

October 14, 2019

Jennifer Dodds  
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 2019)*  
*Administrative Order on Consent (February 26, 2009)*  
*Tyco Fire Products LP, Stanton Street Facility, Marinette, Wisconsin*  
*WID 006 125 215***

Dear Ms. Dodds:

Section VI, 21, b (Page 10) of the Administrative Order on Consent (AOC), dated February 26, 2009, requires Tyco Fire Products LP (Tyco) to submit quarterly progress reports to the U.S. Environmental Protection Agency (EPA) Region 5 and the Wisconsin Department of Natural Resources (WDNR) (collectively referred herein as the Agencies). The 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 July 1 through September 30, 2019 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**

Operation of the groundwater collection and treatment system (GWCTS) continued through third quarter 2019. Attachment 1 summarizes the operational data, and Attachment 2 contains the Discharge Monitoring Reports.

Pump down operations with the temporary system continued through third quarter 2019 in the former Salt Vault and former 8th Street Slip areas under management of Endpoint Solutions. Details of the pump down operations are being reported to the Agencies in biweekly summary reports.

An initial vertical barrier wall (VBW) land side inspection and survey of the sheet pile VBW were completed on August 22, 2019. The underwater and riverside inspection of the sheet pile VBW as well as another concurrent check of the land side was completed September 24 and September 25, 2019. No major issues were identified, and the survey identified four dimple locations with movement of just over an inch, but based on the inspection, are not areas for concern. Several areas were identified that require some follow-up maintenance. This work will be completed by Tyco during the fourth quarter 2019 or spring 2020 and includes:

- One bolt area with a broken washer plate. This was the only location that appeared to have a small leak in the area where the plate was broken off. The broken washer will be addressed in fourth quarter.
- One tieback cover plate was cracked; however, no flow was observed. The cracked cover plate will be addressed in fourth quarter.

- Several bolts along the Main Plant area appear to have a gap along the washer plate, however, no flow was observed. Construction drawings indicate an 1/8-inch thick neoprene donut washer was placed between the steel washer plate and sheet pile wall. The observed gaps are believed to be from the neoprene washers which were designed to prevent flow through the bolt hole (the washers could not be seen during the inspection). The bolts will continue to be monitored.
- Erosion on the landside from the high river levels. Erosional areas will be addressed in spring 2020 after the spring snow melt.
- Some sheet pile wall cap welds had cracks; note these are on top of the sheet pile wall and not a concern regarding VBW integrity. The cracks will continue to be monitored.
- Missing VBW markers along the slurry wall portion. Replacement of markers will be addressed in spring 2020 after the spring snow melt.
- Potential erosion/loss of fill between the Wetlands Area and the former 8th Street Slip between two generations of sheet pile wall; however, no flow was observed. There is a gap between the two walls approximately 2 inches wide. The upland area is paved, and hard material (likely grout) fills the gap along the top 30 to 48 inches with soft fill observed in the gap below. This seem was jet- grouted during installation of the sheet pile section in the Wetlands Area. The area will be addressed in fourth quarter.

The VBW inspection details will be provided in the annual report

The diving portion of *Arsenic Migration Pathways Evaluation Work Plan* field activities was completed from September 16 to September 20, 2019. The data will be compiled and provided with a summary of the follow-on drilling activities component of the work that is planned to start the week of October 14, 2019. All work activities will be provided in a memorandum that will be submitted by the end of first quarter 2020.

The staff gauge that had been damaged was fixed/reinstalled on or before July 2, 2019.

The five new shallow monitoring wells (MW107S, MW121S, MW122S, MW123S, and MW124S), one replacement monitoring well (MW118D-R), three repaired/adjusted monitoring wells (MW068S, MW118S and MW118M), and one reinstalled staff gauge were surveyed on August 22, 2019. The data will be compiled and provided in a drilling summary memorandum and included in the annual report.

Quarterly transducer data downloads that were initiated in June 2019 were completed on July 10, 2019 at the 12 remaining transducer locations. Manual groundwater elevation data were obtained at each transducer location where a download was completed for calibration of the data at the time of the installation/download.

The three transducers on the outside of the VBW (MW003S, MW102S, and MW100S) that were removed after the transducer download to prepare for upcoming per- and polyfluoroalkyl substances sampling have not yet been reinstalled. This sampling occurred in late August 2019, and the transducers are planned to be reinstalled during the upcoming semiannual groundwater sampling event in early October 2019. A non-vented transducer also was ordered for MW107D that will be installed to allow for SeriesSEE evaluation at this well. MW107D is a flush-mount monitoring well in a high traffic area that cannot be converted to a stickup. The non-vented transducer can be installed without the cable and allow for the well cap to remain in place, keeping possible surface water infiltration out of the well.

### **Additional Activities**

The Wisconsin Pollutant Discharge and Elimination System (WPDES) variance permit remains on hold until the path forward on industrial outfall OF001 is determined. This delays moving forward with the conveyance system construction work for the permanent pump down program approach. Additional information requested by WDNR regarding GWCTS outfall OF003 were provided to WDNR on September 3, 2019. In addition, Tyco is evaluating stormwater management options in accordance with

WDNR discussions that may significantly change the stormwater management system at the site. A meeting with WDNR was held on August 7, 2019 to discuss plans for a stormwater diversion model that Arcadis is preparing that will better evaluate specific stormwater management options for the site.

## **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 GWCTS. The GWCTS operates under WPDES Permit WI-0001040-07-0. Attachment 2 includes the GWCTS monthly WPDES Discharge Monitoring Reports for June 2019 through August 2019. Attachment 1 contains additional data on the GWCTS operations.

Groundwater elevation data were collected from monitoring wells in the former 8th Street Slip and former Salt Vault areas in accordance with the pump down program requirements and are being reported to the Agencies in biweekly summary reports. Groundwater elevation data recorded by installed transducers during the third quarter of 2019 are being compiled and evaluated. The transducer data will be provided in the annual report. Sediment and surface water samples were collected during the diving portion of *Arsenic Migration Pathways Evaluation Work Plan* field activities. The data are not yet available and will be included in a memorandum.

## **Problems Encountered**

Menominee River water levels have remained high through third quarter 2019. During the reporting period, the river water elevation has remained continuously in excess of the top of the VBW in the Wetlands Area of the site. Although less frequently than last reporting period, periodically, water levels were in excess at the weirs in the Main Plant area. This contributed to increased groundwater levels in those areas.

Also because of the high water levels, during the VBW survey, dimple points D-42 to D-53 (essentially the Wetlands Area or from just east of staff gauge SG-4 to the east) was not able to be surveyed nor was the wall able to be inspected from the land side. Portions of the slurry wall in the Wetlands Area also were not able to be inspected as well.

During the week of July 8, 2019, Tyco had three Jacobs Engineering Group Inc. staff onsite to support Tyco with troubleshooting the GWCTS operations and maintenance issues that has resulted in more limited operational run times. The items observed and how they are being addressed were summarized in an email sent to EPA on August 20, 2019. Monthly operational run times increased to 12 and 16 days in August and September (July was 4 days), but overall volume extracted was similar to or slightly less than the previous reporting period (extracted volume flow meters are believed to be inaccurate due to scaling, see Attachment 1). Reject volumes were also high and are anticipated to improve as operational improvements are made during the next reporting period. In addition, extraction wells EW-5 and EW-7 were not operational during the reporting period; Tyco is evaluating options to return the wells to service. The new Vibratory Shear Enhanced Processing (VSEP) equipment is onsite, and Tyco is working with the equipment manufacturer and local contractors to install the new equipment and evaluate the VSEP units to get the units back online. The VSEP units will help with reducing the amount of time it takes for the reject tank to fill, which recently has limited operational run time once the reject tanks are full.

## **Schedule of Upcoming Activities**

The following is a summary of activities to be conducted during the next reporting period.

- Submit the quarterly progress report
- Initiate construction of new ChemDesign building and related changes to RCRA remedy components
- Submit report summarizing VBW inspection findings and address any inspection findings for the VBW

- Submit well installation summary memorandum
- Conduct fourth quarter 2019 semiannual barrier wall groundwater monitoring
- Conduct transducer data download activities
- Conduct drilling portion of *Arsenic Migration Pathways Evaluation Work Plan* field activities
- Continue pump down operations in the former Salt Vault and former 8th Street Slip areas
- Install new VSEP equipment and conduct system evaluation
- Complete maintenance on GWCTS extraction wells in an effort to improve flow rates in the Main Plant
- Conduct vapor intrusion assessment field activities (assuming timely approval from agencies is received)
- Continue evaluating WPDES variance permit options that will determine path forward on conveyance and GWCTS improvements

## List of Key Correspondence and Document Submittals

**Table 1. Documents Submitted**

*Quarterly Progress Report (July to September 2019)  
 Tyco Fire Products LP Facility, Marinette, Wisconsin*

Description of Submittal	Submitted To	Date Submitted
Revised Five-Year Technical Review Report and Response to Comments	EPA	July 12, 2019
Biweekly Summary Report for Pump Down Program	EPA	July 13, 2019
Quarterly Progress Report	EPA	July 15, 2019
Biweekly Summary Report for Pump Down Program	EPA	July 25, 2019
Biweekly Summary Report for Pump Down Program	EPA	August 7, 2019
Email Regarding <i>Arsenic Migration Pathways Evaluation Work Plan</i> Field Activities schedule	EPA	August 15, 2019
Email Responding to EPA Comment on Quarterly Report for Second Quarter Regarding the GWCTS Operation and Outcome from Week of July 8, 2019 Site Visit	EPA	August 20, 2019
Biweekly Summary Report for Pump Down Program	EPA	August 22, 2019
Email Response to EPA Comment 6 on the <i>Arsenic Migration Pathways Evaluation Work Plan</i> (information/data for the historical vibrating wire piezometer and paired monitoring wells)	EPA	September 3, 2019
Response to April 17, 2019 Outfall 003 Components of Additional Information Request for Tyco Arsenic Variance Package	WDNR	September 3, 2019
Biweekly Summary Report for Pump Down Program	EPA	September 11, 2019
Biweekly Summary Report for Pump Down Program	EPA	September 18, 2019
Technical Memorandum: <i>Vapor Intrusion Assessment and Work Plan</i>	EPA	September 27, 2019
<i>Stormwater Improvement Construction Completion Report</i>	EPA	September 27, 2019

**Table 2. Correspondence from Agency**  
*Quarterly Progress Report (July through September 2019)*  
*Tyco Fire Products LP Facility, Marinette, Wisconsin*

Description of Correspondence	Submitted By	Date Submitted
Quarterly Progress Report – Email with Questions on GWCTS Operation	EPA	July 17, 2019
Conditional Approval Letter: <i>EPA and WDNR Review of Arsenic Migration Pathway Evaluation Work Plan</i>	EPA	July 17, 2019
Quarterly Progress Report – Follow-up Email with Question on GWCTS Operation and Site Visit	EPA	August 15, 2019
Conditional Approval Letter: <i>Addendum to 2015 Barrier Wall Groundwater Monitoring Plan Update</i>	EPA	September 4, 2019

If you have any questions or require additional information, please contact me at 262-644-6167 or Jeffrey Danko at 414-524-3344.

Respectfully Yours,

Jacobs Engineering Group Inc.



Heather Ziegelbauer  
Project Manager

**Attachments**

- 1 Groundwater Collection and Treatment System Operation Summary
- 2 Discharge Monitoring Reports for the Groundwater Collection and Treatment System

cc: Angela Carey, WDNR  
Jim Killian, WDNR  
Ryan Suennen, Tyco Fire Products  
Joe Janeczek, Johnson Controls  
Jeff Danko, Johnson Controls  
Mariel Carter, Stephenson Public Library

Document Control No.: D3235600.269

Attachment 1  
Groundwater Collection and  
Treatment System Operation Summary

## Groundwater Collection and Treatment System Operations for Tyco Fire Products LP, Marinette, Wisconsin, July 1 through September 30, 2019

Groundwater collection and treatment system (GWCTS) operations from July 1 through September 30, 2019 at the Tyco facility on Stanton Street in Marinette, Wisconsin are summarized below.

- The GWCTS operated for 4 days in July 2019, 12 days in August 2019, and 16 days in September 2019, for a total of 32 days.
- The precipitation recorded from the weather station in Marinette, Wisconsin was 17.61 inches of rain (<http://www.ncdc.noaa.gov/cdo-web/datasets/GHCND/stations/GHCND:USC00475091/detail>).
- Based on the recorded data and because the effluent meters are calibrated, Tyco believes the recorded extracted volumes are inaccurate and the flow meters are scaled and need cleaning. Tyco plans to clean the meters in October 2019. Based on the recorded data an estimated 81,657 gallons of groundwater were extracted (not including volumes extracted as part of the pump down program) from the site during the reporting period; however, this value is likely closer to the discharged volume noted in the next bullet. Table 1 lists the water volumes extracted from each area of the site for this quarter based on the recorded data.
- An estimated 51,362 gallons of water were discharged to the Menominee River as effluent under the WPDES permit.
- Approximately 99,200 gallons of reject water were produced during system operations and subsequently disposed of offsite.

**Table 2. Extraction Well Data Summary (July through September 2019)**

*Groundwater Collection and Treatment System  
Tyco Fire Products LP Facility, Marinette, Wisconsin*

Extraction Well	Gallons Run, Third Quarter 2019 (July 1 through September 30, 2019)
EW-1	20,163
EW-2	25
EW-3	14
EW-4	1,394
EW-5	0
EW-6	60,061
EW-7	0
<b>Total</b>	<b>81,657*</b>

\*Extracted volume based on recorded meter readings; however, these values may be inaccurate because of scaling on the flow meters. Overall flow is anticipated to be closer to the discharged volume of 51,362 gallons.

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: 715-735-7411  
 Reporting Period: 06/01/2019 - 06/30/2019  
 Form Due Date: 07/21/2019  
 Permit Number: 0001040

Date Received:  
 DOC: 422916  
 FIN: 7245  
 FID: 438039470  
 Region: Northeast Region  
 Permit Drafter: Trevor J Moen  
 Reviewer: Nicole E Krueger  
 Office: Green Bay

Sample Point	001	703	001	001	001	
Description	PRIOR TO MENOMINEE RIVER	Intake Water Monitoring	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	
Parameter	211	280	487	374	373	
Description	Flow Rate	Mercury, Total Recoverable	Temperature	pH (Minimum)	pH (Maximum)	
Units	MGD	ng/L	degF	su	su	
Sample Type	CONTINUOUS	GRAB	GRAB	CONTINUOUS	CONTINUOUS	
Frequency	DAILY	MONTHLY	MONTHLY	DAILY	DAILY	
Sample Results	<b>Day 1</b>	0.05784		65	6.8	7.1
	<b>2</b>	0.04574		67	6.6	7.2
	<b>3</b>	0.12494		66	6.5	6.8
	<b>4</b>	0.12565		72	6.6	6.9
	<b>5</b>	0.12677		69	6.6	7.0
	<b>6</b>	0.12306		68	6.5	6.9
	<b>7</b>	0.12055		70	6.6	7.0
	<b>8</b>	0.07503		89	6.6	7.2
	<b>9</b>	0.05208		72	6.7	7.5
	<b>10</b>	0.12429		70	6.7	7.2
	<b>11</b>	0.14966		72	6.7	7.3
	<b>12</b>	0.22807		70	6.3	6.9
	<b>13</b>	0.09990		70	6.6	7.0
	<b>14</b>	0.23070		70	6.4	7.0
	<b>15</b>	0.06249		69	6.4	7.2
	<b>16</b>	0.04463		68	6.8	7.5
	<b>17</b>	0.11376	2.2	72	6.7	6.8
	<b>18</b>	0.07511		72	6.8	7.2
	<b>19</b>	0.03647		72	7.0	7.3
	<b>20</b>	0.07963		73	6.9	7.3
	<b>21</b>	0.05348		74	7.1	7.7
	<b>22</b>	0.00478		78	7.4	7.7
	<b>23</b>	0.04129		78	6.8	7.7
	<b>24</b>	0.16101		75	6.4	6.8
	<b>25</b>	0.07321		71	6.5	7.1
	<b>26</b>	0.11020		76	6.5	6.7
	<b>27</b>	0.14582		75	6.5	7.0
	<b>28</b>	0.05031		76	6.4	6.9
	<b>29</b>	0.0		81	6.9	7.9
	<b>30</b>	0.02828		79	7.2	7.7
	<b>31</b>					

	Sample Point	001	703	001	001	001
	Description	PRIOR TO MENOMINEE RIVER	Intake Water Monitoring	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER
	Parameter	211	280	487	374	373
	Description	Flow Rate	Mercury, Total Recoverable	Temperature	pH (Minimum)	pH (Maximum)
	Units	MGD	ng/L	degF	su	su
<b>Summary Values</b>	<b>Monthly Avg</b>	0.092158333	2.2	72.633333333	6.683333333	7.183333333
	<b>Monthly Total</b>					
	<b>Daily Max</b>	0.2307	2.2	89	7.4	7.9
	<b>Daily Min</b>	0	2.2	65	6.3	6.7
	<b>Rolling 12 Month Avg</b>					
<b>Limit(s) in Effect</b>	<b>Monthly Avg</b>					
	<b>Monthly Total</b>					
	<b>Daily Max</b>					11 0
	<b>Daily Min</b>				4 0	
	<b>Rolling 12 Month Avg</b>					
<b>QA/QC Information</b>	<b>LOD</b>		0.12			
	<b>LOQ</b>		0.39			
	<b>QC Exceedance</b>	N	N	N	N	N
	<b>Lab Certification</b>		721026460			

	<b>Sample Point</b>	001	001	001	001	001
	<b>Description</b>	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER
	<b>Parameter</b>	379	376	388	231	35
	<b>Description</b>	pH Total Exceedance Time Minutes	pH Exceedances Greater Than 60 Minutes	Phosphorus, Total	Hardness, Total as CaCO3	Arsenic, Total Recoverable
	<b>Units</b>	minutes	Number	mg/L	mg/L	ug/L
	<b>Sample Type</b>	CONTINUOUS	CONTINUOUS	24 HR COMP	24 HR COMP	24 HR COMP
	<b>Frequency</b>	DAILY	DAILY	WEEKLY	MONTHLY	MONTHLY
<b>Sample Results</b>	<b>Day 1</b>					
	<b>2</b>					
	<b>3</b>			0.11	250	35
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>					
	<b>8</b>					
	<b>9</b>			0.57	260	39
	<b>10</b>					
	<b>11</b>					
	<b>12</b>					
	<b>13</b>					
	<b>14</b>					
	<b>15</b>					
	<b>16</b>					
	<b>17</b>			0.14	240	48
	<b>18</b>					
	<b>19</b>					
	<b>20</b>					
	<b>21</b>					
	<b>22</b>					
	<b>23</b>					
	<b>24</b>			2.8	200	85
	<b>25</b>					
	<b>26</b>					
	<b>27</b>					
	<b>28</b>					
	<b>29</b>					
	<b>30</b>					
	<b>31</b>					

	Sample Point	001		001		001		001	
	Description	PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER	
	Parameter	379		376		388		231	
	Description	pH Total Exceedance Time Minutes		pH Exceedances Greater Than 60 Minutes		Phosphorus, Total		Hardness, Total as CaCO3	
	Units	minutes		Number		mg/L		mg/L	
<b>Summary Values</b>	Monthly Avg					0.905		237.5	
	Monthly Total								
	Daily Max					2.8		260	
	Daily Min					0.11		200	
	Rolling 12 Month Avg					0.2			
<b>Limit(s) in Effect</b>	Monthly Avg								
	Monthly Total	446	0						
	Daily Max			0	0			680	0
	Daily Min								
	Rolling 12 Month Avg					1	0		
<b>QA/QC Information</b>	LOD					0.12		2.1	
	LOQ					0.25		5	
	QC Exceedance	N		N		N		N	
	Lab Certification					999580010		999580010	

	<b>Sample Point</b>	001	001	001	001	001
	<b>Description</b>	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER
	<b>Parameter</b>	35	147	147	87	152
	<b>Description</b>	Arsenic, Total Recoverable	Copper, Total Recoverable	Copper, Total Recoverable	Cadmium, Total Recoverable	Cyanide, Amenable
	<b>Units</b>	lbs/day	ug/L	lbs/day	ug/L	ug/L
	<b>Sample Type</b>	CALCULATED	24 HR COMP	24 HR COMP	24 HR COMP	24 HR COMP
	<b>Frequency</b>	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
<b>Sample Results</b>	<b>Day 1</b>					
	<b>2</b>					
	<b>3</b>	0.0364	13	0.01352	<0.49	<5.0
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>					
	<b>8</b>					
	<b>9</b>					
	<b>10</b>	0.04056	11	0.01144	0.49	
	<b>11</b>					
	<b>12</b>					
	<b>13</b>					
	<b>14</b>					
	<b>15</b>					
	<b>16</b>					
	<b>17</b>	0.0456	11	0.01045	0.56	
	<b>18</b>					
	<b>19</b>					
	<b>20</b>					
	<b>21</b>					
	<b>22</b>					
	<b>23</b>					
	<b>24</b>	0.1139	14	0.01876	1.8	
	<b>25</b>					
	<b>26</b>					
	<b>27</b>					
	<b>28</b>					
	<b>29</b>					
	<b>30</b>					
	<b>31</b>					

	Sample Point	001		001		001		001	
	Description	PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER	
	Parameter	35		147		147		87	
	Description	Arsenic, Total Recoverable		Copper, Total Recoverable		Copper, Total Recoverable		Cadmium, Total Recoverable	
	Units	lbs/day		ug/L		lbs/day		ug/L	
<b>Summary Values</b>	Monthly Avg	0.059115		12.25		0.0135425		0.7125	
	Monthly Total								
	Daily Max	0.1139		14		0.01876		1.8	
	Daily Min	0.0364		11		0.01045		<0.49	
	Rolling 12 Month Avg								
<b>Limit(s) in Effect</b>	Monthly Avg								
	Monthly Total								
	Daily Max	12	0	69	0	0.98	0		
	Daily Min								
	Rolling 12 Month Avg								
<b>QA/QC Information</b>	LOD			1.7				0.49	
	LOQ			5				1	
	QC Exceedance	N		N		N		N	
	Lab Certification			999580010				999580010	

	<b>Sample Point</b>	001	001	101	101	101
	<b>Description</b>	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent
	<b>Parameter</b>	112	280	211	457	342
	<b>Description</b>	Chlorine, Total Residual	Mercury, Total Recoverable	Flow Rate	Suspended Solids, Total	Oil & Grease (Freon)
	<b>Units</b>	ug/L	ng/L	MGD	mg/L	mg/L
	<b>Sample Type</b>	GRAB	GRAB	CONTINUOUS	24 HR COMP	GRAB
	<b>Frequency</b>	MONTHLY	MONTHLY	DAILY	DAILY	2/WEEK
<b>Sample Results</b>	<b>Day 1</b>			0.01030	4.0	
	<b>2</b>					
	<b>3</b>			0.04621	3.5	<1.6
	<b>4</b>			0.03470	6.0	2.2
	<b>5</b>			0.03554	<1.9	
	<b>6</b>			0.02285	3.0	
	<b>7</b>			0.04102	3.0	
	<b>8</b>			0.01575	3.0	
	<b>9</b>					
	<b>10</b>			0.04932	<1.9	1.7
	<b>11</b>			0.03427	2.5	1.5
	<b>12</b>			0.04013	<1.9	
	<b>13</b>			0.03636	4.0	
	<b>14</b>			0.03537	3.5	
	<b>15</b>			0.01438	3.5	
	<b>16</b>					
	<b>17</b>		18	0.04957	3.5	<1.5
	<b>18</b>			0.04456	3.5	34.6
	<b>19</b>			0.02713	4.5	
	<b>20</b>			0.03496	7.0	
	<b>21</b>			0.01147	3.0	
	<b>22</b>					
	<b>23</b>					
	<b>24</b>	25		0.04600	<1.9	4.0
	<b>25</b>			0.01035	7.0	2.2
	<b>26</b>			0.04973	6.5	
	<b>27</b>			0.04889	9.0	
	<b>28</b>			0.03280	11.0	
	<b>29</b>					
	<b>30</b>					
	<b>31</b>					

	Sample Point	001		001		101		101			
	Description	PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER		Metal Finishing Effluent		Metal Finishing Effluent			
	Parameter	112		280		211		457			
	Description	Chlorine, Total Residual		Mercury, Total Recoverable		Flow Rate		Suspended Solids, Total			
	Units	ug/L		ng/L		MGD		mg/L			
<b>Summary Values</b>	Monthly Avg	25		18		0.033550435		3.956521739		5.775	
	Monthly Total										
	Daily Max	25		18		0.04973		11		34.6	
	Daily Min	25		18		0.0103		<1.9		<1.5	
	Rolling 12 Month Avg										
<b>Limit(s) in Effect</b>	Monthly Avg							31	0	26	0
	Monthly Total										
	Daily Max							60	0	52	0
	Daily Min										
	Rolling 12 Month Avg										
<b>QA/QC Information</b>	LOD	30		0.12						1.3	
	LOQ	100		0.39						6	
	QC Exceedance	N		N		N		N		N	
	Lab Certification			721026460				999580010		999580010	



	<b>Sample Point</b>	101	101	101	101	101
	<b>Description</b>	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent
	<b>Parameter</b>	87	133	315	553	155
	<b>Description</b>	Cadmium, Total Recoverable	Chromium, Total Recoverable	Nickel, Total Recoverable	Zinc, Total Recoverable	Cyanide, Total
	<b>Units</b>	ug/L	ug/L	ug/L	ug/L	ug/L
	<b>Sample Type</b>	24 HR COMP	24 HR COMP	24 HR COMP	24 HR COMP	GRAB
	<b>Frequency</b>	2/WEEK	MONTHLY	2/WEEK	2/WEEK	MONTHLY
<b>Sample Results</b>	<b>Day 1</b>	<0.49	<2.2	4.7	52	
	<b>2</b>					
	<b>3</b>	<0.49	<2.2	4.0	63	<3.0
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>					
	<b>8</b>	<0.49	<2.2	2.5	64	
	<b>9</b>					
	<b>10</b>	<0.49	<2.2	2.5	72	
	<b>11</b>					
	<b>12</b>					
	<b>13</b>					
	<b>14</b>					
	<b>15</b>	<0.49	<2.2	3.7	77	
	<b>16</b>					
	<b>17</b>	<0.49	<2.2	4.9	120	
	<b>18</b>					
	<b>19</b>					
	<b>20</b>					
	<b>21</b>					
	<b>22</b>					
	<b>23</b>					
	<b>24</b>	<0.49	<2.2	5.0	73	
	<b>25</b>	<0.49	<2.2	4.7	75	
	<b>26</b>					
	<b>27</b>					
	<b>28</b>					
	<b>29</b>					
	<b>30</b>					
	<b>31</b>					

	<b>Sample Point</b>	101		101		101		101		101	
	<b>Description</b>	Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent	
	<b>Parameter</b>	87		133		315		553		155	
	<b>Description</b>	Cadmium, Total Recoverable		Chromium, Total Recoverable		Nickel, Total Recoverable		Zinc, Total Recoverable		Cyanide, Total	
	<b>Units</b>	ug/L		ug/L		ug/L		ug/L		ug/L	
<b>Summary Values</b>	<b>Monthly Avg</b>	0		0		4		74.5		0	
	<b>Monthly Total</b>										
	<b>Daily Max</b>	<0.49		<2.2		5		120		<3	
	<b>Daily Min</b>	<0.49		<2.2		2.5		52		<3	
	<b>Rolling 12 Month Avg</b>										
<b>Limit(s) in Effect</b>	<b>Monthly Avg</b>	260	0	1710	0	2380	0	1480	0	650	0
	<b>Monthly Total</b>										
	<b>Daily Max</b>	690	0	2770	0	3980	0	2610	0	1200	0
	<b>Daily Min</b>										
	<b>Rolling 12 Month Avg</b>										
<b>QA/QC Information</b>	<b>LOD</b>	0.49		2.2		1.5		3.6		3	
	<b>LOQ</b>	1		5		5		10		10	
	<b>QC Exceedance</b>	N		N		N		N		N	
	<b>Lab Certification</b>	999580010		999580010		999580010		999580010		999580010	

	<b>Sample Point</b>	101	101	101	101	101
	<b>Description</b>	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent
	<b>Parameter</b>	147	264	430	374	373
	<b>Description</b>	Copper, Total Recoverable	Lead, Total Recoverable	Silver, Total Recoverable	pH (Minimum)	pH (Maximum)
	<b>Units</b>	ug/L	ug/L	ug/L	su	su
	<b>Sample Type</b>	24 HR COMP	24 HR COMP	24 HR COMP	CONTINUOUS	CONTINUOUS
	<b>Frequency</b>	2/WEEK	MONTHLY	MONTHLY	DAILY	DAILY
<b>Sample Results</b>	<b>Day 1</b>	5.4	<1.3	<1.1	6.8	7.2
	<b>2</b>					
	<b>3</b>	8.9	<1.3	<1.1	7.2	7.6
	<b>4</b>				7.1	8.0
	<b>5</b>				7.0	7.9
	<b>6</b>				6.9	7.8
	<b>7</b>				7.0	7.2
	<b>8</b>	6.9	<1.3	1.1	6.4	7.2
	<b>9</b>					
	<b>10</b>	6.0	<1.3	<1.1	7.2	8.1
	<b>11</b>				6.5	7.4
	<b>12</b>				6.5	7.3
	<b>13</b>				6.6	7.4
	<b>14</b>				6.8	7.6
	<b>15</b>	3.8	<1.3	<1.1	6.8	7.8
	<b>16</b>					
	<b>17</b>	4.6	<1.3	<1.1	6.5	7.2
	<b>18</b>				6.6	7.0
	<b>19</b>				6.7	7.8
	<b>20</b>				6.6	7.9
	<b>21</b>				6.8	8.8
	<b>22</b>					
	<b>23</b>					
	<b>24</b>	6.7	<1.3	<1.1	6.8	7.7
	<b>25</b>	12	<1.3	<1.1	6.5	7.2
	<b>26</b>				6.1	8.4
	<b>27</b>				6.5	7.8
	<b>28</b>				7.2	9.0
	<b>29</b>					
	<b>30</b>					
	<b>31</b>					

	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		264		430		374		373	
	Description	Copper, Total Recoverable		Lead, Total Recoverable		Silver, Total Recoverable		pH (Minimum)		pH (Maximum)	
	Units	ug/L		ug/L		ug/L		su		su	
<b>Summary Values</b>	Monthly Avg	6.7875		0		0.1375		6.743478261		7.708695652	
	Monthly Total										
	Daily Max	12		<1.3		1.1		7.2		9	
	Daily Min	3.8		<1.3		<1.1		6.1		7	
	Rolling 12 Month Avg										
<b>Limit(s) in Effect</b>	Monthly Avg	2070	0	430	0	240	0				
	Monthly Total										
	Daily Max	3380	0	690	0	430	0			11	0
	Daily Min							4	0		
	Rolling 12 Month Avg										
<b>QA/QC Information</b>	LOD	1.7		1.3		1.1					
	LOQ	5		2.5		2.5					
	QC Exceedance	N		N		N		N		N	
	Lab Certification	999580010		999580010		999580010					

	<b>Sample Point</b>	101	101	101	101	101
	<b>Description</b>	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent
	<b>Parameter</b>	379	376	507	40	490
	<b>Description</b>	pH Total Exceedance Time Minutes	pH Exceedances Greater Than 60 Minutes	Total Toxic Organics	Benzene	Tetrachloroethylene
	<b>Units</b>	minutes	Number	ug/L	ug/L	ug/L
	<b>Sample Type</b>	CALCULATED	CALCULATED	24 HR COMP	24 HR COMP	24 HR COMP
	<b>Frequency</b>	DAILY	DAILY	MONTHLY	MONTHLY	MONTHLY
<b>Sample Results</b>	<b>Day 1</b>					
	<b>2</b>					
	<b>3</b>					
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>					
	<b>8</b>					
	<b>9</b>					
	<b>10</b>					
	<b>11</b>					
	<b>12</b>					
	<b>13</b>					
	<b>14</b>					
	<b>15</b>					
	<b>16</b>					
	<b>17</b>					
	<b>18</b>					
	<b>19</b>					
	<b>20</b>					
	<b>21</b>					
	<b>22</b>					
	<b>23</b>					
	<b>24</b>					
	<b>25</b>					
	<b>26</b>					
	<b>27</b>					
	<b>28</b>					
	<b>29</b>					
	<b>30</b>					
	<b>31</b>					

	<b>Sample Point</b>	101		101		101		101		101	
	<b>Description</b>	Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent	
	<b>Parameter</b>	379		376		507		40		490	
	<b>Description</b>	pH Total Exceedance Time Minutes		pH Exceedances Greater Than 60 Minutes		Total Toxic Organics		Benzene		Tetrachloroethylene	
	<b>Units</b>	minutes		Number		ug/L		ug/L		ug/L	
<b>Summary Values</b>	<b>Monthly Avg</b>										
	<b>Monthly Total</b>										
	<b>Daily Max</b>										
	<b>Daily Min</b>										
	<b>Rolling 12 Month Avg</b>										
<b>Limit(s) in Effect</b>	<b>Monthly Avg</b>										
	<b>Monthly Total</b>	446	0	0	0						
	<b>Daily Max</b>					2130					
	<b>Daily Min</b>										
	<b>Rolling 12 Month Avg</b>										
<b>QA/QC Information</b>	<b>LOD</b>										
	<b>LOQ</b>										
	<b>QC Exceedance</b>	N		N		N		N		N	
	<b>Lab Certification</b>										

	<b>Sample Point</b>	101	101	101	101	101
	<b>Description</b>	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent
	<b>Parameter</b>	500	561	200	508	285
	<b>Description</b>	Toluene	1,1,1-Trichloro- ethane	Ethylbenzene	Trichloro- ethylene	Methylene chloride
	<b>Units</b>	ug/L	ug/L	ug/L	ug/L	ug/L
	<b>Sample Type</b>	24 HR COMP	24 HR COMP	24 HR COMP	24 HR COMP	24 HR COMP
	<b>Frequency</b>	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
<b>Sample Results</b>	<b>Day 1</b>					
	<b>2</b>					
	<b>3</b>					
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>					
	<b>8</b>					
	<b>9</b>					
	<b>10</b>					
	<b>11</b>					
	<b>12</b>					
	<b>13</b>					
	<b>14</b>					
	<b>15</b>					
	<b>16</b>					
	<b>17</b>					
	<b>18</b>					
	<b>19</b>					
	<b>20</b>					
	<b>21</b>					
	<b>22</b>					
	<b>23</b>					
	<b>24</b>					
	<b>25</b>					
	<b>26</b>					
	<b>27</b>					
	<b>28</b>					
	<b>29</b>					
	<b>30</b>					
	<b>31</b>					

	<b>Sample Point</b>	101	101	101	101	101
	<b>Description</b>	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent
	<b>Parameter</b>	500	561	200	508	285
	<b>Description</b>	Toluene	1,1,1-Trichloro- ethane	Ethylbenzene	Trichloro- ethylene	Methylene chloride
	<b>Units</b>	ug/L	ug/L	ug/L	ug/L	ug/L
<b>Summary Values</b>	<b>Monthly Avg</b>					
	<b>Monthly Total</b>					
	<b>Daily Max</b>					
	<b>Daily Min</b>					
	<b>Rolling 12 Month Avg</b>					
<b>Limit(s) in Effect</b>	<b>Monthly Avg</b>					
	<b>Monthly Total</b>					
	<b>Daily Max</b>					
	<b>Daily Min</b>					
	<b>Rolling 12 Month Avg</b>					
<b>QA/QC Information</b>	<b>LOD</b>					
	<b>LOQ</b>					
	<b>QC Exceedance</b>					
	<b>Lab Certification</b>					



	<b>Sample Point</b>	101	106	106	106	107
	<b>Description</b>	Metal Finishing Effluent	Future remedial action ww	Future remedial action ww	Future remedial action ww	Mercury Field Blank Results
	<b>Parameter</b>	167	211	35	457	280
	<b>Description</b>	Di-n-butyl phthalate (dibutyl phthalate)	Flow Rate	Arsenic, Total Recoverable	Suspended Solids, Total	Mercury, Total Recoverable
	<b>Units</b>	ug/L	gpd	ug/L	mg/L	ng/L
	<b>Sample Type</b>	24 HR COMP	CONTINUOUS	24 HR COMP	24 HR COMP	GRAB
	<b>Frequency</b>	MONTHLY	DAILY	WEEKLY	WEEKLY	MONTHLY
<b>Sample Results</b>	<b>Day 1</b>					
	<b>2</b>					
	<b>3</b>					
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>					
	<b>8</b>					
	<b>9</b>					
	<b>10</b>					
	<b>11</b>					
	<b>12</b>					
	<b>13</b>					
	<b>14</b>					
	<b>15</b>					
	<b>16</b>					
	<b>17</b>					<0.12
	<b>18</b>					
	<b>19</b>					
	<b>20</b>					
	<b>21</b>					
	<b>22</b>					
	<b>23</b>					
	<b>24</b>					
	<b>25</b>					
	<b>26</b>					
	<b>27</b>					
	<b>28</b>					
	<b>29</b>					
	<b>30</b>					
	<b>31</b>					

	Sample Point	101	106	106	106	107
	Description	Metal Finishing Effluent	Future remedial action ww	Future remedial action ww	Future remedial action ww	Mercury Field Blank Results
	Parameter	167	211	35	457	280
	Description	Di-n-butyl phthalate (dibutyl phthalate)	Flow Rate	Arsenic, Total Recoverable	Suspended Solids, Total	Mercury, Total Recoverable
	Units	ug/L	gpd	ug/L	mg/L	ng/L
<b>Summary Values</b>	Monthly Avg					0
	Monthly Total					
	Daily Max					<0.12
	Daily Min					<0.12
	Rolling 12 Month Avg					
<b>Limit(s) in Effect</b>	Monthly Avg					
	Monthly Total					
	Daily Max					
	Daily Min					
	Rolling 12 Month Avg					
<b>QA/QC Information</b>	LOD					0.12
	LOQ					0.39
	QC Exceedance	N	N	N	N	N
	Lab Certification					721026460

	<b>Sample Point</b>	003	003	003	003	003
	<b>Description</b>	Future remedial action dischg	Future remedial action dischg	Future remedial action dischg	Future remedial action dischg	Future remedial action dischg
	<b>Parameter</b>	211	457	35	374	373
	<b>Description</b>	Flow Rate	Suspended Solids, Total	Arsenic, Total Recoverable	pH (Minimum)	pH (Maximum)
	<b>Units</b>	MGD	mg/L	ug/L	su	su
	<b>Sample Type</b>	CONTINUOUS	24 HR COMP	24 HR COMP	CONTINUOUS	CONTINUOUS
	<b>Frequency</b>	DAILY	WEEKLY	WEEKLY	DAILY	DAILY
<b>Sample Results</b>	<b>Day 1</b>					
	<b>2</b>					
	<b>3</b>					
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>					
	<b>8</b>					
	<b>9</b>					
	<b>10</b>					
	<b>11</b>					
	<b>12</b>					
	<b>13</b>					
	<b>14</b>	0.003895			7.1	7.2
	<b>15</b>					
	<b>16</b>					
	<b>17</b>	0.001950	2.5	<2.1	7.8	7.9
	<b>18</b>	0.003129			7.4	7.6
	<b>19</b>					
	<b>20</b>					
	<b>21</b>					
	<b>22</b>					
	<b>23</b>					
	<b>24</b>					
	<b>25</b>					
	<b>26</b>	0.004685	3.0	2.3	6.3	6.4
	<b>27</b>					
	<b>28</b>					
	<b>29</b>					
	<b>30</b>					
	<b>31</b>					

	Sample Point	003		003		003		003			
	Description	Future remedial action dischg		Future remedial action dischg		Future remedial action dischg		Future remedial action dischg			
	Parameter	211		457		35		374			
	Description	Flow Rate		Suspended Solids, Total		Arsenic, Total Recoverable		pH (Minimum)		pH (Maximum)	
	Units	MGD		mg/L		ug/L		su		su	
<b>Summary Values</b>	Monthly Avg	0.00341475		2.75		1.15		7.15		7.275	
	Monthly Total										
	Daily Max	0.004685		3		2.3		7.8		7.9	
	Daily Min	0.00195		2.5		<2.1		6.3		6.4	
	Rolling 12 Month Avg										
<b>Limit(s) in Effect</b>	Monthly Avg										
	Monthly Total										
	Daily Max					680	0			11	0
	Daily Min							4	0		
	Rolling 12 Month Avg										
<b>QA/QC Information</b>	LOD					2.1					
	LOQ					5					
	QC Exceedance	N		N		N		N		N	
	Lab Certification			999580010		999580010					

	<b>Sample Point</b>	003	003
	<b>Description</b>	Future remedial action dischg	Future remedial action dischg
	<b>Parameter</b>	379	376
	<b>Description</b>	pH Total Exceedance Time Minutes	pH Exceedances Greater Than 60 Minutes
	<b>Units</b>	minutes	Number
	<b>Sample Type</b>	CONTINUOUS	CONTINUOUS
	<b>Frequency</b>	DAILY	DAILY
<b>Sample Results</b>	<b>Day 1</b>		
	<b>2</b>		
	<b>3</b>		
	<b>4</b>		
	<b>5</b>		
	<b>6</b>		
	<b>7</b>		
	<b>8</b>		
	<b>9</b>		
	<b>10</b>		
	<b>11</b>		
	<b>12</b>		
	<b>13</b>		
	<b>14</b>		
	<b>15</b>		
	<b>16</b>		
	<b>17</b>		
	<b>18</b>		
	<b>19</b>		
	<b>20</b>		
	<b>21</b>		
	<b>22</b>		
	<b>23</b>		
	<b>24</b>		
	<b>25</b>		
	<b>26</b>		
	<b>27</b>		
	<b>28</b>		
	<b>29</b>		
	<b>30</b>		
	<b>31</b>		

	<b>Sample Point</b>	003		003	
	<b>Description</b>	Future remedial action dischg		Future remedial action dischg	
	<b>Parameter</b>	379		376	
	<b>Description</b>	pH Total Exceedance Time Minutes		pH Exceedances Greater Than 60 Minutes	
	<b>Units</b>	minutes		Number	
<b>Summary Values</b>	<b>Monthly Avg</b>				
	<b>Monthly Total</b>				
	<b>Daily Max</b>				
	<b>Daily Min</b>				
	<b>Rolling 12 Month Avg</b>				
<b>Limit(s) in Effect</b>	<b>Monthly Avg</b>				
	<b>Monthly Total</b>	446	0		
	<b>Daily Max</b>			0	0
	<b>Daily Min</b>				
	<b>Rolling 12 Month Avg</b>				
<b>QA/QC Information</b>	<b>LOD</b>				
	<b>LOQ</b>				
	<b>QC Exceedance</b>	N		N	
	<b>Lab Certification</b>				

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

1. Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for TTO I certify that to the best of my knowledge and belief no dumping of concentrated toxic organics into the wastewaters has
2. occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the solvent management plan submitted to the department.

General Remarks

OF003 did not run for the first two weeks of the month due to maintenance issues so, there were no samples taken

Laboratory Quality Control Comments

Submitted by Anne Fleury(afleury16) on 7/15/2019 8:28:11 AM



eReport Certify - TYCO FIRE PRODUCTS LP - 465255

Facility Name  
TYCO FIRE PRODUCTS LP  
Form Type  
Wastewater Discharge Monitoring Long Report  
DOC ID  
429800  
Reporting Period  
7/1/2019 to 7/31/2019  
Enter Certification Code

dectiouste

E-Mail was sent to  
afleury@tycoint.com

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Certification complete.

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**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: 715-735-7411  
 Reporting Period: 07/01/2019 - 07/31/2019  
 Form Due Date: 08/21/2019  
 Permit Number: 0001040

Date Received:	
DOC:	429800
FIN:	7245
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Region:	Northeast Region
Permit Drafter:	Trevor J Moen
Reviewer:	Nicole E Krueger
Office:	Milwaukee

Sample Point	001	703	001	001	001	
Description	PRIOR TO MENOMINEE RIVER	Intake Water Monitoring	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	
Parameter	211	280	487	374	373	
Description	Flow Rate	Mercury, Total Recoverable	Temperature	pH (Minimum)	pH (Maximum)	
Units	MGD	ng/L	degF	su	su	
Sample Type	CONTINUOUS	GRAB	GRAB	CONTINUOUS	CONTINUOUS	
Frequency	DAILY	MONTHLY	MONTHLY	DAILY	DAILY	
Sample Results	Day 1	0.16648		75	6.3	7.4
	2	0.11357		86	6.2	7.8
	3	0.06099		75	6.8	7.3
	4	0.01183		81	7.1	7.7
	5	0.00409		83	7.2	7.5
	6	0.00746		79	7.1	7.6
	7	0.05277		81	7.1	7.7
	8	0.12284		76	7.0	7.2
	9	0.12369		79	7.0	7.6
	10	0.13625		81	6.8	7.6
	11	0.12487	1.9	79	6.8	7.0
	12	0.05057		79	6.5	7.1
	13	0.0		79	6.5	7.4
	14	0.36364		79	6.4	7.7
	15	0.17634		80	6.3	7.0
	16	0.10685		79	7.1	7.2
	17	0.09964		79	7.3	7.5
	18	0.11360		93	7.1	8.2
	19	0.28607		80	6.9	8.0
	20	0.03147		79	6.8	7.4
	21	0.01722		81	7.3	7.6
	22	0.08145		76	7.1	7.7
	23	0.19585		78	6.8	7.2
	24	0.24520		78	6.5	7.2
	25	0.18722		81	6.7	7.0
	26	0.20266		80	6.8	7.4
	27	0.06050		81	7.2	7.6
	28	0.14846		85	7.5	7.7
	29	0.17403		77	6.8	6.9
	30	0.14045		75	6.9	7.5
	31	0.09082		75	6.8	7.1

	Sample Point	001	703	001	001	001
	Description	PRIOR TO MENOMINEE RIVER	Intake Water Monitoring	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER
	Parameter	211	280	487	374	373
	Description	Flow Rate	Mercury, Total Recoverable	Temperature	pH (Minimum)	pH (Maximum)
	Units	MGD	ng/L	degF	su	su
<b>Summary Values</b>	Monthly Avg	0.119254194	1.9	79.64516129	6.861290323	7.44516129
	Monthly Total					
	Daily Max	0.36364	1.9	93	7.5	8.2
	Daily Min	0	1.9	75	6.2	6.9
	Rolling 12 Month Avg					
<b>Limit(s) in Effect</b>	Monthly Avg					
	Monthly Total					
	Daily Max					11 0
	Daily Min				4 0	
	Rolling 12 Month Avg					
<b>QA/QC Information</b>	LOD		0.12			
	LOQ		0.39			
	QC Exceedance	N	N	N	N	N
	Lab Certification		721026460			

	Sample Point	001	001	001	001	001
	Description	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER
	Parameter	379	376	388	231	35
	Description	pH Total Exceedance Time Minutes	pH Exceedances Greater Than 60 Minutes	Phosphorus, Total	Hardness, Total as CaCO3	Arsenic, Total Recoverable
	Units	minutes	Number	mg/L	mg/L	ug/L
	Sample Type	CONTINUOUS	CONTINUOUS	24 HR COMP	24 HR COMP	24 HR COMP
	Frequency	DAILY	DAILY	WEEKLY	MONTHLY	MONTHLY
Sample Results	Day 1			0.20	280	40
	2					
	3					
	4					
	5					
	6					
	7					
	8			0.12	340	29
	9					
	10					
	11					
	12					
	13					
	14					
	15			0.41	120	71
	16					
	17					
	18					
	19					
	20					
	21					
	22			0.21	380	88
	23					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					

	Sample Point	001		001		001		001		001	
	Description	PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER	
	Parameter	379		376		388		231		35	
	Description	pH Total Exceedance Time Minutes		pH Exceedances Greater Than 60 Minutes		Phosphorus, Total		Hardness, Total as CaCO3		Arsenic, Total Recoverable	
	Units	minutes		Number		mg/L		mg/L		ug/L	
<b>Summary Values</b>	Monthly Avg					0.235		280		57	
	Monthly Total										
	Daily Max					0.41		380		88	
	Daily Min					0.12		120		29	
	Rolling 12 Month Avg					0.2					
<b>Limit(s) in Effect</b>	Monthly Avg										
	Monthly Total	446	0								
	Daily Max			0	0					680	0
	Daily Min										
	Rolling 12 Month Avg					1	0				
<b>QA/QC Information</b>	LOD					0.024				2.1	
	LOQ					0.05				5	
	QC Exceedance	N		N		N		N		N	
	Lab Certification					999580010		999580010		999580010	

Sample Point	001	001	001	001	001	
Description	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	
Parameter	35	147	147	87	152	
Description	Arsenic, Total Recoverable	Copper, Total Recoverable	Copper, Total Recoverable	Cadmium, Total Recoverable	Cyanide, Amenable	
Units	lbs/day	ug/L	lbs/day	ug/L	ug/L	
Sample Type	CALCULATED	24 HR COMP	24 HR COMP	24 HR COMP	24 HR COMP	
Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY	
<b>Sample Results</b>	<b>Day 1</b>	0.0556	13	0.01807	0.99	<5.0
	2					
	3					
	4					
	5					
	6					
	7					
	8	0.02958	17	0.01734	0.49	
	9					
	10					
	11					
	12					
	13					
	14					
	15	0.10437	12	0.01764	1.5	
	16					
	17					
	18					
	19					
	20					
	21					
	22	0.05984	16	0.01088	1.6	
	23					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					

	Sample Point	001		001		001		001		001	
	Description	PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER	
	Parameter	35		147		147		87		152	
	Description	Arsenic, Total Recoverable		Copper, Total Recoverable		Copper, Total Recoverable		Cadmium, Total Recoverable		Cyanide, Amenable	
	Units	lbs/day		ug/L		lbs/day		ug/L		ug/L	
<b>Summary Values</b>	Monthly Avg	0.0623475		14.5		0.0159825		1.145		0	
	Monthly Total										
	Daily Max	0.10437		17		0.01807		1.6		<5	
	Daily Min	0.02958		12		0.01088		0.49		<5	
	Rolling 12 Month Avg										
<b>Limit(s) in Effect</b>	Monthly Avg										
	Monthly Total										
	Daily Max	12	0	69	0	0.98	0				
	Daily Min										
	Rolling 12 Month Avg										
<b>QA/QC Information</b>	LOD			1.7				0.49		3	
	LOQ			5				1		10	
	QC Exceedance	N		N		N		N		N	
	Lab Certification			999580010				999580010		999580010	

Sample Point	001	001	101	101	101	
Description	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	
Parameter	112	280	211	457	342	
Description	Chlorine, Total Residual	Mercury, Total Recoverable	Flow Rate	Suspended Solids, Total	Oil & Grease (Freon)	
Units	ug/L	ng/L	MGD	mg/L	mg/L	
Sample Type	GRAB	GRAB	CONTINUOUS	24 HR COMP	GRAB	
Frequency	MONTHLY	MONTHLY	DAILY	DAILY	2/WEEK	
Sample Results	Day 1		0.03625	10	1.5	
	2		0.04767	6.5	3.0	
	3		0.02444	6.5		
	4					
	5					
	6					
	7					
	8			0.04476	30	3.1
	9			0.03691	7.5	3.6
	10			0.05622	6.5	
	11		10	0.03949	5.0	
	12			0.01548	9.5	
	13					
	14					
	15			0.03328	7.5	2.4
	16			0.03354	6.5	<1.5
	17			0.04011	8.5	
	18			0.03941	6.0	
	19			0.01725	7.0	
	20					
	21					
	22	30		0.03726	6.5	2.6
	23			0.04017	4.5	2.4
	24			0.04193	<1.9	
	25			0.03151	<1.9	
	26			0.01720	6.0	
	27			0.00588	2.5	
	28					
	29			0.03704	4.0	
	30			0.04028	4.0	
	31			0.02508	4.0	

	<b>Sample Point</b>	001	001	101	101	101		
	<b>Description</b>	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent		
	<b>Parameter</b>	112	280	211	457	342		
	<b>Description</b>	Chlorine, Total Residual	Mercury, Total Recoverable	Flow Rate	Suspended Solids, Total	Oil & Grease (Freon)		
	<b>Units</b>	ug/L	ng/L	MGD	mg/L	mg/L		
<b>Summary Values</b>	<b>Monthly Avg</b>	30	10	0.033689091	6.75	2.325		
	<b>Monthly Total</b>							
	<b>Daily Max</b>	30	10	0.05622	30	3.6		
	<b>Daily Min</b>	30	10	0.00588	<1.9	<1.5		
	<b>Rolling 12 Month Avg</b>							
<b>Limit(s) in Effect</b>	<b>Monthly Avg</b>				31	0	26	0
	<b>Monthly Total</b>							
	<b>Daily Max</b>				60	0	52	0
	<b>Daily Min</b>							
	<b>Rolling 12 Month Avg</b>							
<b>QA/QC Information</b>	<b>LOD</b>	30	0.12			1.3		
	<b>LOQ</b>	100	0.39			6		
	<b>QC Exceedance</b>	N	N	N	N	N		
	<b>Lab Certification</b>		721026460		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	87	133	315	553	155	
Description	Cadmium, Total Recoverable	Chromium, Total Recoverable	Nickel, Total Recoverable	Zinc, Total Recoverable	Cyanide, Total	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	
Sample Type	24 HR COMP	24 HR COMP	24 HR COMP	24 HR COMP	GRAB	
Frequency	2/WEEK	MONTHLY	2/WEEK	2/WEEK	MONTHLY	
<b>Sample Results</b>	<b>Day 1</b>	<0.49	7.3	2.8	64	<3.0
	<b>2</b>	<0.49	<2.2	<1.5	49	
	<b>3</b>					
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>					
	<b>8</b>	<0.49	28	<1.5	61	
	<b>9</b>	<0.49	3.9	<1.5	55	
	<b>10</b>					
	<b>11</b>					
	<b>12</b>					
	<b>13</b>					
	<b>14</b>					
	<b>15</b>	<0.49	13	4.7	69	
	<b>16</b>					
	<b>17</b>	<0.49	4.0	2.1	49	
	<b>18</b>					
	<b>19</b>					
	<b>20</b>					
	<b>21</b>					
	<b>22</b>	<0.49	2.9	5.8	66	
	<b>23</b>	<0.49	4.3	5.1	88	
	<b>24</b>					
	<b>25</b>					
	<b>26</b>					
	<b>27</b>					
	<b>28</b>					
	<b>29</b>					
	<b>30</b>					
	<b>31</b>					

	<b>Sample Point</b>	101		101		101		101		101	
	<b>Description</b>	Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent	
	<b>Parameter</b>	87		133		315		553		155	
	<b>Description</b>	Cadmium, Total Recoverable		Chromium, Total Recoverable		Nickel, Total Recoverable		Zinc, Total Recoverable		Cyanide, Total	
	<b>Units</b>	ug/L		ug/L		ug/L		ug/L		ug/L	
<b>Summary Values</b>	<b>Monthly Avg</b>	0		7.925		2.5625		62.625		0	
	<b>Monthly Total</b>										
	<b>Daily Max</b>	<0.49		28		5.8		88		<3	
	<b>Daily Min</b>	<0.49		<2.2		<1.5		49		<3	
	<b>Rolling 12 Month Avg</b>										
<b>Limit(s) in Effect</b>	<b>Monthly Avg</b>	260	0	1710	0	2380	0	1480	0	650	0
	<b>Monthly Total</b>										
	<b>Daily Max</b>	690	0	2770	0	3980	0	2610	0	1200	0
	<b>Daily Min</b>										
	<b>Rolling 12 Month Avg</b>										
<b>QA/QC Information</b>	<b>LOD</b>	0.49		2.2		1.5		3.6		3	
	<b>LOQ</b>	1		5		5		10		10	
	<b>QC Exceedance</b>	N		N		N		N		N	
	<b>Lab Certification</b>	999580010		999580010		999580010		999580010		999580010	

	<b>Sample Point</b>	101	101	101	101	101
	<b>Description</b>	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent
	<b>Parameter</b>	147	264	430	374	373
	<b>Description</b>	Copper, Total Recoverable	Lead, Total Recoverable	Silver, Total Recoverable	pH (Minimum)	pH (Maximum)
	<b>Units</b>	ug/L	ug/L	ug/L	su	su
	<b>Sample Type</b>	24 HR COMP	24 HR COMP	24 HR COMP	CONTINUOUS	CONTINUOUS
	<b>Frequency</b>	2/WEEK	MONTHLY	MONTHLY	DAILY	DAILY
<b>Sample Results</b>	<b>Day 1</b>	5.1	<1.3	<1.1	7.3	7.7
	<b>2</b>	11	<1.3	<1.1	7.5	8.0
	<b>3</b>				7.1	8.2
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>					
	<b>8</b>	9.2	<1.3	<1.1	7.2	7.9
	<b>9</b>	8.4	<1.3	<1.1	7.1	7.5
	<b>10</b>				6.9	8.2
	<b>11</b>				6.6	7.7
	<b>12</b>				6.8	8.0
	<b>13</b>					
	<b>14</b>					
	<b>15</b>	11	<1.3	<1.1	7.6	8.5
	<b>16</b>				7.9	8.4
	<b>17</b>	6.4	<1.3	<1.1	8.0	8.9
	<b>18</b>				8.2	8.6
	<b>19</b>				7.2	8.2
	<b>20</b>					
	<b>21</b>					
	<b>22</b>	8.8	<1.3	<1.1	7.4	8.4
	<b>23</b>	6.6	<1.3	<1.1	7.5	8.4
	<b>24</b>				7.0	8.0
	<b>25</b>				6.9	7.7
	<b>26</b>				6.8	8.2
	<b>27</b>				6.2	8.7
	<b>28</b>					
	<b>29</b>				6.6	9.0
	<b>30</b>				6.4	8.8
	<b>31</b>				6.2	7.0

	<b>Sample Point</b>	101		101		101		101		101	
	<b>Description</b>	Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent	
	<b>Parameter</b>	147		264		430		374		373	
	<b>Description</b>	Copper, Total Recoverable		Lead, Total Recoverable		Silver, Total Recoverable		pH (Minimum)		pH (Maximum)	
	<b>Units</b>	ug/L		ug/L		ug/L		su		su	
<b>Summary Values</b>	<b>Monthly Avg</b>	8.3125		0		0		7.109090909		8.181818182	
	<b>Monthly Total</b>										
	<b>Daily Max</b>	11		<1.3		<1.1		8.2		9	
	<b>Daily Min</b>	5.1		<1.3		<1.1		6.2		7	
	<b>Rolling 12 Month Avg</b>										
<b>Limit(s) in Effect</b>	<b>Monthly Avg</b>	2070	0	430	0	240	0				
	<b>Monthly Total</b>										
	<b>Daily Max</b>	3380	0	690	0	430	0			11	0
	<b>Daily Min</b>							4	0		
	<b>Rolling 12 Month Avg</b>										
<b>QA/QC Information</b>	<b>LOD</b>	1.7		1.3		1.1					
	<b>LOQ</b>	5		2.5		2.5					
	<b>QC Exceedance</b>	N		N		N		N		N	
	<b>Lab Certification</b>	999580010		999580010		999580010					

	<b>Sample Point</b>	101	101	101	101	101
	<b>Description</b>	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent
	<b>Parameter</b>	379	376	507	40	490
	<b>Description</b>	pH Total Exceedance Time Minutes	pH Exceedances Greater Than 60 Minutes	Total Toxic Organics	Benzene	Tetrachloroethylene
	<b>Units</b>	minutes	Number	ug/L	ug/L	ug/L
	<b>Sample Type</b>	CALCULATED	CALCULATED	24 HR COMP	24 HR COMP	24 HR COMP
	<b>Frequency</b>	DAILY	DAILY	MONTHLY	MONTHLY	MONTHLY
<b>Sample Results</b>	<b>Day 1</b>					
	<b>2</b>					
	<b>3</b>					
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>					
	<b>8</b>					
	<b>9</b>					
	<b>10</b>					
	<b>11</b>					
	<b>12</b>					
	<b>13</b>					
	<b>14</b>					
	<b>15</b>					
	<b>16</b>					
	<b>17</b>					
	<b>18</b>					
	<b>19</b>					
	<b>20</b>					
	<b>21</b>					
	<b>22</b>					
	<b>23</b>					
	<b>24</b>					
	<b>25</b>					
	<b>26</b>					
	<b>27</b>					
	<b>28</b>					
	<b>29</b>					
	<b>30</b>					
	<b>31</b>					

	<b>Sample Point</b>	101		101		101		101		101	
	<b>Description</b>	Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent	
	<b>Parameter</b>	379		376		507		40		490	
	<b>Description</b>	pH Total Exceedance Time Minutes		pH Exceedances Greater Than 60 Minutes		Total Toxic Organics		Benzene		Tetrachloroethylene	
	<b>Units</b>	minutes		Number		ug/L		ug/L		ug/L	
<b>Summary Values</b>	<b>Monthly Avg</b>										
	<b>Monthly Total</b>										
	<b>Daily Max</b>										
	<b>Daily Min</b>										
	<b>Rolling 12 Month Avg</b>										
<b>Limit(s) in Effect</b>	<b>Monthly Avg</b>										
	<b>Monthly Total</b>	446	0	0	0						
	<b>Daily Max</b>					2130					
	<b>Daily Min</b>										
	<b>Rolling 12 Month Avg</b>										
<b>QA/QC Information</b>	<b>LOD</b>										
	<b>LOQ</b>										
	<b>QC Exceedance</b>	N		N		N		N		N	
	<b>Lab Certification</b>										

	<b>Sample Point</b>	101	101	101	101	101
	<b>Description</b>	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent
	<b>Parameter</b>	500	561	200	508	285
	<b>Description</b>	Toluene	1,1,1-Trichloro- ethane	Ethylbenzene	Trichloro- ethylene	Methylene chloride
	<b>Units</b>	ug/L	ug/L	ug/L	ug/L	ug/L
	<b>Sample Type</b>	24 HR COMP	24 HR COMP	24 HR COMP	24 HR COMP	24 HR COMP
	<b>Frequency</b>	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
<b>Sample Results</b>	<b>Day 1</b>					
	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					

	<b>Sample Point</b>	101	101	101	101	101
	<b>Description</b>	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent
	<b>Parameter</b>	500	561	200	508	285
	<b>Description</b>	Toluene	1,1,1-Trichloro- ethane	Ethylbenzene	Trichloro- ethylene	Methylene chloride
	<b>Units</b>	ug/L	ug/L	ug/L	ug/L	ug/L
<b>Summary Values</b>	<b>Monthly Avg</b>					
	<b>Monthly Total</b>					
	<b>Daily Max</b>					
	<b>Daily Min</b>					
	<b>Rolling 12 Month Avg</b>					
<b>Limit(s) in Effect</b>	<b>Monthly Avg</b>					
	<b>Monthly Total</b>					
	<b>Daily Max</b>					
	<b>Daily Min</b>					
	<b>Rolling 12 Month Avg</b>					
<b>QA/QC Information</b>	<b>LOD</b>					
	<b>LOQ</b>					
	<b>QC Exceedance</b>					
	<b>Lab Certification</b>					



	<b>Sample Point</b>	101	106	106	106	107
	<b>Description</b>	Metal Finishing Effluent	Future remedial action ww	Future remedial action ww	Future remedial action ww	Mercury Field Blank Results
	<b>Parameter</b>	167	211	35	457	280
	<b>Description</b>	Di-n-butyl phthalate (dibutyl phthalate)	Flow Rate	Arsenic, Total Recoverable	Suspended Solids, Total	Mercury, Total Recoverable
	<b>Units</b>	ug/L	gpd	ug/L	mg/L	ng/L
	<b>Sample Type</b>	24 HR COMP	CONTINUOUS	24 HR COMP	24 HR COMP	GRAB
	<b>Frequency</b>	MONTHLY	DAILY	WEEKLY	WEEKLY	MONTHLY
<b>Sample Results</b>	<b>Day 1</b>					
	<b>2</b>					
	<b>3</b>					
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>					
	<b>8</b>					
	<b>9</b>					
	<b>10</b>					
	<b>11</b>					<0.12
	<b>12</b>					
	<b>13</b>					
	<b>14</b>					
	<b>15</b>					
	<b>16</b>					
	<b>17</b>					
	<b>18</b>					
	<b>19</b>					
	<b>20</b>					
	<b>21</b>					
	<b>22</b>					
	<b>23</b>					
	<b>24</b>					
	<b>25</b>					
	<b>26</b>					
	<b>27</b>					
	<b>28</b>					
	<b>29</b>					
	<b>30</b>					
	<b>31</b>					

	<b>Sample Point</b>	101	106	106	106	107
	<b>Description</b>	Metal Finishing Effluent	Future remedial action ww	Future remedial action ww	Future remedial action ww	Mercury Field Blank Results
	<b>Parameter</b>	167	211	35	457	280
	<b>Description</b>	Di-n-butyl phthalate (dibutyl phthalate)	Flow Rate	Arsenic, Total Recoverable	Suspended Solids, Total	Mercury, Total Recoverable
	<b>Units</b>	ug/L	gpd	ug/L	mg/L	ng/L
<b>Summary Values</b>	<b>Monthly Avg</b>					0
	<b>Monthly Total</b>					
	<b>Daily Max</b>					<0.12
	<b>Daily Min</b>					<0.12
	<b>Rolling 12 Month Avg</b>					
<b>Limit(s) in Effect</b>	<b>Monthly Avg</b>					
	<b>Monthly Total</b>					
	<b>Daily Max</b>					
	<b>Daily Min</b>					
	<b>Rolling 12 Month Avg</b>					
<b>QA/QC Information</b>	<b>LOD</b>					0.12
	<b>LOQ</b>					0.39
	<b>QC Exceedance</b>	N	N	N	N	N
	<b>Lab Certification</b>					721026460

	<b>Sample Point</b>	003	003	003	003	003
	<b>Description</b>	Future remedial action dischg	Future remedial action dischg	Future remedial action dischg	Future remedial action dischg	Future remedial action dischg
	<b>Parameter</b>	211	457	35	374	373
	<b>Description</b>	Flow Rate	Suspended Solids, Total	Arsenic, Total Recoverable	pH (Minimum)	pH (Maximum)
	<b>Units</b>	MGD	mg/L	ug/L	su	su
	<b>Sample Type</b>	CONTINUOUS	24 HR COMP	24 HR COMP	CONTINUOUS	CONTINUOUS
	<b>Frequency</b>	DAILY	WEEKLY	WEEKLY	DAILY	DAILY
<b>Sample Results</b>	<b>Day 1</b>	0.001975	<1.9	15	6.3	6.4
	<b>2</b>					
	<b>3</b>					
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>					
	<b>8</b>	0.005689			6.1	6.7
	<b>9</b>					
	<b>10</b>					
	<b>11</b>					
	<b>12</b>					
	<b>13</b>					
	<b>14</b>					
	<b>15</b>	0.001244	2.5	6.7	6.4	8.7
	<b>16</b>					
	<b>17</b>					
	<b>18</b>					
	<b>19</b>					
	<b>20</b>					
	<b>21</b>					
	<b>22</b>					
	<b>23</b>					
	<b>24</b>					
	<b>25</b>					
	<b>26</b>	0.000752	2.0	2.2	6.0	6.1
	<b>27</b>					
	<b>28</b>					
	<b>29</b>					
	<b>30</b>					
	<b>31</b>					

	<b>Sample Point</b>	003	003	003	003	003	
	<b>Description</b>	Future remedial action dischg	Future remedial action dischg	Future remedial action dischg	Future remedial action dischg	Future remedial action dischg	
	<b>Parameter</b>	211	457	35	374	373	
	<b>Description</b>	Flow Rate	Suspended Solids, Total	Arsenic, Total Recoverable	pH (Minimum)	pH (Maximum)	
	<b>Units</b>	MGD	mg/L	ug/L	su	su	
<b>Summary Values</b>	<b>Monthly Avg</b>	0.002415	1.5	7.966666667	6.2	6.975	
	<b>Monthly Total</b>						
	<b>Daily Max</b>	0.005689	2.5	15	6.4	8.7	
	<b>Daily Min</b>	0.000752	<1.9	2.2	6	6.1	
	<b>Rolling 12 Month Avg</b>						
<b>Limit(s) in Effect</b>	<b>Monthly Avg</b>						
	<b>Monthly Total</b>						
	<b>Daily Max</b>			680	0	11	0
	<b>Daily Min</b>				4	0	
	<b>Rolling 12 Month Avg</b>						
<b>QA/QC Information</b>	<b>LOD</b>			2.1			
	<b>LOQ</b>			5			
	<b>QC Exceedance</b>	N	N	N	N	N	
	<b>Lab Certification</b>		999580010	999580010			

	<b>Sample Point</b>	003	003
	<b>Description</b>	Future remedial action dischg	Future remedial action dischg
	<b>Parameter</b>	379	376
	<b>Description</b>	pH Total Exceedance Time Minutes	pH Exceedances Greater Than 60 Minutes
	<b>Units</b>	minutes	Number
	<b>Sample Type</b>	CONTINUOUS	CONTINUOUS
	<b>Frequency</b>	DAILY	DAILY
	<b>Sample Results</b>	<b>Day 1</b>	
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
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	<b>Sample Point</b>	003		003	
	<b>Description</b>	Future remedial action dischg		Future remedial action dischg	
	<b>Parameter</b>	379		376	
	<b>Description</b>	pH Total Exceedance Time Minutes		pH Exceedances Greater Than 60 Minutes	
	<b>Units</b>	minutes		Number	
<b>Summary Values</b>	<b>Monthly Avg</b>				
	<b>Monthly Total</b>				
	<b>Daily Max</b>				
	<b>Daily Min</b>				
	<b>Rolling 12 Month Avg</b>				
<b>Limit(s) in Effect</b>	<b>Monthly Avg</b>				
	<b>Monthly Total</b>	446	0		
	<b>Daily Max</b>			0	0
	<b>Daily Min</b>				
	<b>Rolling 12 Month Avg</b>				
<b>QA/QC Information</b>	<b>LOD</b>				
	<b>LOQ</b>				
	<b>QC Exceedance</b>	N		N	
	<b>Lab Certification</b>				

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

1. Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for TTO I certify that to the best of my knowledge and belief no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the solvent management plan submitted to the department.

General Remarks

Laboratory Quality Control Comments

**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: 715-735-7411  
 Reporting Period: 08/01/2019 - 08/31/2019  
 Form Due Date: 09/21/2019  
 Permit Number: 0001040

Date Received:  
 DOC: 429801  
 FIN: 7245  
 FID: 438039470  
 Region: Northeast Region  
 Permit Drafter: Trevor J Moen  
 Reviewer: Nicole E Krueger  
 Office: Milwaukee

Sample Point	001	703	001	001	001	
Description	PRIOR TO MENOMINEE RIVER	Intake Water Monitoring	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	
Parameter	211	280	487	374	373	
Description	Flow Rate	Mercury, Total Recoverable	Temperature	pH (Minimum)	pH (Maximum)	
Units	MGD	ng/L	degF	su	su	
Sample Type	CONTINUOUS	GRAB	GRAB	CONTINUOUS	CONTINUOUS	
Frequency	DAILY	MONTHLY	MONTHLY	DAILY	DAILY	
Sample Results	<b>Day 1</b>	0.103830		75	6.6	7.2
	<b>2</b>	0.055960		76	7.1	7.5
	<b>3</b>	0.019260		81	6.6	8.0
	<b>4</b>	0.037130		82	6.6	7.0
	<b>5</b>	0.166590		76	6.2	7.1
	<b>6</b>	0.122680		76	7.2	7.6
	<b>7</b>	0.162600		75	6.8	7.5
	<b>8</b>	0.062470		76	7.2	7.5
	<b>9</b>	0.004580		76	7.5	7.7
	<b>10</b>	0.000040		78	7.1	7.9
	<b>11</b>	0.038360		78	7.5	7.9
	<b>12</b>	0.122750		74	7.0	7.5
	<b>13</b>	0.103340			7.0	7.4
	<b>14</b>	0.010520	5.2		7.1	7.6
	<b>15</b>	0.084340			6.8	7.4
	<b>16</b>	0.107880		77	6.2	7.6
	<b>17</b>	0.0			7.1	7.8
	<b>18</b>	0.021020			7.5	7.8
	<b>19</b>	0.110950			6.8	7.8
	<b>20</b>	0.096700			7.0	7.6
	<b>21</b>	0.093820			7.0	7.6
	<b>22</b>	0.094050		74	6.8	7.4
	<b>23</b>	0.031850		76	6.8	7.6
	<b>24</b>	0.0		79	7.7	8.3
	<b>25</b>	0.037500		81	7.0	8.1
	<b>26</b>	0.206700		76	6.3	7.0
	<b>27</b>	0.066280		78	6.7	7.2
	<b>28</b>	0.015260		79	7.0	7.2
	<b>29</b>	0.003250		88	7.0	8.1
	<b>30</b>	0.000810		83	7.6	8.0
	<b>31</b>	0.0		81	8.0	8.2



	Sample Point	001		703		001		001		001	
	Description	PRIOR TO MENOMINEE RIVER		Intake Water Monitoring		PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER	
	Parameter	211		280		487		374		373	
	Description	Flow Rate		Mercury, Total Recoverable		Temperature		pH (Minimum)		pH (Maximum)	
	Units	MGD		ng/L		degF		su		su	
<b>Summary Values</b>	Monthly Avg	0.063887742		5.2		78.043478261		6.993548387		7.616129032	
	Monthly Total										
	Daily Max	0.2067		5.2		88		8		8.3	
	Daily Min	0		5.2		74		6.2		7	
	Rolling 12 Month Avg										
<b>Limit(s) in Effect</b>	Monthly Avg										
	Monthly Total										
	Daily Max									11	0
	Daily Min							4	0		
	Rolling 12 Month Avg										
<b>QA/QC Information</b>	LOD			0.12							
	LOQ			0.39							
	QC Exceedance	N		N		N		N		N	
	Lab Certification			721026460							

	<b>Sample Point</b>	001	001	001	001	001
	<b>Description</b>	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER
	<b>Parameter</b>	379	376	388	231	35
	<b>Description</b>	pH Total Exceedance Time Minutes	pH Exceedances Greater Than 60 Minutes	Phosphorus, Total	Hardness, Total as CaCO3	Arsenic, Total Recoverable
	<b>Units</b>	minutes	Number	mg/L	mg/L	ug/L
	<b>Sample Type</b>	CONTINUOUS	CONTINUOUS	24 HR COMP	24 HR COMP	24 HR COMP
	<b>Frequency</b>	DAILY	DAILY	WEEKLY	MONTHLY	MONTHLY
<b>Sample Results</b>	<b>Day 1</b>			0.11	370	38
	<b>2</b>					
	<b>3</b>					
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>					
	<b>8</b>					
	<b>9</b>					
	<b>10</b>					
	<b>11</b>					
	<b>12</b>			0.14	310	26
	<b>13</b>					
	<b>14</b>					
	<b>15</b>			0.11	390	34
	<b>16</b>					
	<b>17</b>					
	<b>18</b>					
	<b>19</b>					
	<b>20</b>					
	<b>21</b>					
	<b>22</b>			0.11	430	30
	<b>23</b>					
	<b>24</b>					
	<b>25</b>					
	<b>26</b>					
	<b>27</b>					
	<b>28</b>					
	<b>29</b>					
	<b>30</b>					
	<b>31</b>					

	Sample Point	001		001		001		001	
	Description	PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER	
	Parameter	379		376		388		231	
	Description	pH Total Exceedance Time Minutes		pH Exceedances Greater Than 60 Minutes		Phosphorus, Total		Hardness, Total as CaCO3	
	Units	minutes		Number		mg/L		mg/L	
<b>Summary Values</b>	Monthly Avg					0.1175		375	
	Monthly Total								
	Daily Max					0.14		430	
	Daily Min					0.11		310	
	Rolling 12 Month Avg					0.2			
<b>Limit(s) in Effect</b>	Monthly Avg								
	Monthly Total	446	0						
	Daily Max			0	0			680	0
	Daily Min								
	Rolling 12 Month Avg					1	0		
<b>QA/QC Information</b>	LOD					0.024		3*Footnote	
	LOQ					0.05		10*Footnote	
	QC Exceedance	N		N		N		N	
	Lab Certification					999580010		999580010	

\*Footnote: QA/QC Information is not identical for each day, so the value shown is the maximum of all values for LOD/LOQ data or the first Lab found for Lab Cert data.

	<b>Sample Point</b>	001	001	001	001	001
	<b>Description</b>	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER
	<b>Parameter</b>	35	147	147	87	152
	<b>Description</b>	Arsenic, Total Recoverable	Copper, Total Recoverable	Copper, Total Recoverable	Cadmium, Total Recoverable	Cyanide, Amenable
	<b>Units</b>	lbs/day	ug/L	lbs/day	ug/L	ug/L
	<b>Sample Type</b>	CALCULATED	24 HR COMP	24 HR COMP	24 HR COMP	24 HR COMP
	<b>Frequency</b>	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
<b>Sample Results</b>	<b>Day 1</b>	0.03306	13	0.01131	0.68	<5.0
	<b>2</b>					
	<b>3</b>					
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>					
	<b>8</b>					
	<b>9</b>					
	<b>10</b>					
	<b>11</b>					
	<b>12</b>	0.02652	23	0.02346	<0.49	
	<b>13</b>					
	<b>14</b>					
	<b>15</b>	0.0238	15	0.0105	0.65	
	<b>16</b>					
	<b>17</b>					
	<b>18</b>					
	<b>19</b>					
	<b>20</b>					
	<b>21</b>					
	<b>22</b>	0.0234	13	0.01014	0.54	
	<b>23</b>					
	<b>24</b>					
	<b>25</b>					
	<b>26</b>					
	<b>27</b>					
	<b>28</b>					
	<b>29</b>					
	<b>30</b>					
	<b>31</b>					

	Sample Point	001		001		001		001	
	Description	PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER	
	Parameter	35		147		147		87	
	Description	Arsenic, Total Recoverable		Copper, Total Recoverable		Copper, Total Recoverable		Cadmium, Total Recoverable	
	Units	lbs/day		ug/L		lbs/day		ug/L	
<b>Summary Values</b>	Monthly Avg	0.026695		16		0.0138525		0.4675	
	Monthly Total								
	Daily Max	0.03306		23		0.02346		0.68	
	Daily Min	0.0234		13		0.01014		<0.49	
	Rolling 12 Month Avg								
<b>Limit(s) in Effect</b>	Monthly Avg								
	Monthly Total								
	Daily Max	12	0	69	0	0.98	0		
	Daily Min								
	Rolling 12 Month Avg								
<b>QA/QC Information</b>	LOD			1.7				0.49	
	LOQ			5				1	
	QC Exceedance	N		N		N		N	
	Lab Certification			999580010				999580010	

	<b>Sample Point</b>	001	001	101	101	101
	<b>Description</b>	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent
	<b>Parameter</b>	112	280	211	457	342
	<b>Description</b>	Chlorine, Total Residual	Mercury, Total Recoverable	Flow Rate	Suspended Solids, Total	Oil & Grease (Freon)
	<b>Units</b>	ug/L	ng/L	MGD	mg/L	mg/L
	<b>Sample Type</b>	GRAB	GRAB	CONTINUOUS	24 HR COMP	GRAB
	<b>Frequency</b>	MONTHLY	MONTHLY	DAILY	DAILY	2/WEEK
<b>Sample Results</b>	<b>Day 1</b>			0.039652	7.5	6.0
	<b>2</b>			0.025013	8.5	2.8
	<b>3</b>					
	<b>4</b>					
	<b>5</b>			0.044303	4.0	
	<b>6</b>			0.052450	3.5	
	<b>7</b>			0.036649	4.5	
	<b>8</b>			0.026335	3.5	
	<b>9</b>			0.004281	7.0	1.8
	<b>10</b>					
	<b>11</b>					
	<b>12</b>			0.051723	2.0	2.9
	<b>13</b>			0.039519	3.0	
	<b>14</b>		8.5	0.035986	3.5	
	<b>15</b>			0.025162	5.0	1.7
	<b>16</b>			0.009295	9.5	<1.5
	<b>17</b>					
	<b>18</b>					
	<b>19</b>			0.032398	4.0	
	<b>20</b>			0.049302	2.5	
	<b>21</b>			0.021642	6.5	
	<b>22</b>	<30		0.031776	4.0	2.6
	<b>23</b>			0.013273	2.5	1.9
	<b>24</b>					
	<b>25</b>					
	<b>26</b>			0.027047	4.5	
	<b>27</b>			0.023757	3.5	
	<b>28</b>			0.015983	3.0	
	<b>29</b>			0.002584	6.5	
	<b>30</b>			0.001032	5.5	
	<b>31</b>					

	Sample Point	001		001		101		101		
	Description	PRIOR TO MENOMINEE RIVER		PRIOR TO MENOMINEE RIVER		Metal Finishing Effluent		Metal Finishing Effluent		
	Parameter	112		280		211		457		
	Description	Chlorine, Total Residual		Mercury, Total Recoverable		Flow Rate		Suspended Solids, Total		
	Units	ug/L		ng/L		MGD		mg/L		
<b>Summary Values</b>	Monthly Avg	0		8.5		0.027689182		4.727272727		
	Monthly Total									
	Daily Max	<30		8.5		0.05245		9.5		
	Daily Min	<30		8.5		0.001032		2		
	Rolling 12 Month Avg									
<b>Limit(s) in Effect</b>	Monthly Avg						31	0	26	0
	Monthly Total									
	Daily Max						60	0	52	0
	Daily Min									
	Rolling 12 Month Avg									
<b>QA/QC Information</b>	LOD	30		0.12				1.4		
	LOQ	100		0.39				5.8		
	QC Exceedance	N		N		N		N		
	Lab Certification			721026460				999580010		

	<b>Sample Point</b>	101	101	101	101	101
	<b>Description</b>	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent
	<b>Parameter</b>	87	133	315	553	155
	<b>Description</b>	Cadmium, Total Recoverable	Chromium, Total Recoverable	Nickel, Total Recoverable	Zinc, Total Recoverable	Cyanide, Total
	<b>Units</b>	ug/L	ug/L	ug/L	ug/L	ug/L
	<b>Sample Type</b>	24 HR COMP	24 HR COMP	24 HR COMP	24 HR COMP	GRAB
	<b>Frequency</b>	2/WEEK	MONTHLY	2/WEEK	2/WEEK	MONTHLY
<b>Sample Results</b>	<b>Day 1</b>	<0.49	2.2	22	650	<3.0
	<b>2</b>	<0.49	<2.2	1.9	200	
	<b>3</b>					
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>					
	<b>8</b>	<0.49	<2.2	2.6	55	
	<b>9</b>					
	<b>10</b>					
	<b>11</b>					
	<b>12</b>	<0.49	<2.2	2.2	57	
	<b>13</b>					
	<b>14</b>					
	<b>15</b>	<0.49	<2.2	4.4	62	
	<b>16</b>	<0.49	2.2	5.0	88	
	<b>17</b>					
	<b>18</b>					
	<b>19</b>					
	<b>20</b>					
	<b>21</b>					
	<b>22</b>	<0.49	<2.2	2.6	59	
	<b>23</b>	<0.49	<2.2	2.7	46	
	<b>24</b>					
	<b>25</b>					
	<b>26</b>					
	<b>27</b>					
	<b>28</b>					
	<b>29</b>					
	<b>30</b>					
	<b>31</b>					



	<b>Sample Point</b>	101		101		101		101		101	
	<b>Description</b>	Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent	
	<b>Parameter</b>	87		133		315		553		155	
	<b>Description</b>	Cadmium, Total Recoverable		Chromium, Total Recoverable		Nickel, Total Recoverable		Zinc, Total Recoverable		Cyanide, Total	
	<b>Units</b>	ug/L		ug/L		ug/L		ug/L		ug/L	
<b>Summary Values</b>	<b>Monthly Avg</b>	0		0.55		5.425		152.125		0	
	<b>Monthly Total</b>										
	<b>Daily Max</b>	<0.49		2.2		22		650		<3	
	<b>Daily Min</b>	<0.49		<2.2		1.9		46		<3	
	<b>Rolling 12 Month Avg</b>										
<b>Limit(s) in Effect</b>	<b>Monthly Avg</b>	260	0	1710	0	2380	0	1480	0	650	0
	<b>Monthly Total</b>										
	<b>Daily Max</b>	690	0	2770	0	3980	0	2610	0	1200	0
	<b>Daily Min</b>										
	<b>Rolling 12 Month Avg</b>										
<b>QA/QC Information</b>	<b>LOD</b>	0.49		2.2		1.5		3.6		3	
	<b>LOQ</b>	1		5		5		10		10	
	<b>QC Exceedance</b>	N		N		N		N		N	
	<b>Lab Certification</b>	999580010		999580010		999580010		999580010		999580010	

	<b>Sample Point</b>	101	101	101	101	101
	<b>Description</b>	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent
	<b>Parameter</b>	147	264	430	374	373
	<b>Description</b>	Copper, Total Recoverable	Lead, Total Recoverable	Silver, Total Recoverable	pH (Minimum)	pH (Maximum)
	<b>Units</b>	ug/L	ug/L	ug/L	su	su
	<b>Sample Type</b>	24 HR COMP	24 HR COMP	24 HR COMP	CONTINUOUS	CONTINUOUS
	<b>Frequency</b>	2/WEEK	MONTHLY	MONTHLY	DAILY	DAILY
<b>Sample Results</b>	<b>Day 1</b>	11	<1.3	<1.1	6.9	9.0
	<b>2</b>	7.6	<1.3	<1.1	6.6	8.4
	<b>3</b>					
	<b>4</b>					
	<b>5</b>				6.8	7.7
	<b>6</b>				6.9	7.9
	<b>7</b>				6.4	8.5
	<b>8</b>	5.0	<1.3	1.1	6.5	7.2
	<b>9</b>				6.4	8.4
	<b>10</b>					
	<b>11</b>					
	<b>12</b>	3.8	<1.3	<1.1	6.9	7.6
	<b>13</b>				6.2	7.2
	<b>14</b>				6.8	7.8
	<b>15</b>	5.4	<1.3	<1.1	6.7	7.4
	<b>16</b>	5.8	2.7	<1.1	7.0	8.6
	<b>17</b>					
	<b>18</b>					
	<b>19</b>				6.7	8.5
	<b>20</b>				7.2	8.6
	<b>21</b>				6.2	8.0
	<b>22</b>	4.1	<1.3	1.2	6.0	8.5
	<b>23</b>	4.0	1.4	<1.1	7.6	7.8
	<b>24</b>					
	<b>25</b>					
	<b>26</b>				7.0	8.2
	<b>27</b>				6.5	7.4
	<b>28</b>				6.4	7.5
	<b>29</b>				6.3	7.2
	<b>30</b>				6.1	6.7
	<b>31</b>					

	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		264		430		374		373	
	Description	Copper, Total Recoverable		Lead, Total Recoverable		Silver, Total Recoverable		pH (Minimum)		pH (Maximum)	
	Units	ug/L		ug/L		ug/L		su		su	
<b>Summary Values</b>	Monthly Avg	5.8375		0.5125		0.2875		6.640909091		7.913636364	
	Monthly Total										
	Daily Max	11		2.7		1.2		7.6		9	
	Daily Min	3.8		<1.3		<1.1		6		6.7	
	Rolling 12 Month Avg										
<b>Limit(s) in Effect</b>	Monthly Avg	2070	0	430	0	240	0				
	Monthly Total										
	Daily Max	3380	0	690	0	430	0			11	0
	Daily Min							4	0		
	Rolling 12 Month Avg										
<b>QA/QC Information</b>	LOD	1.7		1.3		1.1					
	LOQ	5		2.5		2.5					
	QC Exceedance	N		N		N		N		N	
	Lab Certification	999580010		999580010		999580010					

	<b>Sample Point</b>	101	101	101	101	101
	<b>Description</b>	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent
	<b>Parameter</b>	379	376	507	40	490
	<b>Description</b>	pH Total Exceedance Time Minutes	pH Exceedances Greater Than 60 Minutes	Total Toxic Organics	Benzene	Tetrachloroethylene
	<b>Units</b>	minutes	Number	ug/L	ug/L	ug/L
	<b>Sample Type</b>	CALCULATED	CALCULATED	24 HR COMP	24 HR COMP	24 HR COMP
	<b>Frequency</b>	DAILY	DAILY	MONTHLY	MONTHLY	MONTHLY
<b>Sample Results</b>	<b>Day 1</b>					
	<b>2</b>					
	<b>3</b>					
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>					
	<b>8</b>					
	<b>9</b>					
	<b>10</b>					
	<b>11</b>					
	<b>12</b>					
	<b>13</b>					
	<b>14</b>					
	<b>15</b>					
	<b>16</b>					
	<b>17</b>					
	<b>18</b>					
	<b>19</b>					
	<b>20</b>					
	<b>21</b>					
	<b>22</b>					
	<b>23</b>					
	<b>24</b>					
	<b>25</b>					
	<b>26</b>					
	<b>27</b>					
	<b>28</b>					
	<b>29</b>					
	<b>30</b>					
	<b>31</b>					

	<b>Sample Point</b>	101		101		101		101		101	
	<b>Description</b>	Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent		Metal Finishing Effluent	
	<b>Parameter</b>	379		376		507		40		490	
	<b>Description</b>	pH Total Exceedance Time Minutes		pH Exceedances Greater Than 60 Minutes		Total Toxic Organics		Benzene		Tetrachloroethylene	
	<b>Units</b>	minutes		Number		ug/L		ug/L		ug/L	
<b>Summary Values</b>	<b>Monthly Avg</b>										
	<b>Monthly Total</b>										
	<b>Daily Max</b>										
	<b>Daily Min</b>										
	<b>Rolling 12 Month Avg</b>										
<b>Limit(s) in Effect</b>	<b>Monthly Avg</b>										
	<b>Monthly Total</b>	446	0	0	0						
	<b>Daily Max</b>					2130					
	<b>Daily Min</b>										
	<b>Rolling 12 Month Avg</b>										
<b>QA/QC Information</b>	<b>LOD</b>										
	<b>LOQ</b>										
	<b>QC Exceedance</b>	N		N		N		N		N	
	<b>Lab Certification</b>										

	<b>Sample Point</b>	101	101	101	101	101
	<b>Description</b>	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent
	<b>Parameter</b>	500	561	200	508	285
	<b>Description</b>	Toluene	1,1,1-Trichloro- ethane	Ethylbenzene	Trichloro- ethylene	Methylene chloride
	<b>Units</b>	ug/L	ug/L	ug/L	ug/L	ug/L
	<b>Sample Type</b>	24 HR COMP	24 HR COMP	24 HR COMP	24 HR COMP	24 HR COMP
	<b>Frequency</b>	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
<b>Sample Results</b>	<b>Day 1</b>					
	<b>2</b>					
	<b>3</b>					
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>					
	<b>8</b>					
	<b>9</b>					
	<b>10</b>					
	<b>11</b>					
	<b>12</b>					
	<b>13</b>					
	<b>14</b>					
	<b>15</b>					
	<b>16</b>					
	<b>17</b>					
	<b>18</b>					
	<b>19</b>					
	<b>20</b>					
	<b>21</b>					
	<b>22</b>					
	<b>23</b>					
	<b>24</b>					
	<b>25</b>					
	<b>26</b>					
	<b>27</b>					
	<b>28</b>					
	<b>29</b>					
	<b>30</b>					
	<b>31</b>					

	<b>Sample Point</b>	101	101	101	101	101
	<b>Description</b>	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent
	<b>Parameter</b>	500	561	200	508	285
	<b>Description</b>	Toluene	1,1,1-Trichloro- ethane	Ethylbenzene	Trichloro- ethylene	Methylene chloride
	<b>Units</b>	ug/L	ug/L	ug/L	ug/L	ug/L
<b>Summary Values</b>	<b>Monthly Avg</b>					
	<b>Monthly Total</b>					
	<b>Daily Max</b>					
	<b>Daily Min</b>					
	<b>Rolling 12 Month Avg</b>					
<b>Limit(s) in Effect</b>	<b>Monthly Avg</b>					
	<b>Monthly Total</b>					
	<b>Daily Max</b>					
	<b>Daily Min</b>					
	<b>Rolling 12 Month Avg</b>					
<b>QA/QC Information</b>	<b>LOD</b>					
	<b>LOQ</b>					
	<b>QC Exceedance</b>					
	<b>Lab Certification</b>					

	<b>Sample Point</b>	101	106	106	106	107
	<b>Description</b>	Metal Finishing Effluent	Future remedial action ww	Future remedial action ww	Future remedial action ww	Mercury Field Blank Results
	<b>Parameter</b>	167	211	35	457	280
	<b>Description</b>	Di-n-butyl phthalate (dibutyl phthalate)	Flow Rate	Arsenic, Total Recoverable	Suspended Solids, Total	Mercury, Total Recoverable
	<b>Units</b>	ug/L	gpd	ug/L	mg/L	ng/L
	<b>Sample Type</b>	24 HR COMP	CONTINUOUS	24 HR COMP	24 HR COMP	GRAB
	<b>Frequency</b>	MONTHLY	DAILY	WEEKLY	WEEKLY	MONTHLY
<b>Sample Results</b>	<b>Day 1</b>					
	<b>2</b>					
	<b>3</b>					
	<b>4</b>					
	<b>5</b>					
	<b>6</b>					
	<b>7</b>					
	<b>8</b>					
	<b>9</b>					
	<b>10</b>					
	<b>11</b>					
	<b>12</b>					
	<b>13</b>					
	<b>14</b>					<0.12
	<b>15</b>					
	<b>16</b>					
	<b>17</b>					
	<b>18</b>					
	<b>19</b>					
	<b>20</b>					
	<b>21</b>					
	<b>22</b>					
	<b>23</b>					
	<b>24</b>					
	<b>25</b>					
	<b>26</b>					
	<b>27</b>					
	<b>28</b>					
	<b>29</b>					
	<b>30</b>					
	<b>31</b>					



	Sample Point	101	106	106	106	107
	Description	Metal Finishing Effluent	Future remedial action ww	Future remedial action ww	Future remedial action ww	Mercury Field Blank Results
	Parameter	167	211	35	457	280
	Description	Di-n-butyl phthalate (dibutyl phthalate)	Flow Rate	Arsenic, Total Recoverable	Suspended Solids, Total	Mercury, Total Recoverable
	Units	ug/L	gpd	ug/L	mg/L	ng/L
<b>Summary Values</b>	Monthly Avg					0
	Monthly Total					
	Daily Max					<0.12
	Daily Min					<0.12
	Rolling 12 Month Avg					
<b>Limit(s) in Effect</b>	Monthly Avg					
	Monthly Total					
	Daily Max					
	Daily Min					
	Rolling 12 Month Avg					
<b>QA/QC Information</b>	LOD					0.12
	LOQ					0.39
	QC Exceedance	N	N	N	N	N
	Lab Certification					721026460

	<b>Sample Point</b>	003	003	003	003	003
	<b>Description</b>	Future remedial action dischg	Future remedial action dischg	Future remedial action dischg	Future remedial action dischg	Future remedial action dischg
	<b>Parameter</b>	211	457	35	374	373
	<b>Description</b>	Flow Rate	Suspended Solids, Total	Arsenic, Total Recoverable	pH (Minimum)	pH (Maximum)
	<b>Units</b>	MGD	mg/L	ug/L	su	su
	<b>Sample Type</b>	CONTINUOUS	24 HR COMP	24 HR COMP	CONTINUOUS	CONTINUOUS
	<b>Frequency</b>	DAILY	WEEKLY	WEEKLY	DAILY	DAILY
<b>Sample Results</b>	<b>Day 1</b>					
	<b>2</b>					
	<b>3</b>					
	<b>4</b>					
	<b>5</b>	0.000425	2.5	<2.1	6.0	6.0
	<b>6</b>					
	<b>7</b>	0.001172			6.0	6.0
	<b>8</b>	0.000898			6.0	6.0
	<b>9</b>					
	<b>10</b>					
	<b>11</b>					
	<b>12</b>	0.001865	<1.9	<2.1	6.0	6.0
	<b>13</b>					
	<b>14</b>	0.001867			6.5	7.0
	<b>15</b>	0.001743			7.8	8.1
	<b>16</b>					
	<b>17</b>					
	<b>18</b>					
	<b>19</b>	0.000732	<1.9	<2.1	6.8	6.9
	<b>20</b>	0.004699			6.7	6.8
	<b>21</b>	0.002188			6.7	7.2
	<b>22</b>	0.001878			6.7	6.8
	<b>23</b>	0.002285			6.9	7.1
	<b>24</b>					
	<b>25</b>					
	<b>26</b>	0.000881	<1.9	<2.6	6.7	6.8
	<b>27</b>					
	<b>28</b>					
	<b>29</b>					
	<b>30</b>					
	<b>31</b>					

	Sample Point	003	003	003	003	003	
	Description	Future remedial action dischg	Future remedial action dischg	Future remedial action dischg	Future remedial action dischg	Future remedial action dischg	
	Parameter	211	457	35	374	373	
	Description	Flow Rate	Suspended Solids, Total	Arsenic, Total Recoverable	pH (Minimum)	pH (Maximum)	
	Units	MGD	mg/L	ug/L	su	su	
<b>Summary Values</b>	Monthly Avg	0.001719417	0.625	0	6.566666667	6.725	
	Monthly Total						
	Daily Max	0.004699	2.5	<2.6	7.8	8.1	
	Daily Min	0.000425	<1.9	<2.1	6	6	
	Rolling 12 Month Avg						
<b>Limit(s) in Effect</b>	Monthly Avg						
	Monthly Total						
	Daily Max			680	0	11	0
	Daily Min				4	0	
	Rolling 12 Month Avg						
<b>QA/QC Information</b>	LOD			2.1			
	LOQ			5			
	QC Exceedance	N	N	N	N	N	
	Lab Certification		999580010	999580010			

	<b>Sample Point</b>	003	003
	<b>Description</b>	Future remedial action dischg	Future remedial action dischg
	<b>Parameter</b>	379	376
	<b>Description</b>	pH Total Exceedance Time Minutes	pH Exceedances Greater Than 60 Minutes
	<b>Units</b>	minutes	Number
	<b>Sample Type</b>	CONTINUOUS	CONTINUOUS
	<b>Frequency</b>	DAILY	DAILY
<b>Sample Results</b>	<b>Day 1</b>		
	<b>2</b>		
	<b>3</b>		
	<b>4</b>		
	<b>5</b>		
	<b>6</b>		
	<b>7</b>		
	<b>8</b>		
	<b>9</b>		
	<b>10</b>		
	<b>11</b>		
	<b>12</b>		
	<b>13</b>		
	<b>14</b>		
	<b>15</b>		
	<b>16</b>		
	<b>17</b>		
	<b>18</b>		
	<b>19</b>		
	<b>20</b>		
	<b>21</b>		
	<b>22</b>		
	<b>23</b>		
	<b>24</b>		
	<b>25</b>		
	<b>26</b>		
	<b>27</b>		
	<b>28</b>		
	<b>29</b>		
	<b>30</b>		
	<b>31</b>		

	<b>Sample Point</b>	003		003	
	<b>Description</b>	Future remedial action dischg		Future remedial action dischg	
	<b>Parameter</b>	379		376	
	<b>Description</b>	pH Total Exceedance Time Minutes		pH Exceedances Greater Than 60 Minutes	
	<b>Units</b>	minutes		Number	
<b>Summary Values</b>	<b>Monthly Avg</b>				
	<b>Monthly Total</b>				
	<b>Daily Max</b>				
	<b>Daily Min</b>				
	<b>Rolling 12 Month Avg</b>				
<b>Limit(s) in Effect</b>	<b>Monthly Avg</b>				
	<b>Monthly Total</b>	446	0		
	<b>Daily Max</b>			0	0
	<b>Daily Min</b>				
	<b>Rolling 12 Month Avg</b>				
<b>QA/QC Information</b>	<b>LOD</b>				
	<b>LOQ</b>				
	<b>QC Exceedance</b>	N		N	
	<b>Lab Certification</b>				

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

1. Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for TTO I certify that to the best of my knowledge and belief no dumping of concentrated toxic organics into the wastewaters has
2. occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the solvent management plan submitted to the department.

General Remarks

For the temperature readings at OF001 there were missed readings because of the chart not working properly - 13th - 15th and 17th - 21st.

Laboratory Quality Control Comments

Submitted by Anne Fleury(afleury16) on 9/16/2019 12:38:36 PM