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April 14, 2023

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 (January through March 2023)
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 facility on Stanton Street in Marinette, Wisconsin. This report covers the period from January 1 through March 31, 2023, and presents a brief description of the work performed, data collected, problems encountered, and schedule of activities as required by the February 2009 AOC and subsequent agreements.

Work Completed during This Reporting Period

Attachment 1 summarizes the operational data for the groundwater collection and treatment system (GWCTS) during first quarter 2023, and Attachment 2 contains the monthly Discharge Monitoring Reports for Wisconsin Pollutant Discharge Elimination System (WPDES) outfall OF003. The GWCTS treats groundwater extracted from the Main Plant (EW-4, EW-5, EW-6, and EW-7) and Wetlands Area (EW-1) to maintain groundwater levels in those areas below ground surface and prevent surface flooding of the facility. Because the GWCTS was shut down on September 20, 2022, as part of the GWCTS improvements, there was no groundwater extracted and treated by the GWCTS during the reporting period (groundwater recovered from the pump down program [PDP] operations described as follows is tracked separately). The GWCTS will remain shut down until the improvements are in place and operational (planned for summer 2023). As indicated in an April 1, 2023, email² from Tyco, as a temporary measure to address spring

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

² Nelson, Denise, Senior Director, Remediation and Strategy, Johnson Controls. 2023. Email (*Modification to Groundwater Extraction System – Tyco Fire Products Site, Marinette, WI*) with Christopher Black (EPA) and Sarah Krueger (WDNR). April 1.

snowmelt and rain, extraction well EW-7 was operated, as needed, starting March 14, 2023, to reduce groundwater levels in the area. Groundwater extracted from EW-7 is being transferred via the conveyance lines that run from the groundwater treatment plant to the PDP area collection tanks in the PDP building. Approximately 125,500 gallons of groundwater from EW-7 has been pumped and transferred to the PDP building during the reporting period. The groundwater from EW-7 is being managed consistent with the existing PDP groundwater, which is currently sent for offsite disposal. Some of the groundwater may be stored in 20,000 gallon frac tanks on the former Salt Vault and former 8th Street Slip to be either conveyed to the groundwater treatment plant in the future for treatment once the upgrades are in place, or treated by a mobile treatment system for discharge to the City of Marinette municipal wastewater treatment plant under a temporary discharge permit. EW-7 will be operated as needed until the groundwater treatment plant upgrades are completed and treatment operations recommence, at which time EW-7 will be reconnected to discharge into the treatment plant.

Groundwater was also pumped during the reporting period from construction dewatering operations and building sumps at the site. An estimated 700,00 gallons was pumped during the reporting period. This pumped water has been temporarily stored onsite in 20,000-gallon frac tanks, located in the former Salt Vault and former 8th Street Slip areas. A portion of this volume has been disposed of offsite (an estimated 60,000 gallons) at the Waste Management Vickery Deepwell Hazardous Waste disposal facility in Vickery, Ohio.

Tyco also demobilized the mobile treatment system in January 2023 that was used in 2022 and early 2023 to treat the remaining portion of the groundwater from the 2022 construction dewatering operations (an estimated 1,200,000 gallons treated). The groundwater was treated and discharged (an estimated 873,000 gallons) to the City of Marinette municipal wastewater treatment plant. Tyco obtained a temporary discharge permit (Permit No. 2001) to perform this work.

Pump down operations with the pump house system continued through first quarter 2023 in the former Salt Vault and former 8th Street Slip areas. The groundwater generated from the PDP is disposed of offsite at the Vickery disposal facility and is managed separately from the GWCTS. Operations continued under management of Endpoint Solutions (Endpoint) of Franklin, Wisconsin. Both the former Salt Vault and former 8th Street Slip areas have maintained average groundwater levels below the target elevation during the reporting period, as indicated by the target elevation calculation included in the manual water level measurements table (Attachment 3) and also shown on the hydrographs of transducer data collected as part of the pump house system operations (Attachment 4). From January 1 to March 31, 2023, approximately 264,470 gallons of groundwater was extracted and disposed of offsite as part of the PDP. The overall average pumping rate for the reporting period in the former Salt Vault was 1.1 gallons per minute (gpm) and in the former 8th Street Slip was 1.0 gpm. Average weekly pumping rates (which include both areas) ranged from 0.02 to 6.62 gpm and are summarized in Attachment 4. Lower or higher pumping rates coincide with days when trucks were not available or additional volume was needed to generate the minimum volumes required by the disposal/trucking contractor, respectively. In the future, when the modified GWCTS is in place, a more consistent range of daily average pumping rates is expected.

As noted during the last quarterly report, the sealing conducted in August 2022 at Cover Area H (Figure 1) will likely need additional sealing activities in spring 2023. However, prior to resealing this area, Tyco plans to modify this area in spring 2023 by adding a relief drain that will be tied into the groundwater extraction system, as indicated in the April 1, 2023, email. A design was prepared that includes the addition of a shallow drain that will be used to extract groundwater from this low-lying area to the west of the former Salt Vault. Extraction will optimize groundwater recovery, further reduce the risk of seasonal flooding, and prevent potential mixing of groundwater with stormwater that is conveyed at grade as part

of the Outfall 5 permitted stormwater discharge system. This area will be resealed following installation activities.

Pressure transducer-related activities were completed by Endpoint on January 16 and 26, 2023. These activities included downloading data from each transducer and collecting manual water levels at the time of transducer downloads. Also on January 16, 2023, due to well nest MW106 being converted from a stickup to a flush mount as noted last quarter, the MW106S transducer cable was replaced with a non-vented cable, and the transducer at MW106D was moved to MW003D to allow for easier transducer maintenance. MW003D was maintained as a stickup well, and because MW003D and MW106D are close to each other and because they are bedrock wells, the move should not impact data objectives for bedrock monitoring.

Tyco is preparing the 2022 Barrier Wall Groundwater Monitoring Annual Report, which will be submitted in second quarter 2022.

Additional Activities

Follow-on activities as part of the final WPDES Permit WI-0001040-08-0 (effective January 1, 2021, through December 31, 2025) continued in first quarter 2023 and included the following:

- Activities to implement the GWCTS improvements continued in first quarter 2023, including equipment and material procurement, and construction activities. Procurement activities included and continue to include tracking long-lead items and other potential supply-chain issues that have caused and could continue to cause potential construction delays. Construction activities included installing portions of the equipment and tank pads, installing a new sump in the vibratory shear-enhanced processing (VSEP) room, installing electrical conduit and mechanical piping, placing new filter press feed and hot water tanks, completing the erection of the building for the new building addition and installing other building components, and delivering the centrifugal pump skids, as well as other tanks and equipment components.
- Engineering optimization continued for the portions of the stormwater improvement (approved by WDNR). All final stormwater construction activities will be completed in 2023.
- Soil excavated during the reporting period from the construction activities was either placed in rolloff boxes for transport and disposal, or appropriately stockpiled and contained onsite until disposal can occur in spring 2023, after freezing conditions end. An estimated 4,000 tons of soil remain stockpiled onsite. Soil stockpiles are currently covered and will remain covered until disposal activities are completed. Additional excavation may occur as part of the final optimization activities in spring 2023. The further accounting of soils will be provided in the next quarterly report, after the excavation work is completed.

Data Collected

Extraction and treatment volumes, analytical testing, and discharge data are required as part of the WPDES permits obtained from WDNR for operating the existing GWCTS, which operates under WPDES Permit WI-0001040-08-0. Attachment 2 includes the GWCTS monthly WPDES Discharge Monitoring Reports for December 2022 through February 2023 for WPDES outfall OF003; there was no discharge in December 2022 through February 2023 at OF003. Attachment 1 contains additional data on GWCTS operations.

Weekly 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 2023 PDP summary table (Attachment 3). Water level data from transducers in monitoring wells and pumping rates collected as part of the PDP pump house system are also summarized in a hydrograph and stacked bar chart (with average weekly pumping rates), respectively (Attachment 4).

Groundwater elevation data recorded by transducers and downloaded in January 2023 are being compiled and evaluated. The transducer data will be provided in the annual report.

Problems Encountered

There were no new problems encountered during this reporting period.

Schedule of Upcoming Activities

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

- Submit the quarterly progress report
- Submit the 2022 Barrier Wall Groundwater Monitoring Annual Report
- Continue PDP operations in the former Salt Vault and former 8th Street Slip areas
- Continue with shutdown of the GWCTS until upgrades are complete
- Complete construction activities to finalize the GWCTS improvements
- Initiate start-up activities for the GWCTS improvements
- Implement remaining stormwater improvement optimization construction activities
- Initiate and complete installation of the shallow drain to extract groundwater from the low-lying area to the west of the former Salt Vault
- Complete the spring barrier wall groundwater monitoring sampling event
- Plan and prepare for underwater diver-conducted sediment sampling event
- Install replacement monitoring wells for MW105 nest
- Conduct vertical barrier wall (from land and water sides, and both above and below the waterline), tree plot, cover area, and monitoring well inspections
- Conduct vertical barrier wall survey
- Address inspection findings for the vertical barrier wall, tree plot, cover areas, and monitoring wells, as needed

List of Key Correspondence and Document Submittals

Project-related documents submitted to and received from the Agencies during first quarter 2023 are summarized in Tables 1 and 2, respectively.

Table 1. Documents Submitted

Quarterly Progress Report (January through March 2023), Tyco Fire Products LP Facility, Marinette, Wisconsin

Description of Submittal	Submitted To	Date Submitted
Quarterly Progress Report (Fourth Quarter 2022)	EPA	January 17, 2023

Table 2. Correspondence from Agency

Quarterly Progress Report (January through March 2023), Tyco Fire Products LP Facility, Marinette, Wisconsin

Description of Correspondence	Submitted By	Date Submitted
None for first quarter 2023		

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
Sarah Anderson, WDNR
Judy Fassbender, WDNR
Laura Gerold, WDNR
Ryan Suennen, Tyco Fire Products
Denice Nelson, Johnson Controls
Scott Wahl, Johnson Controls
Mariel Carter, Stephenson Public Library

Figure

1 Area Location Map

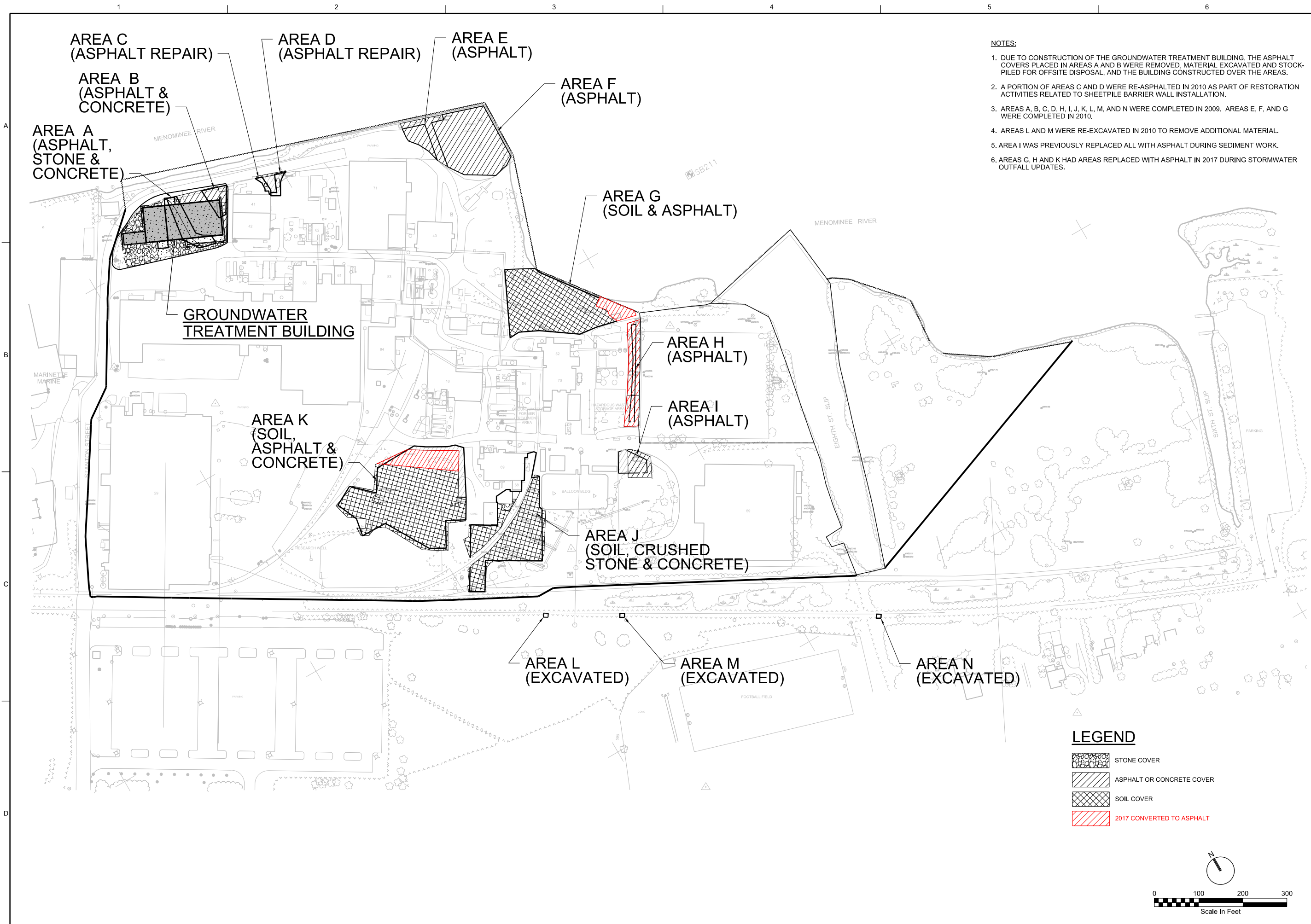
Attachments

- 1 Groundwater Collection and Treatment System Operation Summary
- 2 Discharge Monitoring Reports for the Groundwater Collection and Treatment System
- 3 2023 Pump Down Program Groundwater Elevation Monitoring
- 4 First Quarter 2023 PDP Pump House System Hydrograph and Pumping Rates

Document Control No.: D3630600.296



Figure



- NOTES:**
1. DUE TO CONSTRUCTION OF THE GROUNDWATER TREATMENT BUILDING, THE ASPHALT COVERS PLACED IN AREAS A AND B WERE REMOVED, MATERIAL EXCAVATED AND STOCK-PILED FOR OFFSITE DISPOSAL, AND THE BUILDING CONSTRUCTED OVER THE AREAS.
 2. A PORTION OF AREAS C AND D WERE RE-ASPHALTED IN 2010 AS PART OF RESTORATION ACTIVITIES RELATED TO SHEETPILE BARRIER WALL INSTALLATION.
 3. AREAS A, B, C, D, H, I, J, K, L, M, AND N WERE COMPLETED IN 2009. AREAS E, F, AND G WERE COMPLETED IN 2010.
 4. AREAS L AND M WERE RE-EXCAVATED IN 2010 TO REMOVE ADDITIONAL MATERIAL.
 5. AREA I WAS PREVIOUSLY REPLACED ALL WITH ASPHALT DURING SEDIMENT WORK.
 6. AREAS G, H AND K HAD AREAS REPLACED WITH ASPHALT IN 2017 DURING STORMWATER OUTFALL UPDATES.

LEGEND

-  STONE COVER
-  ASPHALT OR CONCRETE COVER
-  SOIL COVER
-  2017 CONVERTED TO ASPHALT

JACOBS

TYCO FIRE PRODUCTS LP
Cover Maintenance Plan for
Onsite and Offsite Soil Areas at
the Tyco Fire Products LP Facility
Marquette, Wisconsin

**FIGURE 1
AREA LOCATION MAP**

SCALE: 1" = 200'
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.

DATE: DECEMBER 2018
PROJ: 704683

REVISION 1

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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, January 1 through March 31, 2023

The following summarizes groundwater collection and treatment system (GWCTS) operations from January 1 through March 31, 2023, at the Tyco Fire Products LP facility on Stanton Street in Marinette, Wisconsin:

- The GWCTS operated for 0 days in January 2023, 0 days in February 2023, and 0 days in March 2023, for a total of 0 days.
- For the reporting period, the precipitation recorded from the weather station in Marinette, Wisconsin, was 4.68 inches of rain and 42.7 inches of snow (<http://www.ncdc.noaa.gov/cdo-web/datasets/GHCND/stations/GHCND:USC00475091/detail>).
- An estimated 0 gallons of groundwater was extracted (not including volumes extracted as part of the pump down program [PDP]) from the site during the reporting period. Table 1-1 lists the water volumes extracted from each area of the site for this quarter based on the recorded data. Additionally, water was pumped from construction excavation activities, and was either disposed of offsite or treated by the mobile treatment system and discharged to the City of Marinette municipal wastewater treatment plant. An estimated 1,200,000 gallons was treated by the mobile treatment system in 2022 and 2023. An estimated 700,000 gallons was removed and an estimated 60,000 gallons disposed offsite during the reporting period. An estimated 125,500 gallons was pumped from EW-7 when it was temporarily operated, and groundwater was disposed of offsite.
- During the reporting period, an estimated 0 gallons of water was discharged to the Menominee River as effluent under the Wisconsin Pollutant Discharge Elimination System permit.
- Approximately 0 gallons of reject water was produced this reporting period. An estimated 330,000 gallons of reject water (from 2022 and 2023) was produced from the mobile treatment system and subsequently disposed of offsite.

Table 1-1. Extraction Well Data Summary (January through March 2023)

GWCTS Operations, Tyco Fire Products LP Facility, Marinette, Wisconsin

Extraction Well	Gallons Run, First Quarter 2023 (January 1 through March 31, 2023)
EW-1	0
EW-2	Not operated in lieu of ongoing PDP
EW-3	Not operated in lieu of ongoing PDP
EW-4	0
EW-5	0
EW-6	0
EW-7	0 (~125,500 extracted, but was disposed of offsite)
Extraction Well Total	0 (~125,500 extracted, but was disposed of offsite)

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

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: TYCO FIRE PRODUCTS LP
 Contact Address: One Stanton St
 Marinette, WI 54143
 Facility Contact: Mike Elliott, EHS Manager
 Phone Number: 715-735-7415
 Reporting Period: 12/01/2022 - 12/31/2022
 Form Due Date: 01/21/2023
 Permit Number: 0001040

Date Received:
 DOC: 504157
 FIN: 7245
 FID: 438039470
 Region: Northeast Region
 Permit Drafter: Jason R Knutson
 Reviewer: Laura A Gerold
 Office: Green Bay

	Sample Point	703	001	001	703	001
	Description	Menominee River Intake	Combined WW to Menominee River	Combined WW to Menominee River	Menominee River Intake	Combined WW to Menominee River
	Parameter	211	211	373	35	374
	Description	Flow Rate	Flow Rate	pH (Maximum)	Arsenic, Total Recoverable	pH (Minimum)
	Units	gpd	MGD	su	ug/L	su
	Sample Type	TOT DAILY	CONTINUOUS	CONTINUOUS	GRAB	CONTINUOUS
	Frequency	DAILY	DAILY	DAILY	MONTHLY	DAILY
Sample Results	Day 1		0.086000	7.7		7.3
	2		0.043600	7.4		7.2
	3		0.014200	7.8		7.5
	4		0.032500	7.8		7.3
	5		0.067100	7.3		6.9
	6		0.037000	7.3		7.1
	7		0.072200	7.8		7.1
	8		0.092000	7.6		7.1
	9		0.054600	7.5		6.9
	10		0.008400	7.7		7.5
	11		0.027800	7.6		7.2
	12		0.096600	7.3		6.9
	13		0.076400	7.5		7.1
	14		0.176100	7.8		7.1
	15		0.159400	7.8		7.4
	16		0.038500	7.5		7.3
	17		0.009500	7.7		7.5
	18		0.034600	7.7		7.4
	19		0.068500	7.7		7.2
	20		0.023200	7.6		7.2
	21		0.012900	7.8		7.6
	22		0.011400	7.8		7.5
	23		0.009900	7.8		7.7
	24		0.013300	7.9		7.7
	25		0.016300	8.0		7.8
	26		0.015900	8.0		7.7
	27		0.023400	7.8		7.6
	28		0.022100	7.8		7.6
	29		0.002100	7.7		7.6
	30		0.001300	8.6		7.7
	31		0.0	8.3		8.1

	Sample Point	703		001		001		703		001	
	Description	Menominee River Intake		Combined WW to Menominee River		Combined WW to Menominee River		Menominee River Intake		Combined WW to Menominee River	
	Parameter	211		211		373		35		374	
	Description	Flow Rate		Flow Rate		pH (Maximum)		Arsenic, Total Recoverable		pH (Minimum)	
	Units	gpd		MGD		su		ug/L		su	
Summary Values	Monthly Avg			0.043445161		7.729032258				7.380645161	
	Monthly Total										
	Daily Max			0.1761		8.6				8.1	
	Daily Min			0		7.3				6.9	
Limit(s) in Effect	Monthly Avg										
	Monthly Total										
	Daily Max					9	0				
	Daily Min									6	0
QA/QC Information	LOD										
	LOQ										
	QC Exceedance	N		N		N		N		N	
	Lab Certification										

	Sample Point	001	001	001	001	001
	Description	Combined WW to Menominee River	Combined WW to Menominee River	Combined WW to Menominee River	Combined WW to Menominee River	Combined WW to Menominee River
	Parameter	480	231	35	35	87
	Description	Temperature Maximum	Hardness, Total as CaCO3	Arsenic, Total Recoverable	Arsenic, Total Recoverable	Cadmium, Total Recoverable
	Units	degF	mg/L	ug/L	lbs/day	ug/L
	Sample Type	MEASURE	24 HR FLOW PROP	24 HR FLOW PROP	CALCULATED	24 HR FLOW PROP
	Frequency	WEEKLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	Day 1	59				
	2	62				
	3	53				
	4	56				
	5	61				
	6	63				
	7	64				
	8	60				
	9	61				
	10	56				
	11	54				
	12	61				
	13	60				
	14	63				
	15	54				
	16	57				
	17	53				
	18	51				
	19	59	320	260	0.1482	<0.49
	20	58				
	21	49				
	22	51				
	23	45				
	24	45				
	25	47				
	26	50				
	27	48				
	28	51				
	29	52				
	30	50				
	31	44				

	Sample Point	001		001		001		001	
	Description	Combined WW to Menominee River		Combined WW to Menominee River		Combined WW to Menominee River		Combined WW to Menominee River	
	Parameter	480		231		35		35	
	Description	Temperature Maximum		Hardness, Total as CaCO3		Arsenic, Total Recoverable		Arsenic, Total Recoverable	
	Units	degF		mg/L		ug/L		lbs/day	
Summary Values	Monthly Avg	54.741935484		320		260		0.1482	
	Monthly Total								
	Daily Max	64		320		260		0.1482	
	Daily Min	44		320		260		0.1482	
Limit(s) in Effect	Monthly Avg							57	0
	Monthly Total								
	Daily Max					170	1	0.81	0
	Daily Min								
QA/QC Information	LOD					2.1		0.49	
	LOQ					5		1	
	QC Exceedance	N		N		N		N	
	Lab Certification			999580010		999580010		999580010	

	Sample Point	001	001	001	001	001	
	Description	Combined WW to Menominee River	Combined WW to Menominee River	Combined WW to Menominee River	Combined WW to Menominee River	Combined WW to Menominee River	
	Parameter	87	147	147	152	152	
	Description	Cadmium, Total Recoverable	Copper, Total Recoverable	Copper, Total Recoverable	Cyanide, Amenable	Cyanide, Amenable	
	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						
	14						
	15						
	16						
	17						
	18						
	19		0.0002793	28	0.01596		
	20						
	21						
	22						
	23						
	24						
	25						
	26						
	27						
	28						
	29						
	30						
	31						

	Sample Point	001		001		001		001		001	
	Description	Combined WW to Menominee River		Combined WW to Menominee River		Combined WW to Menominee River		Combined WW to Menominee River		Combined WW to Menominee River	
	Parameter	87		147		147		152		152	
	Description	Cadmium, Total Recoverable		Copper, Total Recoverable		Copper, Total Recoverable		Cyanide, Amenable		Cyanide, Amenable	
	Units	lbs/day		ug/L		lbs/day		ug/L		lbs/day	
Summary Values	Monthly Avg	0.0002793		28		0.01596					
	Monthly Total										
	Daily Max	0.0002793		28		0.01596					
	Daily Min	0.0002793		28		0.01596					
Limit(s) in Effect	Monthly Avg			69	0			92			
	Monthly Total										
	Daily Max	0.27	0	69	0	0.98	0	92		0.44	
	Daily Min										
QA/QC Information	LOD			1.7							
	LOQ			5							
	QC Exceedance	N		N		N		N		N	
	Lab Certification			999580010							

	Sample Point	001	001	001	001	001	
	Description	Combined WW to Menominee River	Combined WW to Menominee River	Combined WW to Menominee River	Combined WW to Menominee River	Combined WW to Menominee River	
	Parameter	112	280	1352	1353	1353	
	Description	Chlorine, Total Residual	Mercury, Total Recoverable	PFOA	PFOS	PFOS	
	Units	ug/L	ng/L	ng/L	ng/L	mg/day	
	Sample Type	GRAB	GRAB	24 HR FLOW PROP	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						
	14						
	15						
	16						
	17						
	18						
	19				320	25	0.64905
	20		<10				
	21			2.4			
	22						
	23						
	24						
	25						
	26						
	27						
	28						
	29						
	30						
	31						

	Sample Point	001		001		001		001		001	
	Description	Combined WW to Menominee River		Combined WW to Menominee River		Combined WW to Menominee River		Combined WW to Menominee River		Combined WW to Menominee River	
	Parameter	112		280		1352		1353		1353	
	Description	Chlorine, Total Residual		Mercury, Total Recoverable		PFOA		PFOS		PFOS	
	Units	ug/L		ng/L		ng/L		ng/L		mg/day	
Summary Values	Monthly Avg	0		2.4		320		25		0.64905	
	Monthly Total										
	Daily Max	<10		2.4		320		25		0.64905	
	Daily Min	<10		2.4		320		25		0.64905	
Limit(s) in Effect	Monthly Avg	38	0								
	Monthly Total										
	Daily Max	38	0	29	0						
	Daily Min										
QA/QC Information	LOD	30		0.079		0.77		0.49			
	LOQ	100		0.5		1.8		1.8			
	QC Exceedance	N		N		N		N		N	
	Lab Certification			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	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	0.023859	7.4	6.3		
	2	0.016056	7.2	6.6		
	3	0				
	4	0				
	5	0.034448	7.3	6.6		
	6	0.017584	7.4	6.8		
	7	0.030817	7.2	6.7		
	8	0.037450	8.8	6.4		
	9	0.028180	7.0	6.7		
	10	0				
	11	0				
	12	0.047708	7.9	6.4		
	13	0.034972	7.4	6.4		
	14	0.034394	7.0	6.2		
	15	0.024044	6.8	6.2		
	16	0.009617	8.5	6.2		
	17	0				
	18	0				
	19	0.028040	7.6	6.4		
	20	0.023453	7.4	6.4		
	21	0.033647	7.0	6.3		
	22	0.018918	6.8	6.4		
	23	0.000153	7.6	6.5		
	24	0				
	25	0				
	26	0				
	27	0				
	28	0				
	29	0				
	30	0				
	31	0				

	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	0.01430129		7.429411765		6.441176471			
	Monthly Total								
	Daily Max	0.047708		8.8		6.8			
	Daily Min	0		6.8		6.2			
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	4.8				
	2					
	3					
	4					
	5	3.2				
	6	3.8				
	7					
	8	6.4				
	9					
	10					
	11					
	12	6.0	2.1	<0.49	8.1	6.1
	13	6.0				
	14					
	15	5.8				
	16					
	17					
	18					
	19	11.0				
	20	6.6				
	21					
	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	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	5.955555556		2.1		0		8.1		6.1	
	Monthly Total										
	Daily Max	11		2.1		<0.49		8.1		6.1	
	Daily Min	3.2		2.1		<0.49		8.1		6.1	
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			1.6		0.49		1.7		1.5	
	LOQ			6.1		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	100				<2.1
	13					
	14					
	15					
	16					
	17					
	18					
	19					
	20					
	21			0.59	0.0723798	
	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				0.59		0.0723798		0	
	Monthly Total										
	Daily Max	100				0.59		0.0723798		<2.1	
	Daily Min	100				0.59		0.0723798		<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				0.079				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					
	2					
	3					
	4					
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12	0.00084				
	13					
	14					
	15					
	16					
	17					
	18					
	19					
	20					
	21					
	22					
	23					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	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	0.00084				
	Monthly Total					
	Daily Max	0.00084				
	Daily Min	0.00084				
Limit(s) in Effect	Monthly Avg					
	Monthly Total					
	Daily Max					
	Daily Min					
QA/QC Information	LOD					
	LOQ					
	QC Exceedance	N	N	N	N	N
	Lab Certification					

	Sample Point	107	003	003	003	003
	Description	Mercury Field Blank Results	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent
	Parameter	280	211	373	374	35
	Description	Mercury, Total Recoverable	Flow Rate	pH (Maximum)	pH (Minimum)	Arsenic, Total Recoverable
	Units	ng/L	MGD	su	su	ug/L
	Sample Type	BLANK	CONTINUOUS	CONTINUOUS	CONTINUOUS	24 HR FLOW PROP
	Frequency	MONTHLY	DAILY	DAILY	DAILY	WEEKLY
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					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					

	Sample Point	107	003	003	003	003
	Description	Mercury Field Blank Results	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent
	Parameter	280	211	373	374	35
	Description	Mercury, Total Recoverable	Flow Rate	pH (Maximum)	pH (Minimum)	Arsenic, Total Recoverable
	Units	ng/L	MGD	su	su	ug/L
Summary Values	Monthly Avg					
	Monthly Total					
	Daily Max					
	Daily Min					
Limit(s) in Effect	Monthly Avg					
	Monthly Total					
	Daily Max			9		680
	Daily Min				6	
QA/QC Information	LOD					
	LOQ					
	QC Exceedance					
	Lab Certification					

	Sample Point	003	003	003	003	003
	Description	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent
	Parameter	35	457	280	231	112
	Description	Arsenic, Total Recoverable	Suspended Solids, Total	Mercury, Total Recoverable	Hardness, Total as CaCO3	Chlorine, Total Residual
	Units	lbs/day	mg/L	ng/L	mg/L	ug/L
	Sample Type	CALCULATED	24 HR FLOW PROP	24 HR FLOW PROP	24 HR FLOW PROP	GRAB
	Frequency	WEEKLY	MONTHLY	MONTHLY	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					
	21					
	22					
	23					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					

	Sample Point	003		003		003		003		003	
	Description	GWCTS Effluent		GWCTS Effluent		GWCTS Effluent		GWCTS Effluent		GWCTS Effluent	
	Parameter	35		457		280		231		112	
	Description	Arsenic, Total Recoverable		Suspended Solids, Total		Mercury, Total Recoverable		Hardness, Total as CaCO3		Chlorine, Total Residual	
	Units	lbs/day		mg/L		ng/L		mg/L		ug/L	
Summary Values	Monthly Avg										
	Monthly Total										
	Daily Max										
	Daily Min										
Limit(s) in Effect	Monthly Avg									38	
	Monthly Total										
	Daily Max	0.23				24				38	
	Daily Min										
QA/QC Information	LOD										
	LOQ										
	QC Exceedance										
	Lab Certification										

	Sample Point	003	003	003	004	004
	Description	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent	Combined Process WW & GW	Combined Process WW & GW
	Parameter	1352	1353	1353	211	373
	Description	PFOA	PFOS	PFOS	Flow Rate	pH (Maximum)
	Units	ng/L	ng/L	mg/day	MGD	su
	Sample Type	24 HR FLOW PROP	24 HR FLOW PROP	CALCULATED	CONTINUOUS	CONTINUOUS
	Frequency	WEEKLY	WEEKLY	WEEKLY	DAILY	DAILY
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					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					

	Sample Point	003	003	003	004	004
	Description	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent	Combined Process WW & GW	Combined Process WW & GW
	Parameter	1352	1353	1353	211	373
	Description	PFOA	PFOS	PFOS	Flow Rate	pH (Maximum)
	Units	ng/L	ng/L	mg/day	MGD	su
Summary Values	Monthly Avg					
	Monthly Total					
	Daily Max					
	Daily Min					
Limit(s) in Effect	Monthly Avg					
	Monthly Total					
	Daily Max					9
	Daily Min					
QA/QC Information	LOD					
	LOQ					
	QC Exceedance					
	Lab Certification					

	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	374	112	35	35	280
	Description	pH (Minimum)	Chlorine, Total Residual	Arsenic, Total Recoverable	Arsenic, Total Recoverable	Mercury, Total Recoverable
	Units	su	ug/L	ug/L	lbs/day	ng/L
	Sample Type	CONTINUOUS	GRAB	24 HR FLOW PROP	CALCULATED	GRAB
	Frequency	DAILY	MONTHLY	MONTHLY	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					
	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	374		112		35		35		280	
	Description	pH (Minimum)		Chlorine, Total Residual		Arsenic, Total Recoverable		Arsenic, Total Recoverable		Mercury, Total Recoverable	
	Units	su		ug/L		ug/L		lbs/day		ng/L	
Summary Values	Monthly Avg										
	Monthly Total										
	Daily Max										
	Daily Min										
Limit(s) in Effect	Monthly Avg			38							
	Monthly Total										
	Daily Max			38		194		0.22		18	
	Daily Min	6									
QA/QC Information	LOD										
	LOQ										
	QC Exceedance										
	Lab Certification										

	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	280	87	87	147	147
	Description	Mercury, Total Recoverable	Cadmium, Total Recoverable	Cadmium, Total Recoverable	Copper, Total Recoverable	Copper, Total Recoverable
	Units	mg/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					
	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	280		87		87		147		147	
	Description	Mercury, Total Recoverable		Cadmium, Total Recoverable		Cadmium, Total Recoverable		Copper, Total Recoverable		Copper, Total Recoverable	
	Units	mg/day		ug/L		lbs/day		ug/L		lbs/day	
Summary Values	Monthly Avg										
	Monthly Total										
	Daily Max										
	Daily Min										
Limit(s) in Effect	Monthly Avg			57				69			
	Monthly Total										
	Daily Max			57		0.23		69		0.28	
	Daily Min										
QA/QC Information	LOD										
	LOQ										
	QC Exceedance	N		N		N		N		N	
	Lab Certification										

	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	315	315	553	553	152
	Description	Nickel, Total Recoverable	Nickel, Total Recoverable	Zinc, Total Recoverable	Zinc, Total Recoverable	Cyanide, Amenable
	Units	ug/L	lbs/day	ug/L	lbs/day	ug/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					
	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	315		315		553		553		152	
	Description	Nickel, Total Recoverable		Nickel, Total Recoverable		Zinc, Total Recoverable		Zinc, Total Recoverable		Cyanide, Amenable	
	Units	ug/L		lbs/day		ug/L		lbs/day		ug/L	
Summary Values	Monthly Avg										
	Monthly Total										
	Daily Max										
	Daily Min										
Limit(s) in Effect	Monthly Avg	2000				520				92	
	Monthly Total										
	Daily Max	2000		8.10		520		2.10		92	
	Daily Min										
QA/QC Information	LOD										
	LOQ										
	QC Exceedance										
	Lab Certification										

	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	152	231	480	1352	1353
	Description	Cyanide, Amenable	Hardness, Total as CaCO3	Temperature Maximum	PFOA	PFOS
	Units	lbs/day	mg/L	degF	ng/L	ng/L
	Sample Type	CALCULATED	24 HR FLOW PROP	MEASURE	24 HR FLOW PROP	24 HR FLOW PROP
	Frequency	MONTHLY	MONTHLY	WEEKLY	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					
	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	152		231		480		1352		1353	
	Description	Cyanide, Amenable		Hardness, Total as CaCO3		Temperature Maximum		PFOA		PFOS	
	Units	lbs/day		mg/L		degF		ng/L		ng/L	
Summary Values	Monthly Avg										
	Monthly Total										
	Daily Max										
	Daily Min										
Limit(s) in Effect	Monthly Avg									11	
	Monthly Total										
	Daily Max	0.37								11	
	Daily Min										
QA/QC Information	LOD										
	LOQ										
	QC Exceedance										
	Lab Certification										

	Sample Point	004	108	108	108	108
	Description	Combined Process WW & GW	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent
	Parameter	1353	211	457	35	35
	Description	PFOS	Flow Rate	Suspended Solids, Total	Arsenic, Total Recoverable	Arsenic, Total Recoverable
	Units	mg/day	MGD	mg/L	ug/L	lbs/day
	Sample Type	CALCULATED	CONTINUOUS	24 HR FLOW PROP	24 HR FLOW PROP	CALCULATED
	Frequency	MONTHLY	DAILY	WEEKLY	WEEKLY	WEEKLY
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					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					

	Sample Point	004		108		108		108		108	
	Description	Combined Process WW & GW		GWCTS Effluent		GWCTS Effluent		GWCTS Effluent		GWCTS Effluent	
	Parameter	1353		211		457		35		35	
	Description	PFOS		Flow Rate		Suspended Solids, Total		Arsenic, Total Recoverable		Arsenic, Total Recoverable	
	Units	mg/day		MGD		mg/L		ug/L		lbs/day	
Summary Values	Monthly Avg										
	Monthly Total										
	Daily Max										
	Daily Min										
Limit(s) in Effect	Monthly Avg	2.10									
	Monthly Total										
	Daily Max							500		0.17	
	Daily Min										
QA/QC Information	LOD										
	LOQ										
	QC Exceedance										
	Lab Certification										

	Sample Point	108	108	108	108
	Description	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent
	Parameter	280	280	1352	1353
	Description	Mercury, Total Recoverable	Mercury, Total Recoverable	PFOA	PFOS
	Units	ng/L	mg/day	ng/L	ng/L
	Sample Type	24 HR FLOW PROP	CALCULATED	24 HR FLOW PROP	24 HR FLOW PROP
	Frequency	MONTHLY	MONTHLY	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				
	21				
	22				
	23				
	24				
	25				
	26				
	27				
	28				
	29				
	30				
	31				

	Sample Point	108	108	108	108
	Description	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent
	Parameter	280	280	1352	1353
	Description	Mercury, Total Recoverable	Mercury, Total Recoverable	PFOA	PFOS
	Units	ng/L	mg/day	ng/L	ng/L
Summary Values	Monthly Avg				
	Monthly Total				
	Daily Max				
	Daily Min				
Limit(s) in Effect	Monthly Avg				
	Monthly Total				
	Daily Max	24			
	Daily Min				
QA/QC Information	LOD				
	LOQ				
	QC Exceedance				
	Lab Certification				

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

General Remarks

GW system is still down for remodeling so, there was no sampling done.
The Amenable CN- was mixed up this month by T.A. lab for outfall OF001. They ran total instead. So, this will be left blank.

Laboratory Quality Control Comments

The Arsenic levels were over the limit for the month of December. My supervisor was told, and he contacted our DNR contact. This outfall is no longer in use beginning Jan. 2023

Exceedence Comments

This outfall is no longer connected for sampling so, could not rerun. My supervisor was told and our DNR contact also.

Submitted by Anne Fleury(afleury16) on 1/20/2023 11:35:47 AM

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: TYCO FIRE PRODUCTS LP
 Contact Address: One Stanton St
 Marinette, WI 54143
 Facility Contact: Mike Elliott, EHS Manager
 Phone Number: 715-735-7415
 Reporting Period: 01/01/2023 - 01/31/2023
 Form Due Date: 02/21/2023
 Permit Number: 0001040

Date Received:
 DOC: 509598
 FIN: 7245
 FID: 438039470
 Region: Northeast Region
 Permit Drafter: Laura K Rodriguez Alvarez
 Reviewer: Laura A Gerold
 Office: Green Bay

Sample Point	703	703	101	101	101
Description	Menominee River Intake	Menominee River Intake	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent
Parameter	211	35	211	373	374
Description	Flow Rate	Arsenic, Total Recoverable	Flow Rate	pH (Maximum)	pH (Minimum)
Units	gpd	ug/L	MGD	su	su
Sample Type	TOT DAILY	GRAB	CONTINUOUS	CONTINUOUS	CONTINUOUS
Frequency	DAILY	MONTHLY	DAILY	DAILY	DAILY
Sample Results	Day 1		0		
	2		0		
	3		0.048765	7.6	6.9
	4		0.047769	7.4	6.6
	5		0.039561	7.6	6.4
	6		0.025223	7.7	6.3
	7		0		
	8		0		
	9		0.038166	7.8	6.4
	10		0.033689	7.4	6.5
	11		0.042781	7.8	6.7
	12		0.034474	7.4	6.7
	13		0.024098	7.4	6.7
	14		0		
	15		0		
	16		0		
	17		0.049610	7.6	6.8
	18		0.045737	7.8	6.7
	19		0.032570	7.4	6.4
	20		0.007242	7.5	6.3
	21		0		
	22		0		
	23		0.040901	7.6	6.8
	24		0.035676	7.2	6.6
	25		0.034244	8.0	6.4
	26		0.042742	7.8	6.3
	27		0.008879	7.4	6.6
	28		0		
	29		0		
	30		0.042584	7.8	6.9
	31		0.047919	8.2	7.0

	Sample Point	703		703		101		101		101	
	Description	Menominee River Intake		Menominee River Intake		Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent	
	Parameter	211		35		211		373		374	
	Description	Flow Rate		Arsenic, Total Recoverable		Flow Rate		pH (Maximum)		pH (Minimum)	
	Units	gpd		ug/L		MGD		su		su	
Summary Values	Monthly Avg					0.023310645		7.62		6.6	
	Monthly Total										
	Daily Max					0.04961		8.2		7	
	Daily Min					0		7.2		6.3	
Limit(s) in Effect	Monthly Avg										
	Monthly Total										
	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	379	376	457	651	87
	Description	pH Total Exceedance Time Minutes	pH Exceedances Greater Than 60 Minutes	Suspended Solids, Total	Oil & Grease (Hexane)	Cadmium, Total Recoverable
	Units	minutes	Number	mg/L	mg/L	ug/L
	Sample Type	CONTINUOUS	CONTINUOUS	24 HR FLOW PROP	GRAB	24 HR FLOW PROP
	Frequency	DAILY	DAILY	3/WEEK	MONTHLY	MONTHLY
Sample Results	Day 1					
	2					
	3			13.0		
	4			9.4		
	5			5.0		
	6					
	7					
	8					
	9			4.8		
	10			3.0		<0.49
	11			2.2	<1.4	
	12					
	13					
	14					
	15					
	16					
	17			3.0		
	18			2.2		
	19			2.2		
	20					
	21					
	22					
	23			3.8		
	24			<1.9		
	25			2.0		
	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	379		376		457		651		87	
	Description	pH Total Exceedance Time Minutes		pH Exceedances Greater Than 60 Minutes		Suspended Solids, Total		Oil & Grease (Hexane)		Cadmium, Total Recoverable	
	Units	minutes		Number		mg/L		mg/L		ug/L	
Summary Values	Monthly Avg					4.216666667		0		0	
	Monthly Total										
	Daily Max					13		<1.4		<0.49	
	Daily Min					<1.9		<1.4		<0.49	
Limit(s) in Effect	Monthly Avg					31	0	26	0	260	0
	Monthly Total	446	0	0	0						
	Daily Max					60	0	52	0	690	0
	Daily Min										
QA/QC Information	LOD							1.4		0.49	
	LOQ							5.2		1	
	QC Exceedance	N		N		N		N		N	
	Lab Certification					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	147	315	553	507	280
	Description	Copper, Total Recoverable	Nickel, Total Recoverable	Zinc, Total Recoverable	Total Toxic Organics	Mercury, Total Recoverable
	Units	ug/L	ug/L	ug/L	ug/L	ng/L
	Sample Type	24 HR FLOW PROP	24 HR FLOW PROP	24 HR FLOW PROP	24 HR FLOW PROP	GRAB
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	Day 1					
	2					
	3					
	4					
	5					
	6					
	7					
	8					
	9					
	10	5.9	<1.5	47.0		
	11					
	12					
	13					
	14					
	15					
	16					
	17					
	18					
	19					
	20					
	21					
	22					
	23					
	24					0.42
	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	147		315		553		507		280	
	Description	Copper, Total Recoverable		Nickel, Total Recoverable		Zinc, Total Recoverable		Total Toxic Organics		Mercury, Total Recoverable	
	Units	ug/L		ug/L		ug/L		ug/L		ng/L	
Summary Values	Monthly Avg	5.9		0		47				0.42	
	Monthly Total										
	Daily Max	5.9		<1.5		47				0.42	
	Daily Min	5.9		<1.5		47				0.42	
Limit(s) in Effect	Monthly Avg	2070	0	2380	0	1480	0				
	Monthly Total										
	Daily Max	3380	0	3980	0	2610	0	2130			
	Daily Min										
QA/QC Information	LOD	1.7		1.5		3.6				0.079	
	LOQ	5		5		10				0.5	
	QC Exceedance	N		N		N		N		N	
	Lab Certification	999580010		999580010		999580010				999580010	

	Sample Point	101	101	101	704	704
	Description	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	GWCTS Influent	GWCTS Influent
	Parameter	280	35	35	211	35
	Description	Mercury, Total Recoverable	Arsenic, Total Recoverable	Arsenic, Total Recoverable	Flow Rate	Arsenic, Total Recoverable
	Units	mg/day	ug/L	lbs/day	gpd	ug/L
	Sample Type	CALCULATED	24 HR FLOW PROP	CALCULATED	CONTINUOUS	24 HR FLOW PROP
	Frequency	MONTHLY	MONTHLY	MONTHLY	DAILY	WEEKLY
Sample Results	Day 1					
	2					
	3					
	4					
	5					
	6					
	7					
	8					
	9					
	10		<2.1	0.000588		
	11					
	12					
	13					
	14					
	15					
	16					
	17					
	18					
	19					
	20					
	21					
	22					
	23					
	24	0.05997264				
	25					
	26					
	27					
	28					
	29					
	30					
	31					

	Sample Point	101	101	101	704	704
	Description	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	GWCTS Influent	GWCTS Influent
	Parameter	280	35	35	211	35
	Description	Mercury, Total Recoverable	Arsenic, Total Recoverable	Arsenic, Total Recoverable	Flow Rate	Arsenic, Total Recoverable
	Units	mg/day	ug/L	lbs/day	gpd	ug/L
Summary Values	Monthly Avg	0.05997264	0	0.000588		
	Monthly Total					
	Daily Max	0.05997264	<2.1	0.000588		
	Daily Min	0.05997264	<2.1	0.000588		
Limit(s) in Effect	Monthly Avg					
	Monthly Total					
	Daily Max					
	Daily Min					
QA/QC Information	LOD		2.1			
	LOQ		5			
	QC Exceedance	N	N	N	N	N
	Lab Certification		999580010			

	Sample Point	704	704	107	004	004
	Description	GWCTS Influent	GWCTS Influent	Mercury Field Blank Results	Combined Process WW & GW	Combined Process WW & GW
	Parameter	457	280	280	211	373
	Description	Suspended Solids, Total	Mercury, Total Recoverable	Mercury, Total Recoverable	Flow Rate	pH (Maximum)
	Units	mg/L	ng/L	ng/L	MGD	su
	Sample Type	24 HR FLOW PROP	GRAB	BLANK	CONTINUOUS	CONTINUOUS
	Frequency	WEEKLY	MONTHLY	MONTHLY	DAILY	DAILY
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					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					

	Sample Point	704	704	107	004	004
	Description	GWCTS Influent	GWCTS Influent	Mercury Field Blank Results	Combined Process WW & GW	Combined Process WW & GW
	Parameter	457	280	280	211	373
	Description	Suspended Solids, Total	Mercury, Total Recoverable	Mercury, Total Recoverable	Flow Rate	pH (Maximum)
	Units	mg/L	ng/L	ng/L	MGD	su
Summary Values	Monthly Avg					
	Monthly Total					
	Daily Max					
	Daily Min					
Limit(s) in Effect	Monthly Avg					
	Monthly Total					
	Daily Max					9
	Daily Min					
QA/QC Information	LOD					
	LOQ					
	QC Exceedance					
	Lab Certification					

	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	374	112	35	35	280
	Description	pH (Minimum)	Chlorine, Total Residual	Arsenic, Total Recoverable	Arsenic, Total Recoverable	Mercury, Total Recoverable
	Units	su	ug/L	ug/L	lbs/day	ng/L
	Sample Type	CONTINUOUS	GRAB	24 HR FLOW PROP	CALCULATED	GRAB
	Frequency	DAILY	MONTHLY	MONTHLY	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					
	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	374		112		35		35		280	
	Description	pH (Minimum)		Chlorine, Total Residual		Arsenic, Total Recoverable		Arsenic, Total Recoverable		Mercury, Total Recoverable	
	Units	su		ug/L		ug/L		lbs/day		ng/L	
Summary Values	Monthly Avg										
	Monthly Total										
	Daily Max										
	Daily Min										
Limit(s) in Effect	Monthly Avg			38							
	Monthly Total										
	Daily Max			38		194		0.22		18	
	Daily Min	6									
QA/QC Information	LOD										
	LOQ										
	QC Exceedance										
	Lab Certification										

	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	280	87	87	147	147
	Description	Mercury, Total Recoverable	Cadmium, Total Recoverable	Cadmium, Total Recoverable	Copper, Total Recoverable	Copper, Total Recoverable
	Units	mg/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					
	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	280		87		87		147		147	
	Description	Mercury, Total Recoverable		Cadmium, Total Recoverable		Cadmium, Total Recoverable		Copper, Total Recoverable		Copper, Total Recoverable	
	Units	mg/day		ug/L		lbs/day		ug/L		lbs/day	
Summary Values	Monthly Avg										
	Monthly Total										
	Daily Max										
	Daily Min										
Limit(s) in Effect	Monthly Avg			57				69			
	Monthly Total										
	Daily Max			57		0.23		69		0.28	
	Daily Min										
QA/QC Information	LOD										
	LOQ										
	QC Exceedance										
	Lab Certification										

	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	315	315	553	553	152
	Description	Nickel, Total Recoverable	Nickel, Total Recoverable	Zinc, Total Recoverable	Zinc, Total Recoverable	Cyanide, Amenable
	Units	ug/L	lbs/day	ug/L	lbs/day	ug/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					
	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	315		315		553		553		152	
	Description	Nickel, Total Recoverable		Nickel, Total Recoverable		Zinc, Total Recoverable		Zinc, Total Recoverable		Cyanide, Amenable	
	Units	ug/L		lbs/day		ug/L		lbs/day		ug/L	
Summary Values	Monthly Avg										
	Monthly Total										
	Daily Max										
	Daily Min										
Limit(s) in Effect	Monthly Avg	2000				520				92	
	Monthly Total										
	Daily Max	2000		8.10		520		2.10		92	
	Daily Min										
QA/QC Information	LOD										
	LOQ										
	QC Exceedance										
	Lab Certification										

	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	152	231	480	1352	1353
	Description	Cyanide, Amenable	Hardness, Total as CaCO3	Temperature Maximum	PFOA	PFOS
	Units	lbs/day	mg/L	degF	ng/L	ng/L
	Sample Type	CALCULATED	24 HR FLOW PROP	MEASURE	24 HR FLOW PROP	24 HR FLOW PROP
	Frequency	MONTHLY	MONTHLY	WEEKLY	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					
	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	152		231		480		1352		1353	
	Description	Cyanide, Amenable		Hardness, Total as CaCO3		Temperature Maximum		PFOA		PFOS	
	Units	lbs/day		mg/L		degF		ng/L		ng/L	
Summary Values	Monthly Avg										
	Monthly Total										
	Daily Max										
	Daily Min										
Limit(s) in Effect	Monthly Avg									11	
	Monthly Total										
	Daily Max	0.37								11	
	Daily Min										
QA/QC Information	LOD										
	LOQ										
	QC Exceedance										
	Lab Certification										

	Sample Point	004	108	108	108	108
	Description	Combined Process WW & GW	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent
	Parameter	1353	211	457	35	35
	Description	PFOS	Flow Rate	Suspended Solids, Total	Arsenic, Total Recoverable	Arsenic, Total Recoverable
	Units	mg/day	MGD	mg/L	ug/L	lbs/day
	Sample Type	CALCULATED	CONTINUOUS	24 HR FLOW PROP	24 HR FLOW PROP	CALCULATED
	Frequency	MONTHLY	DAILY	WEEKLY	WEEKLY	WEEKLY
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					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					

	Sample Point	004		108		108		108		108	
	Description	Combined Process WW & GW		GWCTS Effluent		GWCTS Effluent		GWCTS Effluent		GWCTS Effluent	
	Parameter	1353		211		457		35		35	
	Description	PFOS		Flow Rate		Suspended Solids, Total		Arsenic, Total Recoverable		Arsenic, Total Recoverable	
	Units	mg/day		MGD		mg/L		ug/L		lbs/day	
Summary Values	Monthly Avg										
	Monthly Total										
	Daily Max										
	Daily Min										
Limit(s) in Effect	Monthly Avg	2.10									
	Monthly Total										
	Daily Max						500		0.17		
	Daily Min										
QA/QC Information	LOD										
	LOQ										
	QC Exceedance										
	Lab Certification										

	Sample Point	108	108	108	108
	Description	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent
	Parameter	280	280	1352	1353
	Description	Mercury, Total Recoverable	Mercury, Total Recoverable	PFOA	PFOS
	Units	ng/L	mg/day	ng/L	ng/L
	Sample Type	24 HR FLOW PROP	CALCULATED	24 HR FLOW PROP	24 HR FLOW PROP
	Frequency	MONTHLY	MONTHLY	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				
	21				
	22				
	23				
	24				
	25				
	26				
	27				
	28				
	29				
	30				
	31				

	Sample Point	108		108		108		108	
	Description	GWCTS Effluent		GWCTS Effluent		GWCTS Effluent		GWCTS Effluent	
	Parameter	280		280		1352		1353	
	Description	Mercury, Total Recoverable		Mercury, Total Recoverable		PFOA		PFOS	
	Units	ng/L		mg/day		ng/L		ng/L	
Summary Values	Monthly Avg								
	Monthly Total								
	Daily Max								
	Daily Min								
Limit(s) in Effect	Monthly Avg								
	Monthly Total								
	Daily Max	24							
	Daily Min								
QA/QC Information	LOD								
	LOQ								
	QC Exceedance	N		N		N		N	
	Lab Certification								

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

General Remarks

The ground water system is still under construction / remodeling so, there will be no samples from SP704, SP108 and OF004. Also, SP703.

Laboratory Quality Control Comments

Submitted by Anne Fleury(afleury16) on 2/2/2023 7:38:12 AM

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: TYCO FIRE PRODUCTS LP
 Contact Address: One Stanton St
 Marinette, WI 54143
 Facility Contact: Mike Elliott, EHS Manager
 Phone Number: 715-735-7415
 Reporting Period: 02/01/2023 - 02/28/2023
 Form Due Date: 03/21/2023
 Permit Number: 0001040

Date Received:
 DOC: 509599
 FIN: 7245
 FID: 438039470
 Region: Northeast Region
 Permit Drafter: Laura K Rodriguez Alvarez
 Reviewer: Laura A Gerold
 Office: Green Bay

Sample Point	703	703	101	101	101
Description	Menominee River Intake	Menominee River Intake	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent
Parameter	211	35	211	373	374
Description	Flow Rate	Arsenic, Total Recoverable	Flow Rate	pH (Maximum)	pH (Minimum)
Units	gpd	ug/L	MGD	su	su
Sample Type	TOT DAILY	GRAB	CONTINUOUS	CONTINUOUS	CONTINUOUS
Frequency	DAILY	MONTHLY	DAILY	DAILY	DAILY
Sample Results	Day 1		0.046714	8.6	7.0
	2		0.035661	7.2	6.8
	3		0.015372	7.4	6.3
	4		0		
	5		0		
	6		0.024795	7.2	6.2
	7		0.023462	7.2	6.3
	8		0.026943	7.3	6.2
	9		0.031000	8.0	6.4
	10		0.005376	7.5	6.3
	11		0.002714	7.2	6.6
	12		0		
	13		0.037606	8.0	7.1
	14		0.031678	8.1	6.8
	15		0.033338	8.0	6.6
	16		0.034241	7.6	7.2
	17		0.026373	7.6	6.6
	18		0.019688	8.6	6.5
	19		0		
	20		0.048063	7.4	6.5
	21		0.029296	7.3	6.6
	22		0.024945	7.4	6.6
	23		0.021956	7.8	6.6
	24		0.022194	7.4	6.6
	25		0.013645	7.4	7.0
	26		0		
	27		0.040940	7.8	6.5
	28		0.035871	7.3	6.8
	29				
	30				
	31				

	Sample Point	703		703		101		101		101	
	Description	Menominee River Intake		Menominee River Intake		Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent	
	Parameter	211		35		211		373		374	
	Description	Flow Rate		Arsenic, Total Recoverable		Flow Rate		pH (Maximum)		pH (Minimum)	
	Units	gpd		ug/L		MGD		su		su	
Summary Values	Monthly Avg					0.022566821		7.62173913		6.613043478	
	Monthly Total										
	Daily Max					0.048063		8.6		7.2	
	Daily Min					0		7.2		6.2	
Limit(s) in Effect	Monthly Avg										
	Monthly Total										
	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	379	376	457	651	87
	Description	pH Total Exceedance Time Minutes	pH Exceedances Greater Than 60 Minutes	Suspended Solids, Total	Oil & Grease (Hexane)	Cadmium, Total Recoverable
	Units	minutes	Number	mg/L	mg/L	ug/L
	Sample Type	CONTINUOUS	CONTINUOUS	24 HR FLOW PROP	GRAB	24 HR FLOW PROP
	Frequency	DAILY	DAILY	3/WEEK	MONTHLY	MONTHLY
Sample Results	Day 1			2.0		
	2			<1.9		
	3					
	4					
	5					
	6			3.2		<0.49
	7					
	8			2.2	<1.4	
	9			<1.9		
	10					
	11					
	12					
	13			<1.9		
	14					
	15			<1.9		
	16			<1.9		
	17					
	18					
	19					
	20			<1.9		
	21					
	22			2.0		
	23			2.2		
	24					
	25					
	26					
	27			<1.9		
	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	379		376		457		651		87	
	Description	pH Total Exceedance Time Minutes		pH Exceedances Greater Than 60 Minutes		Suspended Solids, Total		Oil & Grease (Hexane)		Cadmium, Total Recoverable	
	Units	minutes		Number		mg/L		mg/L		ug/L	
Summary Values	Monthly Avg					0.966666667		0		0	
	Monthly Total										
	Daily Max					3.2		<1.4		<0.49	
	Daily Min					<1.9		<1.4		<0.49	
Limit(s) in Effect	Monthly Avg					31	0	26	0	260	0
	Monthly Total	446	0	0	0						
	Daily Max					60	0	52	0	690	0
	Daily Min										
QA/QC Information	LOD							1.4		0.49	
	LOQ							5.2		1	
	QC Exceedance	N		N		N		N		N	
	Lab Certification					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	147	315	553	507	280
	Description	Copper, Total Recoverable	Nickel, Total Recoverable	Zinc, Total Recoverable	Total Toxic Organics	Mercury, Total Recoverable
	Units	ug/L	ug/L	ug/L	ug/L	ng/L
	Sample Type	24 HR FLOW PROP	24 HR FLOW PROP	24 HR FLOW PROP	24 HR FLOW PROP	GRAB
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	Day 1					
	2					
	3					
	4					
	5					
	6	5.1	2.7	110		
	7					
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					
	16					
	17					
	18					
	19					
	20					
	21					
	22					
	23					
	24					
	25					
	26					
	27					
	28					0.30
	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	147		315		553		507		280	
	Description	Copper, Total Recoverable		Nickel, Total Recoverable		Zinc, Total Recoverable		Total Toxic Organics		Mercury, Total Recoverable	
	Units	ug/L		ug/L		ug/L		ug/L		ng/L	
Summary Values	Monthly Avg	5.1		2.7		110				0.3	
	Monthly Total										
	Daily Max	5.1		2.7		110				0.3	
	Daily Min	5.1		2.7		110				0.3	
Limit(s) in Effect	Monthly Avg	2070	0	2380	0	1480	0				
	Monthly Total										
	Daily Max	3380	0	3980	0	2610	0	2130			
	Daily Min										
QA/QC Information	LOD	1.7		1.5		3.6				0.079	
	LOQ	5		5		10				0.5	
	QC Exceedance	N		N		N		N		N	
	Lab Certification	999580010		999580010		999580010				999580010	

	Sample Point	101	101	101	704	704
	Description	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	GWCTS Influent	GWCTS Influent
	Parameter	280	35	35	211	35
	Description	Mercury, Total Recoverable	Arsenic, Total Recoverable	Arsenic, Total Recoverable	Flow Rate	Arsenic, Total Recoverable
	Units	mg/day	ug/L	lbs/day	gpd	ug/L
	Sample Type	CALCULATED	24 HR FLOW PROP	CALCULATED	CONTINUOUS	24 HR FLOW PROP
	Frequency	MONTHLY	MONTHLY	MONTHLY	DAILY	WEEKLY
Sample Results	Day 1					
	2					
	3					
	4					
	5					
	6		<2.1	0.000441		
	7					
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					
	16					
	17					
	18					
	19					
	20					
	21					
	22					
	23					
	24					
	25					
	26					
	27					
	28		0.0407853			
	29					
	30					
	31					

	Sample Point	101	101	101	704	704
	Description	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	GWCTS Influent	GWCTS Influent
	Parameter	280	35	35	211	35
	Description	Mercury, Total Recoverable	Arsenic, Total Recoverable	Arsenic, Total Recoverable	Flow Rate	Arsenic, Total Recoverable
	Units	mg/day	ug/L	lbs/day	gpd	ug/L
Summary Values	Monthly Avg	0.0407853	0	0.000441		
	Monthly Total					
	Daily Max	0.0407853	<2.1	0.000441		
	Daily Min	0.0407853	<2.1	0.000441		
Limit(s) in Effect	Monthly Avg					
	Monthly Total					
	Daily Max					
	Daily Min					
QA/QC Information	LOD		2.1			
	LOQ		5			
	QC Exceedance	N	N	N	N	N
	Lab Certification		999580010			

	Sample Point	704	704	107	004	004
	Description	GWCTS Influent	GWCTS Influent	Mercury Field Blank Results	Combined Process WW & GW	Combined Process WW & GW
	Parameter	457	280	280	211	373
	Description	Suspended Solids, Total	Mercury, Total Recoverable	Mercury, Total Recoverable	Flow Rate	pH (Maximum)
	Units	mg/L	ng/L	ng/L	MGD	su
	Sample Type	24 HR FLOW PROP	GRAB	BLANK	CONTINUOUS	CONTINUOUS
	Frequency	WEEKLY	MONTHLY	MONTHLY	DAILY	DAILY
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					
	24					
	25					
	26					
	27					
	28				0.093	
	29					
	30					
	31					

	Sample Point	704		704		107		004		004	
	Description	GWCTS Influent		GWCTS Influent		Mercury Field Blank Results		Combined Process WW & GW		Combined Process WW & GW	
	Parameter	457		280		280		211		373	
	Description	Suspended Solids, Total		Mercury, Total Recoverable		Mercury, Total Recoverable		Flow Rate		pH (Maximum)	
	Units	mg/L		ng/L		ng/L		MGD		su	
Summary Values	Monthly Avg					0.093					
	Monthly Total										
	Daily Max					0.093					
	Daily Min					0.093					
Limit(s) in Effect	Monthly Avg										
	Monthly Total										
	Daily Max									9	
	Daily Min										
QA/QC Information	LOD					0.079					
	LOQ					0.5					
	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	374	112	35	35	280
	Description	pH (Minimum)	Chlorine, Total Residual	Arsenic, Total Recoverable	Arsenic, Total Recoverable	Mercury, Total Recoverable
	Units	su	ug/L	ug/L	lbs/day	ng/L
	Sample Type	CONTINUOUS	GRAB	24 HR FLOW PROP	CALCULATED	GRAB
	Frequency	DAILY	MONTHLY	MONTHLY	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					
	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	374		112		35		35		280	
	Description	pH (Minimum)		Chlorine, Total Residual		Arsenic, Total Recoverable		Arsenic, Total Recoverable		Mercury, Total Recoverable	
	Units	su		ug/L		ug/L		lbs/day		ng/L	
Summary Values	Monthly Avg										
	Monthly Total										
	Daily Max										
	Daily Min										
Limit(s) in Effect	Monthly Avg			38							
	Monthly Total										
	Daily Max			38		194		0.22		18	
	Daily Min	6									
QA/QC Information	LOD										
	LOQ										
	QC Exceedance										
	Lab Certification										

	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	280	87	87	147	147
	Description	Mercury, Total Recoverable	Cadmium, Total Recoverable	Cadmium, Total Recoverable	Copper, Total Recoverable	Copper, Total Recoverable
	Units	mg/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					
	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	280		87		87		147		147	
	Description	Mercury, Total Recoverable		Cadmium, Total Recoverable		Cadmium, Total Recoverable		Copper, Total Recoverable		Copper, Total Recoverable	
	Units	mg/day		ug/L		lbs/day		ug/L		lbs/day	
Summary Values	Monthly Avg										
	Monthly Total										
	Daily Max										
	Daily Min										
Limit(s) in Effect	Monthly Avg			57				69			
	Monthly Total										
	Daily Max			57		0.23		69		0.28	
	Daily Min										
QA/QC Information	LOD										
	LOQ										
	QC Exceedance										
	Lab Certification										

	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	315	315	553	553	152
	Description	Nickel, Total Recoverable	Nickel, Total Recoverable	Zinc, Total Recoverable	Zinc, Total Recoverable	Cyanide, Amenable
	Units	ug/L	lbs/day	ug/L	lbs/day	ug/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					
	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	315		315		553		553		152	
	Description	Nickel, Total Recoverable		Nickel, Total Recoverable		Zinc, Total Recoverable		Zinc, Total Recoverable		Cyanide, Amenable	
	Units	ug/L		lbs/day		ug/L		lbs/day		ug/L	
Summary Values	Monthly Avg										
	Monthly Total										
	Daily Max										
	Daily Min										
Limit(s) in Effect	Monthly Avg	2000				520				92	
	Monthly Total										
	Daily Max	2000		8.10		520		2.10		92	
	Daily Min										
QA/QC Information	LOD										
	LOQ										
	QC Exceedance										
	Lab Certification										

	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	152	231	480	1352	1353
	Description	Cyanide, Amenable	Hardness, Total as CaCO3	Temperature Maximum	PFOA	PFOS
	Units	lbs/day	mg/L	degF	ng/L	ng/L
	Sample Type	CALCULATED	24 HR FLOW PROP	MEASURE	24 HR FLOW PROP	24 HR FLOW PROP
	Frequency	MONTHLY	MONTHLY	WEEKLY	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					
	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	152		231		480		1352		1353	
	Description	Cyanide, Amenable		Hardness, Total as CaCO3		Temperature Maximum		PFOA		PFOS	
	Units	lbs/day		mg/L		degF		ng/L		ng/L	
Summary Values	Monthly Avg										
	Monthly Total										
	Daily Max										
	Daily Min										
Limit(s) in Effect	Monthly Avg									11	
	Monthly Total										
	Daily Max	0.37								11	
	Daily Min										
QA/QC Information	LOD										
	LOQ										
	QC Exceedance										
	Lab Certification										

	Sample Point	004	108	108	108	108
	Description	Combined Process WW & GW	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent
	Parameter	1353	211	457	35	35
	Description	PFOS	Flow Rate	Suspended Solids, Total	Arsenic, Total Recoverable	Arsenic, Total Recoverable
	Units	mg/day	MGD	mg/L	ug/L	lbs/day
	Sample Type	CALCULATED	CONTINUOUS	24 HR FLOW PROP	24 HR FLOW PROP	CALCULATED
	Frequency	MONTHLY	DAILY	WEEKLY	WEEKLY	WEEKLY
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					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					

	Sample Point	004		108		108		108		108	
	Description	Combined Process WW & GW		GWCTS Effluent		GWCTS Effluent		GWCTS Effluent		GWCTS Effluent	
	Parameter	1353		211		457		35		35	
	Description	PFOS		Flow Rate		Suspended Solids, Total		Arsenic, Total Recoverable		Arsenic, Total Recoverable	
	Units	mg/day		MGD		mg/L		ug/L		lbs/day	
Summary Values	Monthly Avg										
	Monthly Total										
	Daily Max										
	Daily Min										
Limit(s) in Effect	Monthly Avg	2.10									
	Monthly Total										
	Daily Max						500			0.17	
	Daily Min										
QA/QC Information	LOD										
	LOQ										
	QC Exceedance										
	Lab Certification										

	Sample Point	108	108	108	108
	Description	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent	GWCTS Effluent
	Parameter	280	280	1352	1353
	Description	Mercury, Total Recoverable	Mercury, Total Recoverable	PFOA	PFOS
	Units	ng/L	mg/day	ng/L	ng/L
	Sample Type	24 HR FLOW PROP	CALCULATED	24 HR FLOW PROP	24 HR FLOW PROP
	Frequency	MONTHLY	MONTHLY	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				
	21				
	22				
	23				
	24				
	25				
	26				
	27				
	28				
	29				
	30				
	31				

	Sample Point	108		108		108		108	
	Description	GWCTS Effluent		GWCTS Effluent		GWCTS Effluent		GWCTS Effluent	
	Parameter	280		280		1352		1353	
	Description	Mercury, Total Recoverable		Mercury, Total Recoverable		PFOA		PFOS	
	Units	ng/L		mg/day		ng/L		ng/L	
Summary Values	Monthly Avg								
	Monthly Total								
	Daily Max								
	Daily Min								
Limit(s) in Effect	Monthly Avg								
	Monthly Total								
	Daily Max	24							
	Daily Min								
QA/QC Information	LOD								
	LOQ								
	QC Exceedance	N		N		N		N	
	Lab Certification								

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

General Remarks

GW is still down and under construction so, there was no sampling from SP704, OF004 and SP108.

Laboratory Quality Control Comments

Submitted by Anne Fleury(afleury16) on 3/17/2023 8:05:12 AM

Attachment 3
2023 Pump Down Program Groundwater Elevation
Monitoring

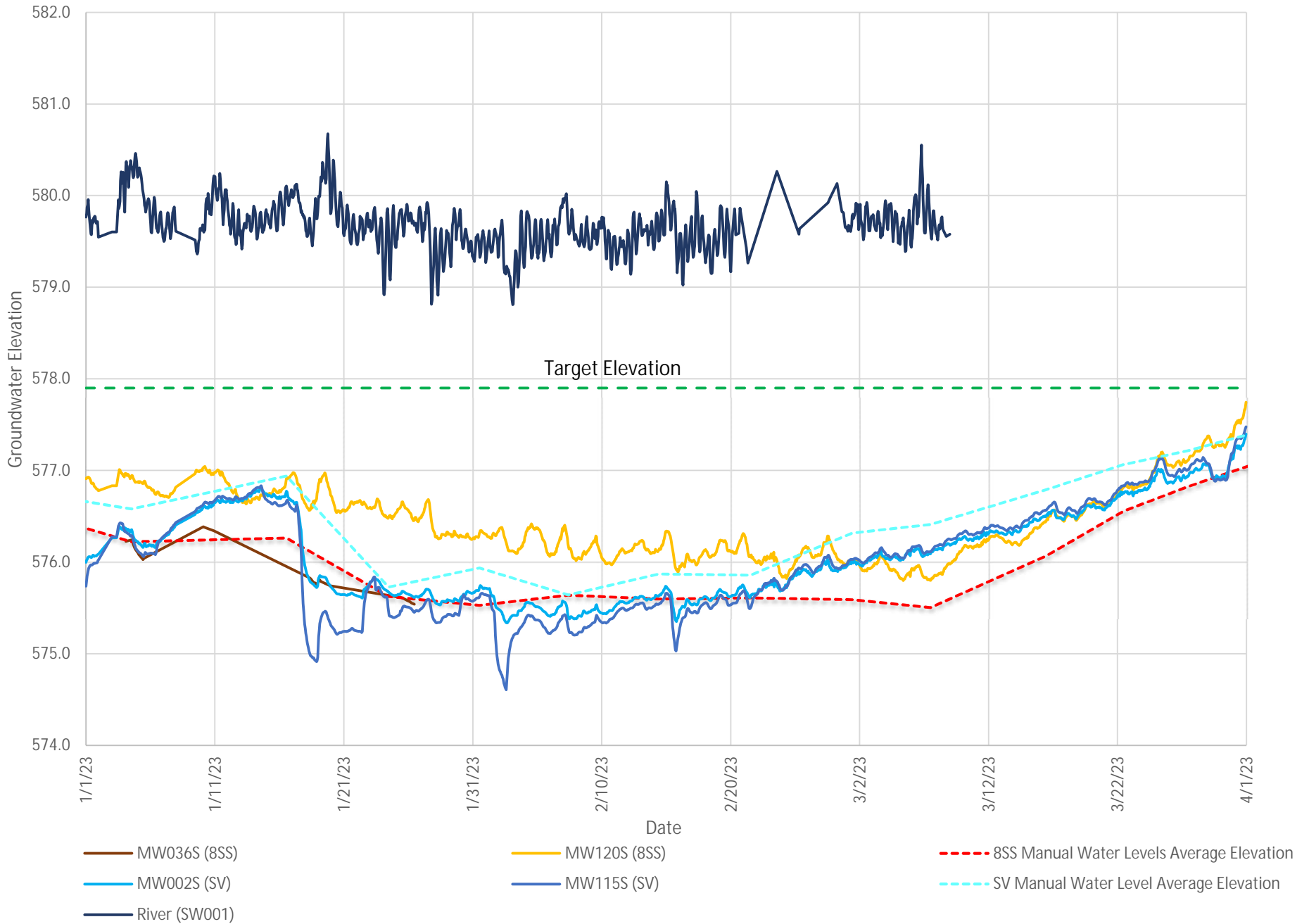
Attachment 3. 2023 Pump Down Program Groundwater Elevation Monitoring
 Tyco Fire Products LP, Marinette, Wisconsin

Target Elevation	577.9
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Well ID	January 4, 2023		January 16, 2023		January 24, 2023		January 31, 2023		February 7, 2023		February 14, 2023		February 21, 2023		March 1, 2023		March 7, 2023		March 16, 2023		March 22, 2023		March 27, 2023		April 3, 2023			
	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)	DTW	Corrected Groundwater Elevation (for equivalent fresh water)
MW001M	10.63	576.51	10.31	576.83	11.43	575.71	11.32	575.82	11.63	575.51	11.38	575.76	11.37	575.77	10.98	576.16	10.83	576.31	10.48	576.66	10.21	576.93	10.04	577.10	9.74	577.40		
MW001S	10.82	576.39	10.50	576.71	11.64	575.56	11.59	575.61	11.87	575.33	11.64	575.56	11.62	575.58	NM	-	NM	-	10.72	576.49	10.47	576.74	10.26	576.95	10.02	577.19		
MW002M-R	14.02	576.38	13.63	576.77	14.72	575.67	14.59	575.81	14.99	575.40	14.70	575.69	14.71	575.68	14.30	576.10	14.24	576.16	13.83	576.57	13.59	576.81	13.39	577.01	13.16	577.25		
MW002S-R	13.97	576.31	13.56	576.72	14.64	575.64	14.57	575.71	14.86	575.42	14.64	575.64	14.67	575.61	14.28	576.00	14.20	576.08	13.77	576.51	13.49	576.79	13.36	576.92	13.08	577.20		
MW031M	11.39	576.56	11.16	576.80	12.13	575.82	12.16	575.79	12.31	575.64	12.20	575.75	12.16	575.79	11.69	576.26	11.61	576.34	11.16	576.80	10.89	577.07	10.78	577.18	10.48	577.48		
MW031S	12.60	576.27	12.24	576.63	14.42	574.45	13.26	575.61	13.54	575.33	13.35	575.52	13.38	575.49	12.81	576.06	12.77	576.10	12.29	576.58	12.02	576.85	11.87	577.00	11.65	577.22		
MW113S	13.82	576.44	13.45	576.81	14.55	575.71	14.47	575.79	14.82	575.44	14.59	575.67	14.59	575.67	14.22	576.04	14.11	576.15	13.71	576.55	13.44	576.82	13.27	576.99	13.02	577.24		
MW113M	11.85	578.38	11.55	578.68	12.22	578.01	12.26	577.97	12.36	577.87	12.28	577.95	12.29	577.94	12.04	578.19	11.88	578.35	11.59	578.64	11.31	578.92	11.26	579.17	10.94	579.29		
MW115P	12.26	576.81	11.24	577.83	12.99	576.08	13.06	576.01	13.37	575.70	13.24	575.83	13.24	575.83	12.85	576.22	12.79	576.28	12.30	576.77	11.13	577.94	10.29	578.78	9.62	579.45		
MW115S	12.68	576.28	12.29	576.67	13.55	575.41	13.36	575.60	13.68	575.28	13.40	575.56	13.48	575.48	12.93	576.03	12.85	576.11	12.39	576.57	12.12	576.84	11.96	577.00	11.71	577.25		
MW116P	12.96	576.89	12.96	576.89	13.00	576.85	12.95	576.90	12.95	576.90	12.94	576.91	12.95	576.90	12.94	576.91	12.95	576.90	12.91	576.94	12.94	576.94	12.94	576.94	12.94	576.94		
MW116S	13.55	576.28	13.05	576.78	14.54	575.29	14.17	575.66	14.64	575.18	14.22	575.61	14.27	575.56	13.81	576.02	13.73	576.10	13.26	576.57	12.95	576.88	12.81	577.02	12.51	577.32		
MW119D	9.21	579.51	9.24	579.48	9.29	579.43	9.29	579.43	9.36	579.36	9.42	579.30	9.44	579.28	9.46	579.26	9.50	579.22	9.45	579.27	9.49	579.23	9.48	579.24	9.41	579.31		
EW-3	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-
EW-10	10.68	576.37	10.22	576.83	11.10	575.95	11.30	575.75	11.59	575.46	11.45	575.60	11.36	575.69	NM	-	NM	-	NM	-	9.98	577.07	NM	-	9.43	577.62		
EW-11	9.54	577.14	9.23	577.45	10.05	576.63	10.18	576.50	10.33	576.35	10.12	576.56	10.14	576.54	NM	-	NM	-	NM	-	9.08	577.60	NM	-	8.55	578.13		
EW-13	8.72	576.39	8.39	576.72	9.42	575.68	9.34	575.76	9.68	575.42	9.50	575.60	9.43	575.67	NM	-	NM	-	NM	-	7.77	577.34	7.44	577.67				
EW-14	9.71	576.36	9.32	576.75	10.60	575.47	10.36	575.71	10.70	575.37	10.45	575.62	10.43	575.64	10.02	576.05	9.97	576.10	9.49	576.58	9.24	576.83	8.99	577.09	8.06	578.02		
MW034M	12.14	576.08	12.60	575.62	12.66	575.56	12.92	575.30	12.80	575.42	12.88	575.34	12.78	575.44	12.80	575.42	12.91	575.31	12.11	576.11	11.50	576.72	11.28	576.94	11.50	576.72		
MW034S	12.52	575.66	12.21	575.97	13.02	575.16	13.28	574.90	13.21	574.97	13.23	574.95	13.11	575.07	13.16	575.02	13.25	574.93	12.48	575.70	11.83	576.35	11.55	576.63	11.62	576.56		
MW036M	12.52	575.98	12.45	576.05	13.13	575.36	13.23	575.26	13.04	575.45	13.05	575.44	13.07	575.42	12.99	575.50	13.14	575.35	12.68	575.82	12.27	576.23	11.99	576.52	11.64	576.87		
MW036S	12.02	576.23	11.92	576.33	12.68	575.57	12.68	575.57	12.55	575.70	12.56	575.69	12.59	575.66	12.51	575.74	12.66	575.59	12.19	576.06	11.74	576.51	11.47	576.78	11.08	577.17		
MW038M	9.74	576.40	9.59	576.55	26.58	559.56	10.43	575.71	10.19	575.95	10.21	575.93	10.28	575.86	NM	-	10.27	575.87	9.81	576.33	9.36	576.78	9.08	577.06	8.49	577.65		
MW038S	11.51	576.31	11.29	576.53	12.34	575.48	12.16	575.66	11.96	575.86	11.92	575.90	11.99	575.83	11.90	575.92	11.95	575.87	11.57	576.25	11.06	576.76	10.78	577.04	10.11	577.72		
MW120D	8.33	580.46	8.59	580.20	9.15	579.63	9.26	579.52	9.02	579.76	9.20	579.58	9.05	579.73	9.00	579.78	9.04	579.74	9.05	579.73	8.51	580.28	8.86	579.92	8.91	579.87		
MW120M	12.55	576.35	12.56	576.34	12.94	575.95	13.23	575.65	13.11	575.78	13.30	575.58	13.22	575.66	13.24	575.64	13.38	575.50	12.88	576.01	12.48	576.42	12.20	576.70	11.83	577.08		
MW120S	11.75	576.77	11.80	576.72	12.22	576.30	12.35	576.17	12.53	575.99	12.58	575.94	12.58	575.94	12.63	575.89	12.90	575.62	12.25	576.27	11.84	576.68	11.62	576.90	11.01	577.51		
EW-2	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-
EW-8	7.91	576.19	7.81	576.29	12.90	571.19	8.57	575.53	8.38	575.72	8.35	575.75	8.44	575.66	8.32	575.78	8.49	575.61	7.97	576.13	7.53	576.57	7.29	576.81	6.73	577.37		
EW-9	11.69	571.66	12.24	571.11	16.10	567.24	NM	-	NM	-	NM	-	8.34	575.02	NM	-	NM	-	NM	-	NM	-	6.79	576.57	10.32	573.04		
MW004M	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-
MW004S	5.78	582.96	5.50	583.24	5.46	583.28	5.63	583.11	5.84	582.90	5.70	583.04	5.53	583.21	5.53	583.21	5.25	583.49	4.82	583.92	4.68	584.06	4.51	584.23	4.08	584.66		
MW032M	6.47	581.84	6.46	581.85	6.65	581.66	6.88	581.43	6.69	581.62	6.70	581.61	6.55	582.96	6.55	581.76	6.26	582.05	6.09	582.22	6.01	582.30	5.99	582.32	5.56	582.75		
MW032S	5.42	583.07	5.33	583.16	5.30	583.19	5.58	582.91	5.59	582.90	5.49	583.00	6.67	581.81	5.29	583.20	5.04	583.45	4.64	583.85	4.59	583.90	4.46	584.03	3.98	584.51		
MW033M	4.60	582.79	4.39	583.00	4.25	583.14	4.53	582.86	4.68	582.71	4.49	582.90	4.32	583.07	4.31	583.08	3.84	583.55	3.72	583.67	3.51	583.88	3.11	584.28	2.83	584.57		
MW033S	4.48	582.84	4.12	583.20	4.04	583.28	4.28	583.04	4.37	582.95	4.26	583.06	4.09	583.23	4.11	583.21	4.04	583.28	3.45	583.87	3.24	584.08	3.33	583.99	2.60	584.72		
MW039M	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-
MW039S	3.08	583.12	2.93	583.27	2.89	583.31	3.05	583.15	3.25	582.95	3.09	583.11	2.95	583.25	2.96	583.24	2.65	583.55	2.24	583.96	2.08	584.12	1.92	584.28	1.50	584.70		
MW035M	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-
MW035S	5.99	581.66	6.33	581.32	6.49	581.16	6.98	580.67	7.24	580.41	6.94	580.71	6.71	580.94	6.91	580.74	6.28	581.37	5.91	581.74	5.65	582.00	5.64	582.01	5.62	582.03		
MW037M	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-
MW037S	5.59	581.48	5.67	581.40	5.72	581.35	6.29	580.78	6.57	580.49	6.25	580.82	5.99	581.08	6.21	580.86	5.48	581.59	5.12	581.95	4.91	582.16	4.80	582.27	4.74	582.33		
SG4	7.15	580.30	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	10.18	577.27
Rough Target Elevation Calc SV*		576.58		576.94		575.73		575.94		575.64		575.87		575.86		576.32		576.41		576.79		577.06		577.21		577.48		
Rough Target Elevation Calc 8S*		576.22		576.26		573.62		575.53		575.64		575.60		575.61		575.59		575.51		576.07		576.56		576.82		577.16		
Target Elevation (NAVD88																												

Attachment 4
First Quarter 2023 PDP Pump House System
Hydrograph and Pumping Rates

January through March 2023 Water Levels Pump Down Program System Hydrographs



January through March 2023 Salt Vault and 8th Street Slip Weekly Average Extraction Rates

