.24 | 584.08 | 3.05 | 584.27 | 3.33 | 583.99 | 2.98 | 584.34 | 3.99 | 583.33 |
| MW039M | No Data | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| MW039S | 1.786 | 1.98 | 584.22 | 2.14 | 584.06 | 1.91 | 584.29 | 1.76 | 584.44 | 1.76 | 584.44 | 1.73 | 584.47 | 1.78 | 584.42 | 1.44 | 584.76 | 1.43 | 584.77 | 1.79 | 584.41 | 2.08 | 584.12 | 1.75 | 584.45 | 2.69 | 583.51 |
| MW035M | No Data | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| MW035S | 1.692 | 5.78 | 581.87 | 5.89 | 581.76 | 5.84 | 581.81 | 5.64 | 582.01 | 5.76 | 581.89 | 5.82 | 581.83 | 5.83 | 581.82 | 5.64 | 582.01 | 5.74 | 581.91 | 5.97 | 581.68 | 6.20 | 581.45 | 6.07 | 581.58 | 7.48 | 580.17 |
| MW037M | No Data | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| MW037S | 1.264 | 4.89 | 582.18 | 5.07 | 582.00 | 5.00 | 582.07 | 4.83 | 582.24 | 4.97 | 582.10 | 4.99 | 582.08 | 5.02 | 582.05 | 4.78 | 582.29 | 4.94 | 582.13 | 5.16 | 581.91 | 5.48 | 581.59 | 5.28 | 581.79 | 5.03 | 582.04 |
| SG4 | No Data | 8.20 | 579.25 | 7.70 | 579.75 | 8.20 | 579.25 | 7.40 | 580.05 | 7.10 | | | | | | | | | | | | | | | | | |

Attachment 3. 2024 Pump Down Program Groundwater Elevation Monitoring

Tyco Fire Products LP, Marinette, Wisconsin

| Well ID | Mean Conductivity (mS/cm-measured) Last 5 Years | August 14, 2024 | | September 10, 2024 | |
|---|---|-----------------|--|--------------------|--|
| | | DTW | Corrected Groundwater Elevation (for equivalent fresh water) | DTW | Corrected Groundwater Elevation (for equivalent fresh water) |
| Wells Inside Former Salt Vault | | | | | |
| MW001M | 6.394 | 9.52 | 577.62 | 10.05 | 577.09 |
| MW001S | 6.023 | 9.71 | 577.50 | 10.28 | 576.93 |
| MW002M-R | 14.800 | 12.79 | 577.62 | 13.34 | 577.06 |
| MW002S-R | 3.467 | 12.74 | 577.54 | 13.28 | 577.00 |
| MW031M | 8.950 | 10.26 | 577.70 | 10.80 | 577.16 |
| MW031S | 1.014 | 11.50 | 577.37 | 11.80 | 577.07 |
| MW113S | 0.791 | 12.67 | 577.59 | 13.21 | 577.05 |
| MW113M | 0.742 | 11.06 | 579.17 | 11.55 | 578.68 |
| MW115P | 1.909 | 11.17 | 577.90 | 11.62 | 577.45 |
| MW115S | 1.335 | 11.50 | 577.45 | 12.04 | 576.91 |
| MW116P | 4.295 | 11.76 | 578.09 | 11.94 | 577.91 |
| MW116S | 1.716 | 12.33 | 577.50 | 12.93 | 576.90 |
| MW119D | 6.257 | 8.63 | 580.09 | 8.74 | 579.98 |
| EW-3 | No Data | | - | | - |
| EW-10 | No Data | 9.55 | 577.50 | 10.16 | 576.89 |
| EW-11 | 3.066 | 8.50 | 578.18 | 9.05 | 577.63 |
| EW-13 | 5.580 | 7.63 | 577.48 | 8.12 | 576.99 |
| EW-14 | 5.011 | 8.56 | 577.52 | 9.12 | 576.95 |
| Wells Inside Former 8th Street Slip | | | | | |
| MW034M | 0.53 | 12.17 | 576.05 | 12.17 | 576.05 |
| MW034S | 1.991 | 12.34 | 575.84 | 12.37 | 575.81 |
| MW036M | 30.975 | 12.67 | 575.83 | 12.90 | 575.59 |
| MW036S | 0.921 | 12.18 | 576.07 | 12.39 | 575.86 |
| MW038M | 0.124 | 10.06 | 576.08 | 10.38 | 575.76 |
| MW038S | 1.213 | 11.79 | 576.03 | 12.12 | 575.70 |
| MW120D | 11.349 | 8.29 | 580.48 | 8.52 | 580.25 |
| MW120M | 28.409 | 12.79 | 576.04 | 12.91 | 575.91 |
| MW120S | 2.867 | 11.99 | 576.53 | 12.10 | 576.42 |
| EW-2 | No Data | | - | | - |
| EW-8 | No Data | 11.34 | 572.75 | 11.86 | 572.23 |
| EW-9 | 4.234 | 11.43 | 571.92 | 10.34 | 573.01 |
| Wells Outside Pump Down Program Area | | | | | |
| MW004M | No Data | | - | | - |
| MW004S | 1.813 | 5.56 | 583.18 | 6.14 | 582.60 |
| MW032M | 7.113 | 6.60 | 581.71 | 6.20 | 582.11 |
| MW032S | 2.508 | 5.77 | 582.72 | 6.97 | 581.51 |
| MW033M | 10.388 | 4.43 | 582.96 | 4.97 | 582.41 |
| MW033S | 1.087 | 4.30 | 583.02 | 7.86 | 579.45 |
| MW039M | No Data | | - | | - |
| MW039S | 1.786 | 2.99 | 583.21 | 3.56 | 582.64 |
| MW035M | No Data | | - | | - |
| MW035S | 1.692 | 8.11 | 579.54 | 8.86 | 578.79 |
| MW037M | No Data | | - | | - |
| MW037S | 1.264 | 7.59 | 579.47 | 8.38 | 578.68 |
| SG4 | No Data | 7.22 | 580.23 | 7.40 | 580.05 |
| | Target Elevation Calc SV | | 577.71 | | 577.18 |
| | Target Elevation Calc 8SS | | 576.06 | | 575.89 |
| | Target Elevation (NAVD88) | | 577.90 | | 577.90 |
| | SV Variance | | -0.19 | | -0.72 |
| | 8SS Variance | | -1.84 | | -2.01 |

Notes:

Measurements were collected from top of casing (TOC). All depth measurements are in feet.

Elevations are reported in feet relative to the North American Vertical Datum 1988 (NAVD88)

Shaded/Bold = Well part of Target Elevation calculation

- = Information not applicable or not collected

Area Definitions - SV - former Salt Vault, 8SS - former 8th Street Slip

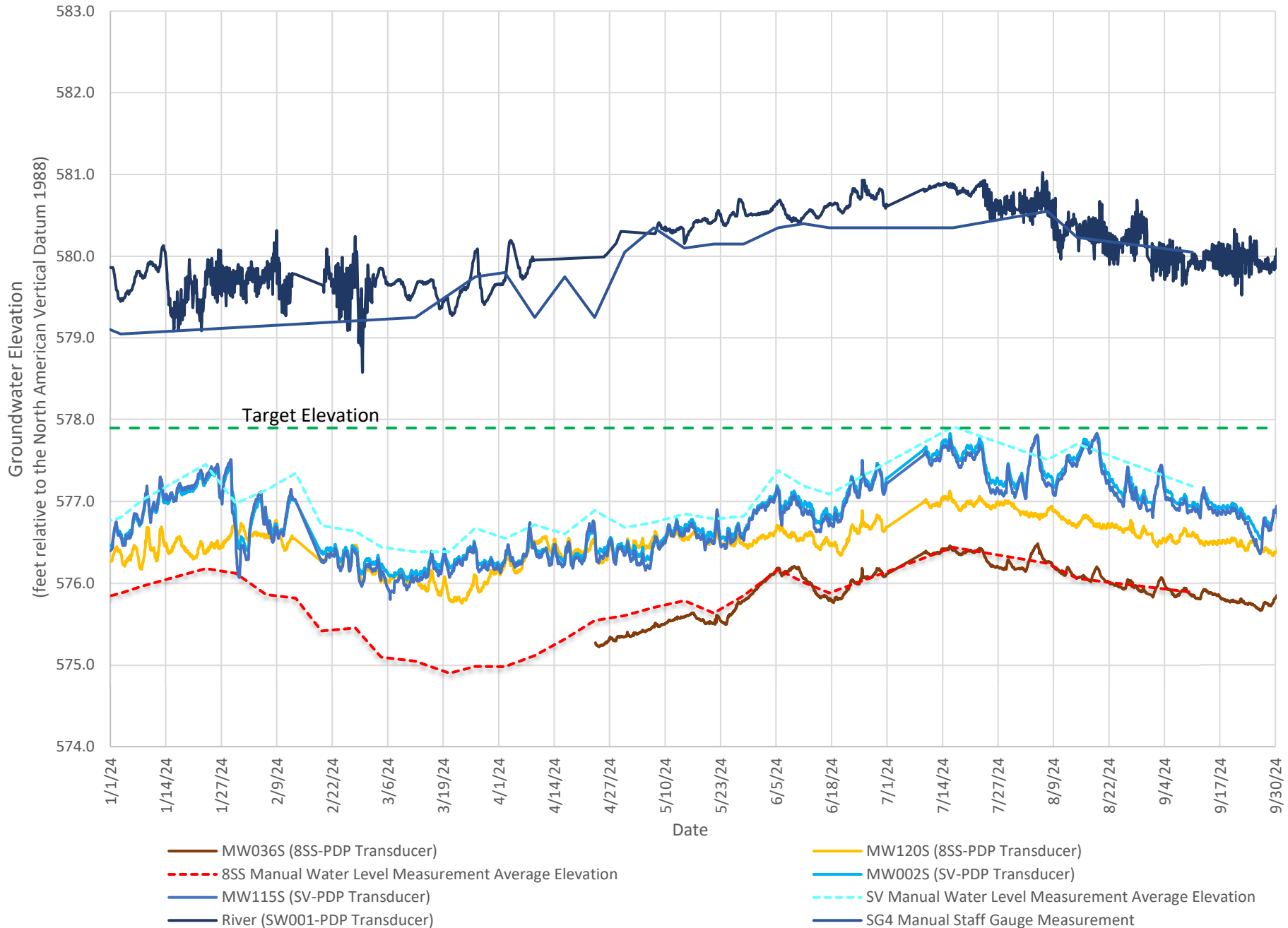
Corrected groundwater elevation is calculated using the 2024 calculated mean conductivity value (last 5 years of data)

ID = identification; DTW = depth to water

NM = Not Measured; MW = Monitoring Well

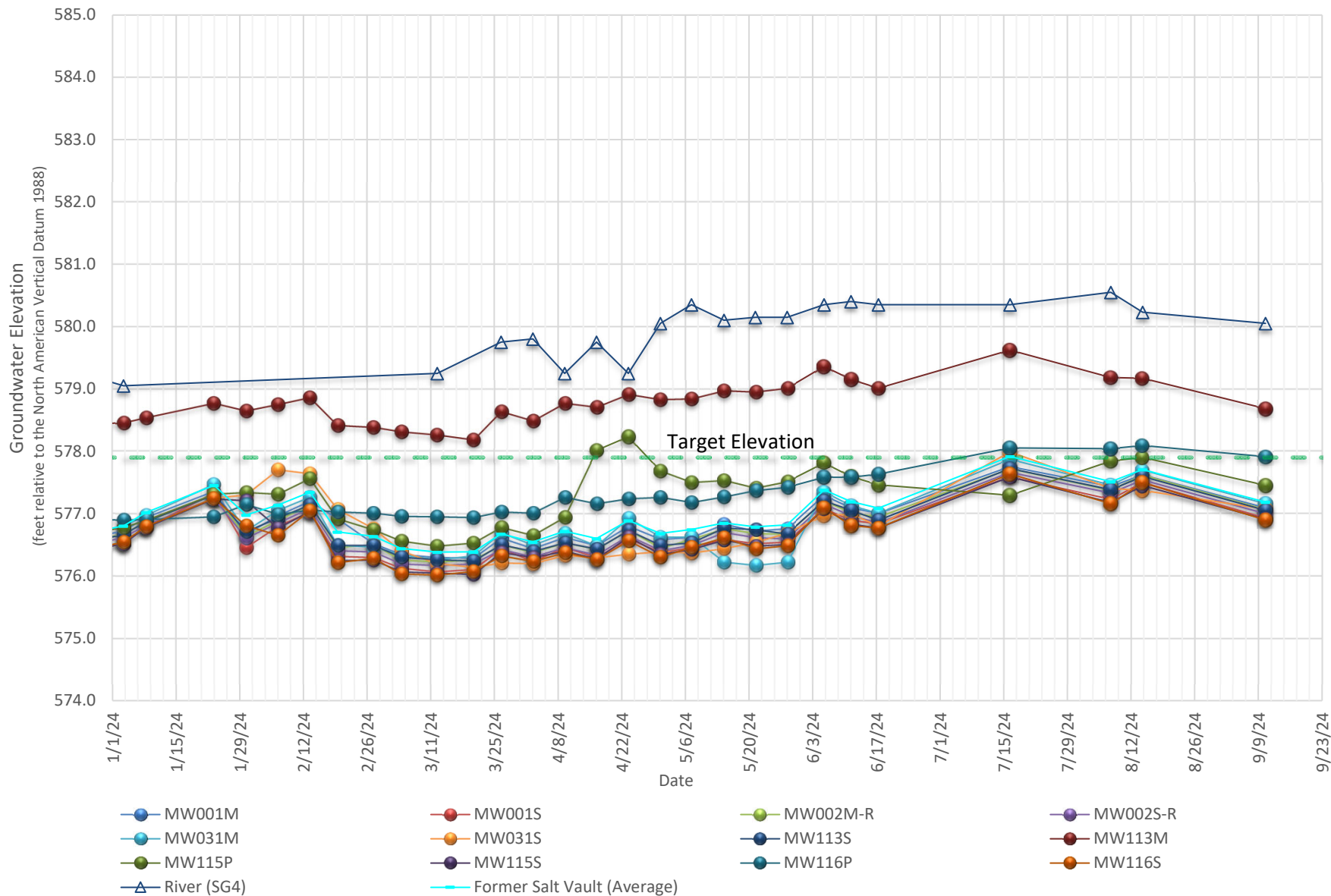
Attachment 4 2024 PDP System Hydrographs

January through September 2024 Water Levels Pump Down Program System Hydrographs



2024 Pump Down Program

Hydrographs of Manual Water Levels for Former Salt Vault Monitoring Wells



2024 Pump Down Program

Hydrographs of Manual Water Levels for Former 8th Street Slip Monitoring Wells

