

January 15, 2019

Mr. Conor Neal
Geologist
EPA Region 5
Land & Chemicals Division
77 West Jackson Blvd, LU-9J
Chicago, IL 60604-3590

Subject: Quarterly Progress Report (October through December 2018)
Administrative Order on Consent (February 26, 2009)
Tyco Fire Products LP
Stanton Street Facility
Marinette, Wisconsin
WID 006 125 215

Dear Mr. Neal:

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 (USEPA) Region 5 and the Wisconsin Department of Natural Resources (WDNR). The reports are required to document activities conducted as part of the Resource Conservation and Recovery Act (RCRA) Corrective Actions at the Tyco facility in Marinette, Wisconsin. The enclosed report covers the period from October 1, 2018 through December 31, 2018, and presents a brief description of the work completed to date, data collected, problems encountered, and schedule of activities as required by the February 2009 AOC.

Work Completed During this Reporting Period

Operation of the groundwater collection and treatment system (GWCTS) continued through the fourth quarter of 2018. A summary of the operational data is included as Attachment 1. The Discharge Monitoring Reports (DMRs) are included in Attachment 2.

Pump down operations continued in the former Salt Vault and 8th Street Slip area through November 5, 2018 as which time the remaining recovered groundwater was transported from the site and the system temporarily decommissioned/disassembled for the winter period. Details of the pump down operations for 2018 were reported to the agencies in the "Bi-Weekly Summary Report", dated November 14, 2018.

The 2018 Fall Vertical Barrier Wall Inspection was performed on October 25, 2018. During the week of October 29, 2018, MJB Industries completed corrective actions based on the findings of the fall inspection. A total of 16 waler system bolts were tightened and marine caulk placed around the bolt and bolt plate to stop the seepage from the areas.

Additional Activities

A meeting was held on October 22, 2018 at the USEPA Region 5 office in Chicago to discuss the WPDES Variance, PDP status, and Dye Testing Alternatives among other project status items.

Data Collected

Extraction and treatment volumes, analytical testing, and discharge data are required as part of the Wisconsin Pollutant Discharge and Elimination System (WPDES) permits obtained from WDNR for operation of the GWCTS. The GWCTS operates under permit WPDES WI-0001040-07-0. Attachment 2 includes the monthly WPDES DMRs for September 2018 through November 2018 for the GWCTS. Additional data on the operation of the GWCTS is included in Attachment 1.

Groundwater elevation data were collected from monitoring wells located in the former 8th Street Slip and Salt Vault as part of the pump down program. This information, through November 2018, was included in the annual report.

Groundwater elevation data recorded by installed transducers was downloaded on the week of October 17, 2018. Evaluation of the data was included in the annual report. Transducers collect data hourly. The site-wide data was provided in the annual report.

Problems Encountered

The GWCTS systems experienced continued problems with excessive fouling in the VSEP units which had difficulty being remedied through normal cleaning procedures. This resulted in continuous downtime during this quarter. A piping modification was made to allow Tyco to run the system without the VSEP process which results in higher rate of waste generation without sacrificing water quality until a shakedown of the VSEP is performed by the manufacturer or a qualified consultant. Troubleshooting is planned to continue in quarter 1 of 2019.

Schedule of Upcoming Activities

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

- Submit the quarterly progress report.
- Complete transducer data download.
- Conduct pump down programs interim shutdown water level monitoring.
- Submit enhanced monitoring well network work plan.
- Submit porewater sampling plan.
- Submit Response to Comments on WPDES Variance Request.

List of Key Correspondence and Document Submittals

Table 1

Documents Submitted

Quarterly Progress Report (October through December 2018), Tyco Fire Products LP Facility, Marinette, Wisconsin

Description of Submittal	Submitted To	Date Submitted
Quarterly Progress Report	USEPA	October 15, 2018
PDP Summary Report	USEPA	November 14, 2018
Response to Comments on Cost Estimate	USEPA	December 7, 2018
2018-2027 Cost Estimate	USEPA	December 12, 2018
Surety Bond Issuance	USEPA	December 19, 2018
5 Year Technical Review	USEPA	December 28, 2018
Boring Logs Resubmittal	USEPA	December 29, 2018

Table 2

Correspondence from Agency

Quarterly Progress Report (October through December 2018) Tyco Fire Products LP Facility, Marinette, Wisconsin

Description of Correspondence	Received From	Date Received
Comments to Draft Cost Estimate	USEPA	December 3, 2018

Please contact me at 715-587-6670 if you have any questions or require additional information.

Respectfully Yours,

Tyco Fire Products LP

Ryan Suennen

Ryan Suennen
Environmental Supervisor

Attachments

- 1 GWCTS Operation Summary
- 2 DMRs for the GWCTS

cc: Angela Carey, WDNR
 Jim Killian, WDNR
 Joe Janeczek, Johnson Controls
 Jeff Danko, Johnson Controls
 Muriel Carter, Stephenson Public Library

Document Control No.: 20190115 US10.11014

Attachment 1
GWCTS Operation Summary

MEMORANDUM

Groundwater Collection and Treatment System Operation

SUBJECT: Groundwater Collection and Treatment System Operation for Tyco

Fire Products LP, Marinette, Wisconsin

DATE: January 13, 2018

Operation of the groundwater collection and treatment system (GWCTS) occurring from October 1, 2017 through December 31, 2017 is summarized below:

- The GWCTS operated for 0 days in October, 0 days in November, and 7 days in December, for a total of 7 days.
- Approximately 18,900 gallons of reject water was produced during system operations and subsequently disposed of offsite.
- The precipitation recorded from the weather station in Marinette, Wisconsin was not available from NOAA due to the Government Shutdown.
(<https://www.ncdc.noaa.gov/cdo-web/datasets/GHCND/stations/GHCND:USC00475091/detail>).
- An estimated total of 52,867 gallons was discharged to the Menominee River as effluent under WPDES permit.
- An estimated total of 42,700 gallons of groundwater were extracted (not including volumes extracted as part of the pump down program) from the site during the reporting period. Details of water volumes extracted from each area of the site and changes in water levels are shown in the Table 1 below.

Table 1 – Extraction Well Data Summary

Extraction Well	Gallons Run Q4 2018 (10/01/2017- 12/31/2017)
EW-1	899
EW-2	0
EW-3	0
EW-4	30
EW-5	21,439
EW-6	20,007
EW-7	325
Total	42,700

Attachment 2
DMRs



eReport Submit - TYCO FIRE PRODUCTS LP - 437897

Facility Name

TYCO FIRE PRODUCTS LP

Form Type

Wastewater Discharge Monitoring Long Report

DOC ID

406456

Reporting Period

9/1/2018 to 9/30/2018

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eReport Certify - TYCO FIRE PRODUCTS LP - 437897

Facility Name

TYCO FIRE PRODUCTS LP

Form Type

Wastewater Discharge Monitoring Long Report

DOC ID

406456

Reporting Period

9/1/2018 to 9/30/2018

Enter Certification Code

E-Mail was sent to

aflleury@tycoint.com

Certification complete.

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101 S. Webster Street . PO Box 7921 . Madison, Wisconsin 53707-7921 . 608.266.2621

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Facility Name
TYCO FIRE PRODUCTS LP

Form Type
Wastewater Discharge Monitoring Long Report

DOC ID
406456

Reporting Period
9/1/2018 to 9/30/2018

Enter Certification Code

E-Mail was sent to
afleury@tycoint.com

Without leaving THIS page, check E-Mail address for message containing Certification code. Enter code and click 'Certify' button to complete Submittal.

Submittal of this form is required by section 283.55, Wis. Stats., and chapters NR 205 and NR 214 or NR 204, Wis. Admin. Code.

Personally identifiable information collected on this form may be used for purposes other than that for which it was originally collected. Under Wisconsin's open records laws, DNR is required to provide all non-confidential information to any person who requests it. Such information may be provided to the public in written or electronic form. Information reported may be made available to the public via a DNR web page.

I certify under penalty of law that this form submitted to DNR on 10/9/2018 for the period 9/1/2018 to 9/30/2018 and identified by the DOC ID number listed above was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

The Official Internet site for the Wisconsin Department of Natural Resources

101 S. Webster Street . PO Box 7921 . Madison, Wisconsin 53707-7921 . 608.266.2621

Questions or comments about this e-form : [Contact Us](#)

Facility Name: TYCO FIRE PROTECTION PRODUCTS LP
 Contact Address: One Stanton St
 Marinette, WI 54143
 Facility Contact: Mike Elliott, EHS Manager
 Phone Number: 715-735-7411
 Reporting Period: 09/01/2018 - 09/30/2018
 Form Due Date: 10/21/2018
 Permit Number: 0001040

Date Received:	
DOC:	406456
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	Day 1	0.02217		81	7.3	7.8
	2	0.00201		82	7.7	7.9
	3	0.20414		81	6.6	7.9
	4	0.20734		77	6.7	7.0
	5	0.20168		76	6.4	6.9
	6	0.14941		76	6.7	6.9
	7	0.12124		94	6.8	7.0
	8	0.00468		76	7.0	7.6
	9	0.04777		79	7.2	8.0
	10	0.13730		77	7.0	7.6
	11	0.12992		78	7.0	7.6
	12	0.14199		78	6.9	7.5
	13	0.12660		78	6.8	7.1
	14	0.11252		78	6.8	7.4
	15	0.07329		77	6.7	7.5
	16	0.04728		81	6.8	8.0
	17	0.12988		79	6.7	7.4
	18	0.13703	1.6	77	7.0	7.4
	19	0.12464		77	6.4	7.2
	20	0.10017		77	6.2	6.6
	21	0.00692		74	6.4	7.2
	22	0.00168		77	7.2	7.4
	23	0.01551		78	6.8	7.7
	24	0.12439		76	6.6	7.2
	25	0.14119		77	6.8	7.2
	26	0.13172		75	6.6	6.8
	27	0.13683		74	6.4	7.0
	28	0.08972		74	6.7	7.3
	29	0.00168		70	6.8	7.7
	30	0.04995		71	6.7	7.6
	31					

Sample / Site		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	
Summary Values	Monthly Avg	0.097355	1.6	77.5	6.79	7.38
	Monthly Total					
	Daily Max	0.20734	1.6	94	7.7	8
	Daily Min	0.00168	1.6	70	6.2	6.6
	Rolling 12 Month Avg					
Limit(s) in Effect	Monthly Avg					
	Monthly Total					
	Daily Max					11 0
	Daily Min				4 0	
	Rolling 12 Month Avg					
QA/QC Information	LOD		0.2			
	LOQ		0.5			
	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 CaCO ₃	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					
	2					
	3					
	4			0.20		50
	5					
	6					
	7					
	8					
	9					
	10			0.16	260	44
	11					
	12					
	13					
	14					
	15					
	16					
	17			0.12	310	39
	18					
	19					
	20					
	21					
	22					
	23					
	24			0.13	270	37
	25					
	26					
	27					
	28					
	29					
	30					
	31					

Sample / Unit	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 CaCO ₃	Arsenic, Total Recoverable	
Units	minutes	Number	mg/L	mg/L	ug/L	
Summary Values	Monthly Avg			0.1525	280	42.5
	Monthly Total					
	Daily Max			0.2	310	50
	Daily Min			0.12	260	37
	Rolling 12 Month Avg			0.2		
Limit(s) in Effect	Monthly Avg					
	Monthly Total	446	0			
	Daily Max		0	0		680 0
	Daily Min					
	Rolling 12 Month Avg			1 0		
QA/QC Information	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
Sample Results	Day 1					
	2					
	3					
	4	0.0865	22	0.03806	0.78	<3.0
	5					
	6					
	7					
	8					
	9					
	10	0.05016	13	0.01482	<0.49	
	11					
	12					
	13					
	14					
	15					
	16					
	17	0.04446	14	0.01596	<0.49	
	18					
	19					
	20					
	21					
	22					
	23					
	24	0.03848	28	0.02912	1.0	
	25					
	26					
	27					
	28					
	29					
	30					
	31					

Sample / Unit	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
Summary Values	Monthly Avg	0.0549	19.25	0.02449	0.445
	Monthly Total				
	Daily Max	0.0865	28	0.03806	1
	Daily Min	0.03848	13	0.01482	<0.49
	Rolling 12 Month Avg				
Limit(s) in Effect	Monthly Avg				
	Monthly Total				
	Daily Max	12	0	69	0
	Daily Min				
	Rolling 12 Month Avg				
QA/QC Information	LOD		1.7		0.49
	LOQ		5		1
	QC Exceedance	N	N	N	N
	Lab Certification		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					
	2					
	3		0.007519	7.5		
	4		0.035345	1.9	1.9	
	5		0.035128	1.5	<1.4	
	6		0.036443	4.5		
	7		0.018977	3.0		
	8					
	9					
	10		0.030579	11.0	1.9	
	11		0.033210	1.9	2.1	
	12		0.029132	1.9		
	13		0.027799	5.5		
	14		0.010973	14.0		
	15		0.010951	9.5		
	16					
	17		0.025466	2.5	1.9	
	18	3.4	0.020901	3.0	1.8	
	19		0.023137	2.0		
	20		0.023966	2.5		
	21		0.007787	4.0		
	22					
	23					
	24	20	0.023177	1.9	1.5	
	25		0.030445	1.9	1.7	
	26		0.033362	3.0		
	27		0.021741	2.0		
	28		0.006467	4.0		
	29					
	30					
	31					

Sample / Date	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
Summary Values	Monthly Avg	20	3.4	0.023452619	4.238095238
	Monthly Total				
	Daily Max	20	3.4	0.036443	14
	Daily Min	20	3.4	0.006467	1.5
	Rolling 12 Month Avg				<1.4
Limit(s) in Effect	Monthly Avg			31	0
	Monthly Total				
	Daily Max			60	0
	Daily Min				
	Rolling 12 Month Avg				
QA/QC Information	LOD	30	0.2		1.4
	LOQ	100	0.5		5.4
	QC Exceedance	N	N	N	N
	Lab Certification		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
Sample Results	Day 1				
	2				
	3				
	4	0.93	6.8	1300	330
	5	0.74	36	1700	330
	6				
	7				
	8				
	9				
	10	<0.49	3.1	400	270
	11	<0.49	<2.2	170	170
	12				
	13				
	14				
	15				
	16				
	17	0.51	4.2	260	480
	18	<0.49	<2.2	100	320
	19				
	20				
	21				
	22				
	23				
	24	2.8	5.0	380	320
	25	0.87	<2.2	210	140
	26				
	27				
	28				
	29				
	30				
	31				

Sample ID	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
Summary Values	Monthly Avg	0.73125	6.8875	565	295
	Monthly Total				
	Daily Max	2.8	36	1700	480
	Daily Min	<0.49	<2.2	100	140
	Rolling 12 Month Avg				
Limit(s) in Effect	Monthly Avg	260	0	1710	0
	Monthly Total				
	Daily Max	690	0	2770	0
	Daily Min				
	Rolling 12 Month Avg				
QA/QC Information	LOD	0.49	2.2	1.5	3.6
	LOQ	1	5	5	10
	QC Exceedance	N	N	N	N
	Lab Certification	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	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
Sample Type	24 HR COMP	24 HR COMP	24 HR COMP	CONTINUOUS	CONTINUOUS
Frequency	2/WEEK	MONTHLY	MONTHLY	DAILY	DAILY
Sample Results	Day 1				
	2				
	3			7.5	7.5
	4	26	<1.3	7.3	7.8
	5	28	<1.3	7.7	7.8
	6			7.2	7.8
	7			7.1	7.4
	8				
	9				
	10	17	<1.3	7.7	8.1
	11	12	<1.3	7.5	7.8
	12			7.4	7.5
	13			7.0	7.8
	14			7.0	8.0
	15			7.7	7.9
	16				
	17	19	1.9	7.4	7.6
	18	5.3	3.1	6.9	7.8
	19			7.3	7.7
	20			7.5	7.9
	21			7.1	7.5
	22				
	23				
	24	39	<1.3	7.6	7.9
	25	14	<1.3	7.6	7.8
	26			7.3	7.7
	27			7.2	7.5
	28			7.2	7.4
	29				
	30				
	31				

Sample / Unit	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				
Summary Values	Monthly Avg	20.0375	0.625	0	7.342857143	7.723809524			
	Monthly Total								
	Daily Max	39	3.1	<1.1	7.7	8.1			
	Daily Min	5.3	<1.3	<1.1	6.9	7.4			
	Rolling 12 Month Avg								
Limit(s) in Effect	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								
QA/QC Information	LOD	1.7		1.3		1.1			
	LOQ	5		2.5		2.5			
	QC Exceedance	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	379	376	507	40	490
	Description	pH Total Exceedance Time Minutes	pH Exceedances Greater Than 60 Minutes	Total Toxic Organics	Benzene	Tetrachloroethylene
	Units	minutes	Number	ug/L	ug/L	ug/L
	Sample Type	CALCULATED	CALCULATED	24 HR COMP	24 HR COMP	24 HR COMP
	Frequency	DAILY	DAILY	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 ID	Description	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent
Parameter	379	376	507	40	490	
Description	pH Total Exceedance Time Minutes	pH Exceedances Greater Than 60 Minutes	Total Toxic Organics	Benzene	Tetrachloroethylene	
Units	minutes	Number	ug/L	ug/L	ug/L	
Summary Values	Monthly Avg					
	Monthly Total					
	Daily Max					
	Daily Min					
	Rolling 12 Month Avg					
Limit(s) in Effect	Monthly Avg					
	Monthly Total	446	0	0	0	
	Daily Max				2130	
	Daily Min					
	Rolling 12 Month Avg					
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				
	Parameter	500	561	200	508	285
	Description	Toluene	1,1,1-Trichloro- ethane	Ethylbenzene	Trichloro- ethylene	Methylene chloride
	Units	ug/L	ug/L	ug/L	ug/L	ug/L
	Sample Type	24 HR COMP				
	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 / Unit		Metal Finishing Effluent				
Parameter	500	561	200	508	285	
Description	Toluene	1,1,1-Trichloro- ethane	Ethylbenzene	Trichloro- ethylene	Methylene chloride	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Summary Values	Monthly Avg					
	Monthly Total					
	Daily Max					
	Daily Min					
	Rolling 12 Month Avg					
Limit(s) in Effect	Monthly Avg					
	Monthly Total					
	Daily Max					
	Daily Min					
	Rolling 12 Month Avg					
QA/QC Information	LOD					
	LOQ					
	QC Exceedance					
	Lab Certification					

	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
	Sample Type	24 HR COMP	CONTINUOUS	24 HR COMP	24 HR COMP	GRAB
	Frequency	MONTHLY	DAILY	WEEKLY	WEEKLY	MONTHLY
Sample Results	Day 1					
	2					
	3					
	4					
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					
	16					
	17					
	18					<0.20
	19					
	20					
	21					
	22					
	23					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					

Sample ID/Code		167	211	35	457	280
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	
Summary Values	Monthly Avg					0
	Monthly Total					
	Daily Max					<0.2
	Daily Min					<0.2
	Rolling 12 Month Avg					
Limit(s) in Effect	Monthly Avg					
	Monthly Total					
	Daily Max					
	Daily Min					
	Rolling 12 Month Avg					
QA/QC Information	LOD					0.2
	LOQ					0.5
	QC Exceedance	N	N	N	N	N
	Lab Certification					721026460

	Sample Point	003	003	003	003	003
	Description	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
	Sample Type	CONTINUOUS	24 HR COMP	24 HR COMP	CONTINUOUS	CONTINUOUS
	Frequency	DAILY	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 1 - Unit		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
Summary Values	Monthly Avg					
	Monthly Total					
	Daily Max					
	Daily Min					
	Rolling 12 Month Avg					
Limit(s) in Effect	Monthly Avg					
	Monthly Total					
	Daily Max			680		11
	Daily Min				4	
	Rolling 12 Month Avg					
QA/QC Information	LOD					
	LOQ					
	QC Exceedance	N	N	N	N	N
	Lab Certification					

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

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

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

The Groundwater system was not running for the whole month of September so, there will be no results for any sampling at OF003.

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: 10/01/2018 - 10/31/2018
 Form Due Date: 11/21/2018
 Permit Number: 0001040

Date Received:	
DOC:	413432
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	Day 1	0.20904		72	6.2	6.6
	2	0.22134		73	6.6	7.0
	3	0.24438		74	6.7	7.2
	4	0.12420		91	7.0	7.3
	5	0.07752		69	7.0	7.1
	6	0.00391		71	7.3	7.8
	7	0.14075		69	7.2	7.8
	8	0.25648		69	6.6	7.3
	9	0.29062		70	7.0	8.0
	10	0.26162		68	7.2	7.6
	11	0.14293		70	7.4	7.7
	12	0.07907		84	7.5	7.9
	13	0.00460		68	7.9	8.0
	14	0.08550		69	7.5	8.0
	15	0.13706		68	7.3	7.7
	16	0.12349	3.7	70	7.1	8.3
	17	0.13739		67	7.3	8.3
	18	0.14774		69	7.2	8.4
	19	0.09397		67	7.2	7.8
	20	0.01639		65	7.4	7.9
	21	0.04674		64	7.7	8.8
	22	0.13772		65	7.3	7.8
	23	0.13326		66	7.2	7.6
	24	0.13129		66	7.3	7.9
	25	0.11261		64	7.0	8.7
	26	0.11256		64	7.1	8.4
	27	0.09204		63	7.4	7.6
	28	0.10850		58	7.2	7.7
	29	0.10353		65	7.2	7.8
	30	0.11658		65	7.2	7.5
	31	0.12857		80	7.2	8.3

	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
Summary Values	Monthly Avg	0.129722581	3.7	69.129032258	7.174193548	7.8
	Monthly Total					
	Daily Max	0.29062	3.7	91	7.9	8.8
	Daily Min	0.00391	3.7	58	6.2	6.6
	Rolling 12 Month Avg					
Limit(s) in Effect	Monthly Avg					
	Monthly Total					
	Daily Max					11 0
	Daily Min				4 0	
	Rolling 12 Month Avg					
QA/QC Information	LOD		0.2			
	LOQ		0.5			
	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 CaCO ₃	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			0.15	210	35
	2					
	3					
	4					
	5					
	6					
	7					
	8			0.14	150	37
	9					
	10					
	11					
	12					
	13					
	14					
	15			0.15	300	17
	16					
	17					
	18					
	19					
	20					
	21					
	22					
	23			0.11	220	46
	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
Summary Values	Monthly Avg			0.1375	220	33.75
	Monthly Total					
	Daily Max			0.15	300	46
	Daily Min			0.11	150	17
	Rolling 12 Month Avg			0.2		
Limit(s) in Effect	Monthly Avg					
	Monthly Total	446	0			
	Daily Max		0	0		680 0
	Daily Min					
	Rolling 12 Month Avg			1 0		
QA/QC Information	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
Sample Results	Day 1	0.0609	18	0.03132	0.80	<3.0
	2					
	3					
	4					
	5					
	6					
	7					
	8	0.07918	11	0.02354	0.56	
	9					
	10					
	11					
	12					
	13					
	14					
	15	0.0513	17	0.0138	<0.49	
	16					
	17					
	18					
	19					
	20					
	21					
	22					
	23	0.05106	17	0.01887	<0.49	
	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
Summary Values	Monthly Avg	0.06061	15.75	0.0218825	0.34	0
	Monthly Total					
	Daily Max	0.07918	18	0.03132	0.8	<3
	Daily Min	0.05106	11	0.0138	<0.49	<3
	Rolling 12 Month Avg					
Limit(s) in Effect	Monthly Avg					
	Monthly Total					
	Daily Max	12	0	69	0	0.98
	Daily Min					
	Rolling 12 Month Avg					
QA/QC Information	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			0.026750	2.5	2.4
	2			0.019663	4.0	2.7
	3			0.019754	<1.9	
	4			0.017168	<1.9	
	5			0.013550	<1.9	
	6					
	7					
	8	30		0.021405	3.0	2.8
	9			0.011495	5.0	2.6
	10			0.012052	3.0	
	11			0.020949	<1.9	
	12			0.020749	<1.9	
	13					
	14					
	15			0.018654	<1.9	2.2
	16	10.0		0.017053	2.0	2.4
	17			0.005177	7.0	
	18			0.019884	2.0	
	19			0.017651	<1.9	
	20					
	21					
	22			0.014823	2.5	3.9
	23			0.012500	3.0	2.9
	24			0.011748	2.5	
	25			0.007166	5.0	
	26			0.007099	6.5	
	27			0.006608	4.5	
	28			0.001305	4.5	
	29			0.016040	4.5	
	30			0.009608	3.5	
	31			0.020320	2.0	

	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		
Summary Values	Monthly Avg	30	10	0.01476684	2.68	2.7375		
	Monthly Total							
	Daily Max	30	10	0.02675	7	3.9		
	Daily Min	30	10	0.001305	<1.9	2.2		
	Rolling 12 Month Avg							
Limit(s) in Effect	Monthly Avg				31	0	26	0
	Monthly Total							
	Daily Max				60	0	52	0
	Daily Min							
	Rolling 12 Month Avg							
QA/QC Information	LOD	30	0.2			1.4		
	LOQ	100	0.5			5.4		
	QC Exceedance	N	N	N	N	N		
	Lab Certification		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
Sample Results	Day 1	0.94	4.4	990	270	<3.0
	2	0.52	<2.2	66	77	
	3					
	4					
	5					
	6					
	7					
	8	0.75	7.0	870	300	
	9	0.91	11	930	470	
	10					
	11					
	12					
	13					
	14					
	15	<0.49	<2.2	50	75	
	16	<0.49	<2.2	52	68	
	17					
	18					
	19					
	20					
	21					
	22	<0.49	2.3	32	89	
	23	<0.49	<2.2	46	160	
	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	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
Summary Values	Monthly Avg	0.39	3.0875	379.5	188.625	0
	Monthly Total					
	Daily Max	0.94	11	990	470	<3
	Daily Min	<0.49	<2.2	32	68	<3
	Rolling 12 Month Avg					
Limit(s) in Effect	Monthly Avg	260	0	1710	0	2380
	Monthly Total					
	Daily Max	690	0	2770	0	3980
	Daily Min					
	Rolling 12 Month Avg					
QA/QC Information	LOD	0.49	2.2	1.5	3.6	3
	LOQ	1	5	5	10	10
	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	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
	Sample Type	24 HR COMP	24 HR COMP	24 HR COMP	CONTINUOUS	CONTINUOUS
	Frequency	2/WEEK	MONTHLY	MONTHLY	DAILY	DAILY
Sample Results	Day 1	24	<1.3	<1.1	7.5	7.9
	2	9.3	<1.3	<1.1	7.3	7.6
	3				7.0	8.2
	4				7.0	7.6
	5				7.2	7.6
	6					
	7					
	8	17	<1.3	<1.1	7.4	7.7
	9	17	<1.3	<1.1	7.2	7.7
	10				7.1	7.7
	11				7.2	8.4
	12				7.9	8.7
	13					
	14					
	15	11	<1.3	<1.1	6.9	7.6
	16	17	<1.3	<1.1	6.7	7.2
	17				6.3	7.5
	18				6.6	7.5
	19				7.2	8.2
	20				6.6	8.0
	21					
	22	18	<1.3	<1.1	6.6	8.0
	23	15	<1.3	<1.1	6.5	8.0
	24				6.6	8.3
	25				6.4	8.4
	26				6.9	8.2
	27				7.0	8.0
	28				7.0	7.1
	29				7.2	8.1
	30				6.8	8.0
	31				7.3	7.9

	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
Summary Values	Monthly Avg	16.0375	0	0	6.976923077	7.888461538
	Monthly Total					
	Daily Max	24	<1.3	<1.1	7.9	8.7
	Daily Min	9.3	<1.3	<1.1	6.3	7.1
	Rolling 12 Month Avg					
Limit(s) in Effect	Monthly Avg	2070	0	430	0	240
	Monthly Total					
	Daily Max	3380	0	690	0	430
	Daily Min					4
	Rolling 12 Month Avg					0
QA/QC Information	LOD	0.49		1.3		1.1
	LOQ	1		2.5		2.5
	QC Exceedance	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	379	376	507	40	490
	Description	pH Total Exceedance Time Minutes	pH Exceedances Greater Than 60 Minutes	Total Toxic Organics	Benzene	Tetrachloroethylene
	Units	minutes	Number	ug/L	ug/L	ug/L
	Sample Type	CALCULATED	CALCULATED	24 HR COMP	24 HR COMP	24 HR COMP
	Frequency	DAILY	DAILY	MONTHLY	MONTHLY	MONTHLY
Sample Results	Day 1					
	2					
	3					
	4					
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					
	16					
	17					
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	24					
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	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	507	40	490
	Description	pH Total Exceedance Time Minutes	pH Exceedances Greater Than 60 Minutes	Total Toxic Organics	Benzene	Tetrachloroethylene
	Units	minutes	Number	ug/L	ug/L	ug/L
Summary Values	Monthly Avg					
	Monthly Total					
	Daily Max					
	Daily Min					
	Rolling 12 Month Avg					
Limit(s) in Effect	Monthly Avg					
	Monthly Total	446	0	0		
	Daily Max				2130	
	Daily Min					
	Rolling 12 Month Avg					
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				
Parameter	500	561	200	508	285
Description	Toluene	1,1,1-Trichloro- ethane	Ethylbenzene	Trichloro- ethylene	Methylene chloride
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Sample Type	24 HR COMP				
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				
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	22				
	23				
	24				
	25				
	26				
	27				
	28				
	29				
	30				
	31				

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

	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
	Sample Type	24 HR COMP	CONTINUOUS	24 HR COMP	24 HR COMP	GRAB
	Frequency	MONTHLY	DAILY	WEEKLY	WEEKLY	MONTHLY
Sample Results	Day 1					
	2					
	3					
	4					
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					
	16					0.27
	17					
	18					
	19					
	20					
	21					
	22					
	23					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					

	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
Summary Values	Monthly Avg					0.27
	Monthly Total					
	Daily Max					0.27
	Daily Min					0.27
	Rolling 12 Month Avg					
Limit(s) in Effect	Monthly Avg					
	Monthly Total					
	Daily Max					
	Daily Min					
	Rolling 12 Month Avg					
QA/QC Information	LOD					0.2
	LOQ					0.5
	QC Exceedance	N	N	N	N	N
	Lab Certification					721026460

Sample Point	003	003	003	003	003
Description	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
Sample Type	CONTINUOUS	24 HR COMP	24 HR COMP	CONTINUOUS	CONTINUOUS
Frequency	DAILY	WEEKLY	WEEKLY	DAILY	DAILY
Sample Results	Day 1				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
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	23				
	24				
	25				
	26				
	27				
	28				
	29				
	30				
	31				

	Sample Point	003	003	003	003	003
	Description	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
Summary Values	Monthly Avg					
	Monthly Total					
	Daily Max					
	Daily Min					
	Rolling 12 Month Avg					
Limit(s) in Effect	Monthly Avg					
	Monthly Total					
	Daily Max			680		11
	Daily Min				4	
	Rolling 12 Month Avg					
QA/QC Information	LOD					
	LOQ					
	QC Exceedance					
	Lab Certification					

Sample Point	003	003
Description	Future remedial action dischg	Future remedial action dischg
Parameter	379	376
Description	pH Total Exceedance Time Minutes	pH Exceedances Greater Than 60 Minutes
Units	minutes	Number
Sample Type	CONTINUOUS	CONTINUOUS
Frequency	DAILY	DAILY
Sample Results	Day 1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
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	28	
	29	
	30	
	31	

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

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

There was no sampling for outfall OF003 because the system has been down all month for Maintenance issues.

Laboratory Quality Control Comments

Submitted by Anne Fleury(afleury16) on 11/19/2018 2:26:56 PM

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: 11/01/2018 - 11/30/2018
 Form Due Date: 12/21/2018
 Permit Number: 0001040

Date Received:	
DOC:	413433
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	Day 1	0.12660		68	7.2	7.8
	2	0.11499		65	7.1	7.8
	3	0.05433		63	7.5	8.1
	4	0.12033		55	7.0	8.1
	5	0.12793		63	7.1	7.6
	6	0.15369		62	6.2	7.3
	7	0.12864		63	7.2	7.5
	8	0.11725		63	7.2	7.4
	9	0.11263		64	7.1	7.4
	10	0.09814		59	7.2	7.5
	11	0.19853		58	7.4	7.4
	12	0.12237		60	7.0	7.5
	13	0.12230		59	7.0	7.4
	14	0.12468		59	7.0	7.3
	15	0.12262		62	7.0	7.3
	16	0.06947		61	6.9	7.4
	17	0.0		57	7.4	7.7
	18	0.00530		58	7.5	7.8
	19	0.11829		58	7.0	7.5
	20	0.11729		62	6.8	7.1
	21	0.10466		57	6.7	7.5
	22	0.09987		55	7.5	7.7
	23	0.03874		57	7.3	7.9
	24	0.01918		57	7.0	7.3
	25	0.04085		57	7.2	7.6
	26	0.12435	3.4	56	6.9	7.2
	27	0.12789		57	6.8	7.3
	28	0.13045		57	7.0	7.4
	29	0.14483		57	7.0	7.2
	30	0.12339		57	6.7	7.2
	31					

	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
Summary Values	Monthly Avg	0.103653	3.4	59.533333333	7.063333333	7.506666667
	Monthly Total					
	Daily Max	0.19853	3.4	68	7.5	8.1
	Daily Min	0	3.4	55	6.2	7.1
	Rolling 12 Month Avg					
Limit(s) in Effect	Monthly Avg					
	Monthly Total					
	Daily Max					11 0
	Daily Min				4 0	
	Rolling 12 Month Avg					
QA/QC Information	LOD		0.2			
	LOQ		0.5			
	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 CaCO ₃	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					
	2					
	3					
	4					
	5		0.30	220	46	
	6					
	7					
	8		0.27	180	38	
	9					
	10					
	11					
	12					
	13					
	14					
	15		0.14	250	33	
	16					
	17					
	18					
	19					
	20					
	21					
	22					
	23					
	24					
	25					
	26					
	27		0.20	200	33	
	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 CaCO ₃	Arsenic, Total Recoverable
	Units	minutes	Number	mg/L	mg/L	ug/L
Summary Values	Monthly Avg			0.2275	212.5	37.5
	Monthly Total					
	Daily Max			0.3	250	46
	Daily Min			0.14	180	33
	Rolling 12 Month Avg			0.2		
Limit(s) in Effect	Monthly Avg					
	Monthly Total	446	0			
	Daily Max		0	0		680 0
	Daily Min					
	Rolling 12 Month Avg			1 0		
QA/QC Information	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
Sample Results	Day 1				
	2				
	3				
	4				
	5	0.04922	9.5	0.010165	0.66
	6				
	7				
	8	0.03724	10	0.0098	0.57
	9				
	10				
	11				
	12				
	13				
	14				
	15	0.03366	12	0.01224	<0.49
	16				
	17				
	18				
	19				
	20				
	21				
	22				
	23				
	24				
	25				
	26				
	27	0.03531	13	0.01391	<0.49
	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
Summary Values	Monthly Avg	0.0388575	11.125	0.01152875	0.3075	0
	Monthly Total					
	Daily Max	0.04922	13	0.01391	0.66	<3
	Daily Min	0.03366	9.5	0.0098	<0.49	<3
	Rolling 12 Month Avg					
Limit(s) in Effect	Monthly Avg					
	Monthly Total					
	Daily Max	12	0	69	0	0.98
	Daily Min					
	Rolling 12 Month Avg					
QA/QC Information	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			0.016909	<1.9	1.5
	2			0.014899	3.0	
	3			0.004312	12.0	
	4					
	5			0.018377	3.0	4.4
	6			0.020768	3.5	
	7			0.021579	2.0	
	8	20		0.018231	3.0	
	9			0.010893	2.5	3.0
	10			0.003754	4.0	
	11					
	12			0.024190	2.0	3.2
	13			0.021344	4.5	
	14			0.026768	2.0	
	15			0.021009	2.5	2.8
	16			0.018385	3.5	2.8
	17					
	18					
	19			0.018687	4.0	
	20			0.017955	7.5	
	21			0.020703	5.0	
	22					
	23					
	24					
	25					
	26	<0.20		0.018883	9.0	3.1
	27			0.022171	4.5	2.4
	28			0.020250	2.5	
	29			0.024989	2.5	
	30			0.024306	3.0	
	31					

	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		
Summary Values	Monthly Avg	20	0	0.018607364	3.88636363636	2.9		
	Monthly Total							
	Daily Max	20	<0.2	0.026768	12	4.4		
	Daily Min	20	<0.2	0.003754	<1.9	1.5		
	Rolling 12 Month Avg							
Limit(s) in Effect	Monthly Avg				31	0	26	0
	Monthly Total							
	Daily Max				60	0	52	0
	Daily Min							
	Rolling 12 Month Avg							
QA/QC Information	LOD	30	0.2				1.3	
	LOQ	100	0.5				5.1	
	QC Exceedance	N	N	N	N		N	
	Lab Certification		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
Sample Results	Day 1	<0.49	3.9	660	240	
	2	<0.49	4.2	780	240	<3.0
	3					
	4					
	5					
	6					
	7					
	8	<0.49	<2.2	210	86	
	9	0.59	<2.2	330	120	
	10					
	11					
	12					
	13					
	14					
	15	<0.49	<2.2	10	49	
	16	<0.49	<2.2	13	63	
	17					
	18					
	19					
	20					
	21					
	22					
	23					
	24					
	25					
	26	<0.49	5.3	960	270	
	27	<0.49	<2.2	410	100	
	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	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
Summary Values	Monthly Avg	0.07375	1.675	421.625	146	0
	Monthly Total					
	Daily Max	0.59	5.3	960	270	<3
	Daily Min	<0.49	<2.2	10	49	<3
	Rolling 12 Month Avg					
Limit(s) in Effect	Monthly Avg	260	0	1710	0	2380
	Monthly Total					
	Daily Max	690	0	2770	0	3980
	Daily Min					
	Rolling 12 Month Avg					
QA/QC Information	LOD	0.49	2.2	1.5	3.6	3
	LOQ	1	5	5	10	10
	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	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
	Sample Type	24 HR COMP	24 HR COMP	24 HR COMP	CONTINUOUS	CONTINUOUS
	Frequency	2/WEEK	MONTHLY	MONTHLY	DAILY	DAILY
Sample Results	Day 1	7.6	<1.3	<1.1	6.9	7.9
	2	5.7	<1.3	<1.1	7.0	7.7
	3				7.2	7.9
	4					
	5				7.7	8.2
	6				7.6	8.3
	7				7.8	8.2
	8	4.1	<1.3	<1.1	7.7	8.4
	9	4.6	<1.3	<1.1	7.6	8.3
	10				7.2	8.0
	11					
	12				7.1	8.3
	13				6.9	7.7
	14				6.9	7.8
	15	6.2	<1.3	<1.1	6.8	7.5
	16	6.9	<1.3	<1.1	7.1	7.4
	17					
	18					
	19				7.1	8.0
	20				7.1	7.9
	21				7.0	8.0
	22					
	23					
	24					
	25					
	26	17	<1.3	<1.1	7.5	7.9
	27	14	<1.3	<1.1	6.8	8.0
	28				7.1	7.7
	29				7.0	7.5
	30				6.9	7.7
	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	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
Summary Values	Monthly Avg	8.2625	0	0	7.181818182	7.922727273
	Monthly Total					
	Daily Max	17	<1.3	<1.1	7.8	8.4
	Daily Min	4.1	<1.3	<1.1	6.8	7.4
	Rolling 12 Month Avg					
Limit(s) in Effect	Monthly Avg	2070	0	430	0	240
	Monthly Total					
	Daily Max	3380	0	690	0	430
	Daily Min					4
	Rolling 12 Month Avg					0
QA/QC Information	LOD	1.7		1.3		1.1
	LOQ	5		2.5		2.5
	QC Exceedance	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	379	376	507	40	490
	Description	pH Total Exceedance Time Minutes	pH Exceedances Greater Than 60 Minutes	Total Toxic Organics	Benzene	Tetrachloroethylene
	Units	minutes	Number	ug/L	ug/L	ug/L
	Sample Type	CALCULATED	CALCULATED	24 HR COMP	24 HR COMP	24 HR COMP
	Frequency	DAILY	DAILY	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	101	101	101	101	101
	Description	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent	Metal Finishing Effluent
	Parameter	379	376	507	40	490
	Description	pH Total Exceedance Time Minutes	pH Exceedances Greater Than 60 Minutes	Total Toxic Organics	Benzene	Tetrachloroethylene
	Units	minutes	Number	ug/L	ug/L	ug/L
Summary Values	Monthly Avg					
	Monthly Total					
	Daily Max					
	Daily Min					
	Rolling 12 Month Avg					
Limit(s) in Effect	Monthly Avg					
	Monthly Total	446	0	0		
	Daily Max				2130	
	Daily Min					
	Rolling 12 Month Avg					
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				
Parameter	500	561	200	508	285
Description	Toluene	1,1,1-Trichloro- ethane	Ethylbenzene	Trichloro- ethylene	Methylene chloride
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Sample Type	24 HR COMP				
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	101	101	101	101	101
	Description	Metal Finishing Effluent				
	Parameter	500	561	200	508	285
	Description	Toluene	1,1,1-Trichloro- ethane	Ethylbenzene	Trichloro- ethylene	Methylene chloride
	Units	ug/L	ug/L	ug/L	ug/L	ug/L
Summary Values	Monthly Avg					
	Monthly Total					
	Daily Max					
	Daily Min					
	Rolling 12 Month Avg					
Limit(s) in Effect	Monthly Avg					
	Monthly Total					
	Daily Max					
	Daily Min					
	Rolling 12 Month Avg					
QA/QC Information	LOD					
	LOQ					
	QC Exceedance					
	Lab Certification					

	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
	Sample Type	24 HR COMP	CONTINUOUS	24 HR COMP	24 HR COMP	GRAB
	Frequency	MONTHLY	DAILY	WEEKLY	WEEKLY	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					4.5
	27					
	28					
	29					
	30					
	31					

	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
Summary Values	Monthly Avg					4.5
	Monthly Total					
	Daily Max					4.5
	Daily Min					4.5
	Rolling 12 Month Avg					
Limit(s) in Effect	Monthly Avg					
	Monthly Total					
	Daily Max					
	Daily Min					
	Rolling 12 Month Avg					
QA/QC Information	LOD					0.2
	LOQ					0.5
	QC Exceedance	N	N	N	N	N
	Lab Certification					721026460

Sample Point	003	003	003	003	003
Description	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
Sample Type	CONTINUOUS	24 HR COMP	24 HR COMP	CONTINUOUS	CONTINUOUS
Frequency	DAILY	WEEKLY	WEEKLY	DAILY	DAILY
Sample Results	Day 1				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
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	19				
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	21				
	22				
	23				
	24				
	25				
	26				
	27				
	28				
	29				
	30				
	31				

	Sample Point	003	003	003	003	003
	Description	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
Summary Values	Monthly Avg					
	Monthly Total					
	Daily Max					
	Daily Min					
	Rolling 12 Month Avg					
Limit(s) in Effect	Monthly Avg					
	Monthly Total					
	Daily Max			680		11
	Daily Min				4	
	Rolling 12 Month Avg					
QA/QC Information	LOD					
	LOQ					
	QC Exceedance					
	Lab Certification					

Sample Point	003	003
Description	Future remedial action dischg	Future remedial action dischg
Parameter	379	376
Description	pH Total Exceedance Time Minutes	pH Exceedances Greater Than 60 Minutes
Units	minutes	Number
Sample Type	CONTINUOUS	CONTINUOUS
Frequency	DAILY	DAILY
Sample Results	Day 1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
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	27	
	28	
	29	
	30	
	31	

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

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

There was no sampling at outfall OF003 because the system has been down for the whole month of November for maintenance issues.

Laboratory Quality Control Comments

Submitted by Anne Fleury(afleury16) on 12/12/2018 2:09:56 PM