

One Stanton Street Marinette, WI 54143-2542

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Tele: 715-735-7411

April 17, 2017

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

Subject: Quarterly Progress Report (January through March 2017)

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 January 1, 2016 through March 31, 2016, 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 first quarter of 2017. A summary of the operational data is included as Attachment 1. The Discharge Monitoring Reports (DMRs) are included in Attachment 2.

### **Additional Activities**

Tyco prepared and submitted the "Temporary Dewatering Well Dewatering Report" to the WDNR on January 12, 2017. The annual report is required as part of the pump down program and on-going groundwater extraction at the site and provides information on monthly groundwater withdrawals at the site.

Tyco prepared and submitted the "Response to Comments on Report on Decontamination Measures Completed in Building 59" on January 27, 2017. The response document addresses comments received from the WDNR on January 14, 2016 related to the decontamination activities reported to the WDNR on November 17, 2015.

Tyco submitted "Responses to WDNR Review of Tyco Contract Documents – Subsurface Injection of Tracer Dye Scope of Work, dated March 30, 2016 and Technical Memorandum, Response to WDNR Questions Regarding Proposed Dye Testing, dated April 15, 2016, CH2M-Hill EPA RCRA Administrative Order Docket No. RCRA-05-2009-0007 Tyco Stanton Street Facility; EPA ID No. WID 006 125 215" on January 31, 2017. No response to the information provided in the January 31, 2017 document has been provided by the agencies to date.

Tyco completed the quarterly download of data from the transducers installed in prescribed monitoring wells on January 12, 2017. Manual groundwater elevation data was obtained at each transducer location for calibration of the data at the time of the download. Manual groundwater elevation data were also collected from the former 8th Street Slip and former Salt Vault areas in accordance with the pump down program requirements.

No additional activities were completed during the first quarter

#### **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 June 2016 through August 2016 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 8<sup>th</sup> Street Slip and Salt Vault as part of the interim shut down (winter period) for the pump down program. Groundwater elevation data were collected on January 12, 2017, February 1, 2017, and March 2, 2017 and were provided to the agencies under separate email submittals following each data collection event.

Groundwater elevation data recorded by installed transducers was downloaded on January 12, 2017 and is under evaluation. The site-wide data will be provided in the annual report.

### **Problems Encountered**

Due to the presence of snow cover and winter weather conditions, data from several monitoring wells planned for manual groundwater elevation monitoring and transducer data download was unable to be obtained. In addition, data collection and download problems appear to exist at three transducer locations. These apparent issues will be addressed during Spring sampling and data collection activities.

No additional problems were encountered during this reporting period.

## **Schedule of Upcoming Activities**

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

Submit the quarterly progress report.

- Submit the 2016 barrier wall monitoring plan update annual report.
- Complete the 2<sup>nd</sup> quarter semi-annual barrier wall, cover area, and monitoring well inspections.
- Complete the spring barrier wall monitoring sampling event.
- Address inspection findings for the vertical barrier wall, cover areas, and monitoring wells.
- Implement the planned storm water management and storm sewer improvements.
- Recommence pump down operations in the former Salt Vault and former 8th Street Slip areas.
- Install and survey planned monitoring well extensions which will convert certain flush mounted wells to stick-up wells.
- Begin the dye test project along barrier wall in the main plant area (assuming all storm water/ sewer modifications/ repairs are completed and outstanding comments/concerns expresses by the agencies and Tyco are adequately addressed).
- Complete 2<sup>nd</sup> quarter tree plot inspections.

### **List of Key Correspondence and Document Submittals**

Table 1

Documents Submitted

Quarterly Progress Report (January to March 2017), Tyco Fire Products LP Facility, Marinette, Wisconsin

_ , , , , , , , , , , , , , , , , , , ,	11 3	
Description of Submittal	Submitted To	Date Submitted
Temporary Dewatering Well Water Withdrawal Report	WDNR	January 12, 2017
Quarterly Progress Report	USEPA	January 17, 2017
Building 59 Closure Response to Comments	WDNR	January 27, 2017
Response to Dye Testing Comments	USEPA	January 31, 2017
PDP Water Level Measurements	USEPA	February 13, 2017
PDP Water Level Measurements	USEPA	March 6, 2017

**Table 2**Correspondence from Agency
Quarterly Progress Report (January through March 2017) Tyco Fire Products LP Facility, Marinette,
Wisconsin

Description of Correspondence	Received From	Date Received
Mis taul alas line and to accept and		

No technical documents received this reporting period

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

Respectfully Yours,

Tyco Fire Products LP

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**Environmental Field Projects** 

### **Attachments**

1 GWCTS Operation Summary

2 DMRs for the GWCTS

cc: Kristin DuFresne, WDNR

Jim Killian, WDNR

Joe Janeczek, Johnson Controls Rich Mator, Johnson Controls

Scott Stacy, Tyco Fire Products LP

Jeff Danko, Tyco

Mariel Carter, Stephenson Public Library

Document Control No.: 20170417 US10.11014

# Attachment 1 GWCTS Operation Summary

# **Groundwater Collection and Treatment System Operation**

SUBJECT: Groundwater Collection and Treatment System Operation for Tyco

Fire Products LP, Marinette, Wisconsin

DATE: April 12, 2017

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

- The GWCTS operated for 18 days in January, 22 days in February, and 17 days in March, for a total of 57 days.
- Approximately 169,500 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 4.64 inches of rain and 17.7 inches of snow. (http://www.ncdc.noaa.gov/cdo-web/datasets/GHCND/stations/GHCND:USC00475091/detail).
- An estimated total of 1,006,454 gallons was discharged to the Menominee River as effluent under WPDES permit.
- An estimated total of 864,751 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

		J
	Gallons Run Q1 2017	Gallons Run Q1 2016
Extraction Well	(1/01/2017-3/31/2017)	(1/01/2016-3/31/2016)
EW-1	72,329	211,580
EW-2	1,256	18,910
EW-3	10,994	5,655
EW-4	15,302	12,960
EW-5	253,088	154,263
EW-6	389,537	459,429
EW-7	122,245	187,800
Total	864,751	1,050,597

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# Attachment 2 DMRs



- 396957

**Facility Name** 

TYCO FIRE PROTECTION PRODUCTS LP

Form Type

Wastewater Discharge Monitoring Long Report

DOC ID

370640

Reporting Period

12/1/2016 to 12/31/2016

Enter Certification Code

iaspermisp

E-Mail was sent to

afleury@tycoint.com

Certify

Return To List

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 1/12/2017 for the period 12/1/2016 to 12/31/2016 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



- 396957 **Facility Name** TYCO FIRE PROTECTION PRODUCTS LP Form Type Wastewater Discharge Monitoring Long Report DOC ID 370640 Reporting Period 12/1/2016 to 12/31/2016

iaspermisp

E-Mail was sent to

afleury@tycoint.com

**Enter Certification Code** 

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Certification complete.

The Official Internet site for the Wisconsin Department of Natural Resources

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Questions or comments about this e-form : Contact Us

### **Wastewater Discharge Monitoring Long Report**

TYCO FIRE PROTECTION PRODUCTS LP Facility Name:

Contact Address: One Stanton Street

Marinette, WI 54143

Facility Contact: Judith Rost, Sr Lab Tech

Phone Number: (715) 735-7411

Reporting Period: 12/01/2016 - 12/31/2016

Form Due Date: 01/21/2017 Permit Number: 0001040

### For DNR Use Only

Date Received:

DOC:

370640

FIN:

7245

FID:

438039470

Region:

Northeast Region

Permit Drafter: Trevor J Moen

Reviewer:

Bruce S. Oman

Office:

Peshtigo

	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	0.056510		57	7.6	7.9
	2	0.033660		56	7.7	7.9
	3	0.002500		55	7.7	7.9
	4	0.027890		54	7.8	8.1
	5	0.098120		55	7.5	8.1
	6	0.072350		56	7.4	7.9
	7	0.077160		51	7.4	7.6
	8	0.082320		46	7.3	7.8
	9	0.074950		46	7.2	7.6
	10	0.048430		41	7.3	7.5
	11	0.009850		49	7.4	7.8
	12	0.081630		55	7.2	8.1
	13	0.072730		55	7.0	7.4
	14	0.068420		53	7.0	7.2
	15	0.073710		52	7.0	7.2
	16	0.065380		55	7.1	7.3
	17	0.007460		50	7.3	7.8
	18	0.024030		45	7.8	8.1
	19	0.067110	5.9	46	7.2	7.9
	20	0.072800		52	6.7	7.4
	21	0.090130	· · · · · · · · · · · · · · · · · · ·	57	6.7	7.2
	22	0.072840		59	6.8	8.0
	23	0.029360		61	7.7	8.4
	24	0.031070		57	7.9	8.2
	25	0.135730		52	7.5	8.4
	26	0.062540		52	7.3	8.0
	27	0.074350		49	8.0	8.0
	28	0.064030		48	6.8	8.0
	29	0.058320		50	6.8	7.0
	30	0.017870		50	7.8	7.9
	31	0.003410		50	6.9	7.5

Facility Name: TYCO FIRE PROTECTION PRODUCTS LP Reporting Period: 12/01/2016 to 12/31/2016

	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	รน
Summary Values	Monthly Avg	0.056666452	5.9	52.064516129	7.316129032	7.777419355
	Monthly Total					
	Daily Max	0.13573	5.9	61	8	8.4
	Daily Min	0.0025	5.9	41	6.7	7
	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 CaCO3	Arsenic, Total Recoverable
ļ.	Units	minutes	Number	mg/L	mg/L	ug/L
	Sample Type	CONTINUOUS	CONTINUOUS	24 HR COMP	24 HR COMP	24 HR COMP
<u> </u>	Frequency	DAILY	DAILY	WEEKLY	MONTHLY	MONTHLY
Sample Results	Day 1			0.059	230	63
	2					
	3					
	4	-1/-				
	5					
	6					
ľ	7	*				
	8	100		0.092	260	61
Ì	9					
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İ	11					
	12					
ľ	13					
Ī	14					
	15			0.070	250	33
	16	····	, W			***
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	18			Ϊ,		***
	19					*****
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ŀ	21					
ļ	22			0.129	240	55
	23					
	24					
	25					
	26				***	
-	27					
	28			***************************************		
ł	29					
ŀ	30					
	31		<u></u>			

	Sample Point	001		001		001		001	001	
	Description	PRIOR TO MENOMINEE R			PRIOR TO MENOMINEE RIVER		IVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE R	
	Parameter	379		376		388		231	35	
	Description	pH Total Exceed Time Minute		pH Exceedances Greater Than 60 Minutes		Phosphorus, 1	otal	Hardness, Total as CaCO3	Arsenic, Tota Recoverable	
	Units	minutes		Number		mg/L		mg/L	ug/L	
Summary Values	Monthly Avg					0.0875		245	53	
	Monthly Total									
	Daily Max					0.129		260	63	
	Daily Min				,	0.059		230	33	
	Rolling 12 Month Avg					0.3				
Limit(s) in Effect	Monthly Avg						ŧ			
	Monthly Total	446	0							
	Daily Max			0	0				680	0
	Daily Min									
	Rolling 12 Month Avg					1	0			
QA/QC Information	LOD				•	0.008			1	
	LOQ	Just				0.027			2	
	QC Exceedance	N		N		N	-1	N	N	
	Lab Certification					43803947	0	721026460	72102646	0

	Sample Point	001	001	001	001	001
	Description	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO	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	0.02961	<1.3	0.0012	<0.14	
	2					
	3					
	4					
	5					
	6					
	7					
	8	0.04209	1.4	0.000966	0.20	
	9					
	10					
	11					
	12					
	13					
	14					
	15	0.02013	3.5	0.002135	0.26	<5.0
	16					
	17					****
	18			washirita tikalir v		LIME
	19					
	20					
	21					
	22	0.03355	15	0.00854	<0.14	
	23					
	24					
	25					
	26					
	27					
	28			,		
	29					
	30					
	31					

	Sample Point	001		001		001		001	001
	Description	PRIOR TO MENOMINEE RI	VER	PRIOR TO MENOMINEE RI	PRIOR TO MENOMINEE RIVER		) RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER
	Dovometer	35		147		147		87	152
	Parameter Description	Arsenic, Tota	 il	Copper, Total		Copper, Tot	al	Cadmium, Total	Cyanide, Amenable
		Recoverable		Recoverable		Recoverabl	e	Recoverable	
	Units	lbs/day		ug/L		lbs/day	<del></del>	ug/L	ug/L
Summary Values	Monthly Avg	0.031345		4.975		0.0032102	25	0.115	0
	Monthly Total								
	Daily Max	0.04209	0.04209			0.00854	•	0.26	<5
	Daily Min	0.02013		<1.3		0.000966	3	<0.14	<5
	Rolling 12 Month Avg								
Limit(s) in Effect	Monthly Avg								
	Monthly Total								
	Daily Max	12	0	69	0	0.98	0		
	Daily Min								
	Rolling 12 Month Avg								
QA/QC Information	LOD			1.3			_~	0.14	5
	LOQ	444		4				0.45	15
	QC Exceedance	N		N		N		N	N
	Lab Certification			721026460	)			721026460	721026460

	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			0.018414	5.5	<0.99
	2			0.018464	9.4	<0.99
	3			0.001221	8.3	
	4					
	5	,,		0.017193	10.2	
	6			0.017300	16.3	
	7			0.015187	9.4	
	8	10		0.015856	3.0	<0.99
	9			0.015413	3.6	<0.99
	10			0.013752	3.5	
	11					
	12			0.021858	3.2	
	13			0.010347	5.8	
	14			0.016714	5.0	
	15			0.025511	6.8	<0.99
	16		***	0.030189	3.3	<0.99
	17		1.00		***	
	18		· · · · · · · · · · · · · · · · · · ·			
	19		0.73	0.024265	7.0	
	20		1,481	0.028933	5.3	
	21			0.039783	4.0	
	22			0.029223	2.2	<0.99
	23					
	24					
	25					
	26					
	27	,,,,,,,,		0.047193	5.3	<0.99
	28			0.036257	5.0	
	29			0.037280	4.3	
	30			0.026598	3.3	
	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
					457	342
	Parameter	112	280	211		
	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	10	0.73	0.023043227	5.895454545	0
	Monthly Total					
	Daily Max	10	0.73	0.047193	16.3	<0.99
	Daily Min	10	0.73	0.001221	2.2	<0.99
	Rolling 12 Month Avg		To a contract of the contract			
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			0.99
	LOQ	100	0.5			3.1
	QC Exceedance	N	N	N	N	N
	Lab Certification		721026460		438039470	721026460

	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	<0.14	<0.67	16	31	
	2	<0.14	<0.67	12	28	
	3					
	4					
	5					
	6					
	7					
	8	<0.14	<0.67	3.4	35	
	9	<0.14	<0.67	5.0	43	
	10					
	11					
	12					
	13					
	14			***************************************		
	15	<0.14	<0.67	4.4	20	<5.0
	16	0.28	<0.67	6.2	22	
	17			<u>.</u>		
	18					
	19					
	20					
	21					
	22	0.16	<0.67	9.6	9.6	
,	23					
	24					
	25					
	26					
	27	0.15	<0.67	16	23	
	28					
	29					
	30					
-	31				l	1

	Sample Point	101		101	·	101		101		101	
	Description	Metal Finishi Effluent	ng	Metal Finishi Effluent	ng	Metal Finish Effluent	ing	Metal Finish Effluent	ng	Metal Finishi Effluent	ng
	Parameter	87		133		315		553	····	155	
	Description	Cadmium, To Recoverabl		Chromium, To Recoverable		Nickel, Tota Recoverab		Zinc, Tota Recoverab		Cyanide, To	tal
	Units	ug/L		ug/L		ug/L		ug/L		ug/L	
Summary Values	Monthly Avg	0.07375		0		9.075		26.45		0	
	Monthly Total										
	Daily Max	0.28		<0.67		16		43		<5	
	Daily Min	<0.14		<0.67		3.4		9.6		<5	•
	Rolling 12 Month Avg										
Limit(s) in Effect	Monthly Avg	260	0	1710	0	2380	0	1480	0	650	0
	Monthly Total	- 10									
	Daily Max	690	0	2770	0	3980	0	2610	0	1200	0
	Daily Min										
	Rolling 12 Month Avg			I I A R							
QA/QC Information	LOD	0.14	•	0.67		1.1		5		5	
	LOQ	0.45		2		3.4		10		15	
	QC Exceedance	N		N		N		N		N	
	Lab Certification	72102646	30	72102646	0	72102646	30	72102646	30	72102646	80

	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	5.2	<1.5	<0.37	6.8	7.4
	2	3.6	<1.5	<0.37	6.7	7.6
	3				6.7	7.3
	4					
	5	YU.			6.9	7.8
	6				6.5	7.3
	7				6.5	7.2
	8	9.8	<1.5	<0.37	6.2	6.6
	9	9.8	<1.5	<0.37	6.4	6.7
	10				6.3	7.0
	11					
	12				7.0	8.0
	13	<u> </u>			6.5	7.2
	14				6.4	7.1
	15	4.8	<1.5	<0.37	6.1	7.5
	16	<1.3	<1.5	<0.37	6.7	7.2
	17					
	18					
ł	19		~		7.3	7.9
ł	20				7.1	7.5
	21				6.6	7.5
	22	4.6	<1.5	<0.37	6.6	7.2
	23					
	24					
	25					
	26					-
	27	9.6	2.5	< 0.37	7.3	8.1
	28				6.8	7.7
	29				6.9	7.4
	30		94		6.9	7.2
	31			- 10.0		

	Sample Point	101		101		101		101		101	
	Description	Metal Finishi Effluent	ng	Metal Finishir Effluent	ng	Metal Finish Effluent	ing	Metal Finish Effluent		Metal Finish Effluent	ing
	Parameter	147		264	264		430			373	
	Description	Copper, Tot Recoverabl	al e	Lead, Total Recoverable		Silver, Tota Recoverab		pH (Minimu	ım)	pH (Maximu	m)
	Units	ug/L		ug/L		ug/L		su		su	
Summary Values	Monthly Avg	5.925		0.3125		0		6.6909090	091	7.3818181	82
	Monthly Total										
	Daily Max	9.8		2.5		<0.37		7.3		8.1	
	Daily Min	<1.3		<1.5		<0.37		6.1		6.6	
	Rolling 12 Month Avg	and the state of t		****							
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	1.3	•	1.5		0.37					
	LOQ	4		4.9		1.2					
	QC Exceedance	N		N		N		N		N	
	Lab Certification	72102646	0	72102646	0	72102646	30				

	Sample Point	101	101	101	101	101
	Description	Metal Finishing	Metal Finishing	Metal Finishing	Metal Finishing	Metal Finishing
	2000	Effluent	Effluent	Effluent	Effluent	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		<del></del>			
	9					
	10					
	11					
	12					
	13					
	14					
	15					
	16					
	17					
	18					
	19					
	20					
	21					
	22					
	23					
	24					
	25					
	26					
	27				aga an distribution	
	28					
	29				ar any confugation of the little	
	30					
	31					

Wastewater Discharge Monitoring Form
Facility Name: TYCO FIRE PROTECTION PRODUCTS LP
Reporting Period: 12/01/2016 to 12/31/2016

	Sample Point	101		101		101		101		101	
	Description	Metal Finishi Effluent	ng	Metal Finishi Effluent	ing	Metal Finishi Effluent	ng	Metal Finishin Effluent	g	Metal Finishir Effluent	ng
	Parameter	379		376		507		40		490	
	Description	pH Total Excee Time Minute		pH Exceedan Greater Than Minutes	ces 60	Total Toxic Org	anics	Benzene		Tetrachloroethy	lene
	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	//		1000							
QA/QC Information	LOD		•								<b></b>
	LOQ					<u></u> -					
	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				
Sample Results	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
ample Results	Day 1					4
	3					
	4					
	5					
	6					
	7					
	8					
	9					
	10 11					
	12					
	13					
	14					
	15					
	16					
	17					
	18 19	- JANAN				
	20					
	21					
	22					
	23					
	24					
	25					
	26					
	27 28		-			
	29					200
	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	N	N	N	N	N
	Lab Certification					

	Sample Point	101	106	106	106	107
	Description	Metal Finishing Effluent			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				A1,1*41**	
	6					
	7					
	8					
	9				- 4 10-14	
	10					
	11					
	12					
	13					
	14			,,,		
	15					
	16					m-75-P H
	17					
	18					
	19					<0.20
	20			144414		
	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
	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

Facility Name: TYCO FIRE PROTECTION PRODUCTS LP Per Reporting Period: 12/01/2016 to 12/31/2016 DC

<del>[</del>	Sample Point	003	003	003	003	003
	Description	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
	Sample Type	CONTINUOUS	24 HR COMP	24 HR COMP	CONTINUOUS	CONTINUOUS
	Frequency	DAILY	WEEKLY	WEEKLY	DAILY	DAILY
Sample Results	Day 1	0.015371	1.9	110	6.5	7.6
	2	0.006171			6.0	6.7
	3				6.0	6.6
	4				-11	
	5	0.001642	**		6.0	8.0
	6	0.012334			6.2	6.6
	7	0.003916			6.5	9.0
	8	0.017174	1.3	43	7.7	8.9
	9	0.029912			6.0	8.9
	10	0.020673			6.8	7.7
	11					
	12	0.010150			6.3	7.2
	13	0.030647			6.5	8.9
	14	0.010801			6.0	7.7
	15	0.006771	1.1	57	6.0	8.9
	16	0.025240			6.4	8.9
	17	4999		***-		- Aviiv
	18				· · · · · · · · · · · · · · · · · · ·	
	19	0.014487	HAP-		6.1	8.4
	20	0.007543			6.3	7.7
	21	0.017344			6.1	8.6
	22					
	23					
	24					
	25					
	26					
	27		-,,			
	28	0.004853			6.1	8.9
	29	0.002935			6.1	8.4
	30			,, -,,,,-		,
	31	,				
L	V 1					

Reporting Period: 12/01/2016 to 12/31/2016

	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	0.013220222	1.433333333	70	6.294736842	8.084210526
	Monthly Total					
	Daily Max	0.030647	1.9	110	7.7	9
	Daily Min	0.001642	1.1	43	6	6.6
	Rolling 12 Month Avg					
Limit(s) in Effect	Monthly Avg					
	Monthly Total					
	Daily Max			680 0		11 0
	Daily Min				4 0	
	Rolling 12 Month Avg					
QA/QC Information	LOD			1		
	LOQ			2		
	QC Exceedance	N	N	N	N	N
	Lab Certification		438039470	721026460		

	Sample Point		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
	11-14-	minutos	Number
	Units Sample Type	minutes CONTINUOUS	CONTINUOUS
	Frequency	DAILY	DAILY
Sample Results	Day 1		
	2		
	3		
	4		
	5		
	6		
	7		
	8		
	9		
	10		
	11		
	12		
	13		
	14		
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	28		
	29		
	30		
	31		

Permit: 0001040

DOC: 370640

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

Permit: 0001040

DOC: 370640

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 compiliance 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
<ol> <li>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.</li> </ol>
General Remarks
CN- is a grab sample per WDNR CI is done once a month For the last 7 day week of sampling on the outfall OF003 we missed because the system was down.
Laboratory Quality Control Comments

Submitted by Anne Fleury(afleury16) on 1/12/2017 2:18:42 PM



- 400762
Facility Name
TYCO FIRE PROTECTION PRODUCTS LP
Form Type
Wastewater Discharge Monitoring Long Report
DOC ID
374697
Reporting Period
1/1/2017 to 1/31/2017
Enter Certification Code

unroauhain

E-Mail was sent to afleury@tycoint.com

Return To List

Certification complete.

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



- 400762

Facility Name

TYCO FIRE PROTECTION PRODUCTS LP

Form Type

Wastewater Discharge Monitoring Long Report

DOC ID

374697

Reporting Period

1/1/2017 to 1/31/2017

Enter Certification Code

lunroauhain

E-Mail was sent to

afleury@tycoint.com

Certify

Return To List

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 2/16/2017 for the period 1/1/2017 to 1/31/2017 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

### **Wastewater Discharge Monitoring Long Report**

Facility Name: TYCO FIRE PROTECTION PRODUCTS LP

Contact Address: One Stanton Street

Marinette, WI 54143

Facility Contact: Judith Rost, Sr Lab Tech

Phone Number: (715) 735-7411

Reporting Period: 01/01/2017 - 01/31/2017

Form Due Date: 02/21/2017 Permit Number: 0001040

### For DNR Use Only

Date Received:

DOC:

374697

FIN:

7245

FID:

438039470

Region:

Northeast Region

Reviewer:

Permit Drafter: Trevor J Moen

Bruce S. Oman

Office:

Peshtigo

	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	0.00000		50	7.1	7.6
	2	0.01152		51	5.8	7.2
	3	0.02172		50	4.7	7.2
	4	0.02653		42	6.9	7.2
	5	0.00335		42	7.1	7.2
	6	0.03178		41	7.2	7.5
	7	0.01328	1.07	40	7.4	7.5
	8	0.00718		42	7.4	7.6
	9	0.02788		44	7.5	7.6
	10	0.05146		46	7.2	7.7
	11	0.01686		44	7.1	7.3
_	12	0.03504		49	7.3	7.4
	13	0.01284		55	7.4	7.8
	14	0.00119		49	7.5	7.7
	15	0.00000		48	7.7	7.9
!	16	0.03103		49	7.7	8.1
	17	0.06151		51	6.9	7.8
	18	0.03037		53	6.8	7.0
	19	0.00927		52	7.0	7.2
	20	0.02462	~	52	7.1	7.4
	21	0.00936		51	7.1	7.2
	22	0.00172		54	7.0	7.3
	23	0.04364	7.3	54	7.0	7.3
	24	0.05544		54	7.0	7.2
	25	0.07122		53	6.9	7.0
	26	0.05787		51	6.9	7.1
	27	0.02082		49	7.1	7.2
	28	0.00566		46	7.0	7.2
	29	0.00217		47	7.0	7.2
	30	0.04597		46	7.1	7.2
l	31	0.05812	,,,,,,	49	7.2	7.4

	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	0.025465161	7.3	48.516129032	7.035483871	7.393548387
	Monthly Total					
	Daily Max	0.07122	7.3	55	7.7	8.1
	Daily Min	0	7.3	40	4.7	7
	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 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					
	2	10				
	3	10		0.328	220	88
	4					
	5					
	6					
	7					
	8				, and the second	
	9			0.130	230	52
	10					
	11					
	12					
	13					
	14					
	15				***	
	16		-41			
	17			0.247	260	65
	18		**			
	19			**		
	20		<del></del>			~
	21					
	22					
	23			0.392	240	110
	24					
	25					
	26					
	27					
	28					
	29		,,			
	30					
	31				<u> </u>	<u></u>

	Sample Point	001		001	**	001		001	001	
	Description	PRIOR TO MENOMINEE RI	VER	PRIOR TO MENOMINEE RI	VER	PRIOR TO MENOMINEE RI	VER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE R	.IVER
	Parameter	379		376		388		231	35	
	Description	pH Total Exceed	ance	pH Exceedance	es	Phosphorus, Te	otal	Hardness, Total as	Arsenic, Tot	al
	Description	Time Minutes		Greater Than Minutes	60	, , , , , , , , , , , , , , , , , , , ,		CaCO3	Recoverable	e
	Units	minutes		Number		mg/L		mg/L	ug/L	
Summary Values	Monthly Avg	10				0.27425		237.5	78.75	
	Monthly Total	10								
	Daily Max	10				0.392		260	110	
	Daily Min	10				0.13		220	52	
	Rolling 12 Month Avg					0.3				
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		•		•	0.008			1	-
	LOQ					0.027			2	
	QC Exceedance	N		N		N		N	N	
	Lab Certification					43803947	0 _	721026460	72102646	0

	Sample Point	001	001	001	001	001
	Description	PRIOR TO	PRIOR TO	PRIOR TO	PRIOR TO	PRIOR TO
	Description	MENOMINEE RIVER	MENOMINEE RIVER	MENOMINEE RIVER	MENOMINEE RIVER	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	0.01584	8.1	0.001458	<0.14	
	4					
	5					
	6					
	7	100		·//-		
	8					
	9	0.01196	3.0	0.00069	<0.14	<5.0
	10					
	11					
	12					
	13					
	14					
	15					
	16			***		
	17	0.03315	8.2	0.004182	0.47	
	18					
	19					
	20					
	21					
	22			2 222/2/	.0.44	
	23	0.0396	5.9	0.002124	<0.14	
	24					
	25		<u></u>			
	26					
	27					
	28					
	29					
	30					
	31				<u> </u>	

	Sample Point	001		001		001		001	001
	Description	PRIOR TO MENOMINEE RI	VER	PRIOR TO MENOMINEE RI	VER	PRIOR TO MENOMINEE R		PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER
		35		147		147		87	152
	Parameter	Arsenic, Tota	,	Copper, Tota		Copper, Tot	al	Cadmium, Total	Cyanide, Amenable
	Description	Recoverable		Recoverable		Recoverable		Recoverable	
	Units	lbs/day		ug/L		lbs/day		ug/L	ug/L
Summary Values	Monthly Avg	0.0251375	5	6.3		0.002113	5	0.1175	0
	Monthly Total								
	Daily Max	0.0396		8.2		0.004182	2	0.47	<5
	Daily Min	0.01196		3		0.00069		<0.14	<5
	Rolling 12 Month Avg								
Limit(s) in Effect	Monthly Avg								
	Monthly Total								
	Daily Max	12	0	69	0	0.98	0		
	Daily Min								
	Rolling 12 Month Avg			,,					
QA/QC Information	LOD	***		1.3				0.14	5
	LOQ			4				0.45	15
	QC Exceedance	N		N		N		N	N
	Lab Certification			721026460	)		-	721026460	721026460

	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			0.027720	6.2	<0.99
	4			0.034991	1.8	<0.99
	5			0.032557	2.2	
	6			0.042390	6.3	
	7			0.018762	2.4	
	8					
	9			0.035840	5.1	<0.99
	10			0.036107	7.4	<0.99
	11			0.025963	5.8	
	12			0.038035	5.8	
	13			0.025969	7.7	
	14					
	15					
	16					
	17			0.024141	4.8	<0.99
	18			0.024366	7.3	<0.99
	19			0.016430	5.5	
	20			0.012760	7.0	
	21			0.009982	7.7	
	22					
	23	20.0	0.89	0.026437	7.7	<0.99
	24			0.041798	5.0	<0.99
	25			0.044523	3.8	
	26	***		0.039588	4.0	1
	27			0.028440	3.3	
	28					
	29					
	30			0.030290	7.7	
	31			0.039053	5.3	

	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
		440	280	211	457	342
	Parameter Description	112 Chlorine, Total	Mercury, Total	Flow Rate	Suspended Solids,	Oil & Grease (Freon)
	Description	Residual	Recoverable	1 low Nato	Total	,
	Units	ug/L	ng/L	MGD	mg/L	mg/L
Summary Values	Monthly Avg	20	0.89	0.029824636	5.445454545	0
	Monthly Total					
	Daily Max	20	0.89	0.044523	7.7	<0.99
	Daily Min	20	0.89	0.009982	1.8	<0.99
	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			0.99
	LOQ	100	0.5			3.1
	QC Exceedance	N	N	N	N	N
	Lab Certification		721026460		438039470	721026460

	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
ŀ	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
ample Results	Day 1					
	2					
	3	<0.14	<0.67	18	34	
	4	<0.14	<0.67	5.2	34	
	5					
	6					
	7					
	8					
	9	0.25	0.70	6.5	52	
	10	0.31	<0.67	5.2	38	<5.0
	11					
	12					
	13					
	14					
	15					
	16					
	17	0.24	<0.67	15	55	
	18	0.33	0.95	17	34	
	19					
	20	-+				
	21					
	22					
	23	<0.14	0.77	15	26	
	24	<0.14	0.90	14	25	
	25					
	26					
	27					
	28	1900				
	29			,		
	30					
	31	41=		1,00		

	Sample Point	101		101		101		101		101	
	Description	Metal Finishir Effluent	ng	Metal Finishir Effluent	ng	Metal Finish Effluent	ing	Metal Finish Effluent	ing	Metal Finishi Effluent	ng
								F.50		455	
	Parameter	87		133		315		553		155	
	Description	Cadmium, To Recoverable		Chromium, To Recoverable		Nickel, Tot Recoverab		Zinc, Tota Recoverab		Cyanide, To	iai
	Units	ug/L	1	ug/L		ug/L		ug/L		ug/L	
Summary Values	Monthly Avg	0.14125		0.415		11.9875	,	37.25		0	
	Monthly Total										
	Daily Max	0.33		0.95		18		55	***************************************	<5	
	Daily Min	<0.14		<0.67		5.2		25		<5	
	Rolling 12 Month Avg										
Limit(s) in Effect	Monthly Avg	260	0	1710	0	2380	0	1480	0	650	0
	Monthly Total										
	Daily Max	690	0	2770	0	3980	0	2610	0	1200	0
	Daily Min										
	Rolling 12 Month Avg										
QA/QC Information	LOD	0.14		0.67		1.1		5		5	
	LOQ	0.45		2		3.4		10		15	
	QC Exceedance	N		N		N		N		N	
	Lab Certification	72102646	721026460		0	72102646	30	721026460		721026460	

	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	9.1	<1.5	< 0.37	7.0	7.8
	4	4.5	<1.5	<0.37	6.7	7.3
	5				6.8	7.2
	6	***			6.7	7.6
	7	*			6.9	7.1
	8					
	9	5.9	<1.5	<0.37	7.6	8.2
	10	5.7	<1.5	<0.37	7.2	7.9
	11				7.2	7.5
	12				7.2	8.0
	13				7.0	7.4
	14					
	15					,,,,
	16		• • • • • • • • • • • • • • • • • • • •			
	17	7.4	<1.5	<0.37	6.7	7.6
	18	7.6	<1.5	< 0.37	7.3	7.6
	19				7.0	7.6
	20				7.0	7.5
	21				7.2	7.5
	22					
	23	5.8	<1.5	<0.37	7.4	7.8
	24	5.9	<1.5	<0.37	6.6	7.7
	25				6.7	7.3
	26			,,,,,,	6.8	8.0
	27				6.9	7.1
	28		33.3			
	29					
	30				7.2	7.7
	31				7.0	7.6

	Sample Point	101		101	T	101		101		101	
	Description	Metal Finishii Effluent	ng	Metal Finishi Effluent	ng	Metal Finish Effluent	ing	Metal Finish Effluent	ing	Metal Finish Effluent	ing
	Parameter	147		264		430		374		373	
	Description	Copper, Tota Recoverable	al e	Lead, Total Recoverable		Silver, Tota Recoverab		pH (Minimum)		pH (Maximum)	
	Units	ug/L		ug/L.		ug/L		su		su	
Summary Values	Monthly Avg	6.4875		0		0		7.0045454	155	7.5909090	91
	Monthly Total								i		
	Daily Max	9.1		<1.5		<0.37		7.6		8.2	
	Daily Min	4.5		<1.5		<0.37		6.6		7.1	
	Rolling 12 Month Avg					0.151					
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	-10 )						4	0		
	Rolling 12 Month Avg			, Vort							
QA/QC Information	LOD	1.3	,	1.5		0.37					
	LOQ	4		4.9		1.2					
	QC Exceedance	N	-	N		N		N		N	
	Lab Certification	72102646	60	72102646	iO	72102646	30				

	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		11.0		·············	
	17		***			
	18		All All			
	19		M/57-27	· · · · · · · · · · · · · · · · · · ·	***	
	20				×-	
	21					
	22					
	23					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31		•••			

	Sample Point	101		101		101		101	101
	Description	Metal Finishi Effluent	ng	Metal Finish Effluent	ing	Metal Finishir Effluent	ng	Metal Finishing Effluent	Metal Finishing Effluent
	Parameter	379		376		507		40	490
	Description	pH Total Exceed Time Minute	lance s	pH Exceedan Greater Thar Minutes	ices i 60	Total Toxic Orga	anics	Benzene	Tetrachloroethylene
	Units	minutes		Number		ug/L		ug/L	ug/L
Summary Values	Monthly Avg								
	Monthly Total			1					
	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				
Samuel Beautie	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	Day 1 2					
	3					
	4					444
	5 6				100	
	7			AV-		
	8					100
	9					
	10					
	11 12					
	13					
	14			water		
	15					
	16 17	A		***		
	18			, 115t ·		
	19	1.40				
	20					
	21 22					
	23			<u></u>		
	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
1	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					AF -
	6					
	7					
	8					
	9					<u></u> .
	10					
	11					
	12					
	13					
	14					
	15					
	16	2000				
	17					
	18					
	19					
	20					
	21					
	22					
	23					<0.20
	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
	Monthly Total					
	Daily Max					<0.2
	Daily Min			,		<0.2
	Rolling 12 Month Avg	A	7*			
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		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
	Sample Type	CONTINUOUS	24 HR COMP	24 HR COMP	CONTINUOUS	CONTINUOUS
	Frequency	DAILY	WEEKLY	WEEKLY	DAILY	DAILY
Sample Results	Day 1					
	2					
	3	0.025037	<1.0	130	6.3	8.9
	4	0.012075			6.1	7.4
	5	0.021420			6.1	8.7
	6					
	7					
	8					
	9	0.004094			7.7	8.9
	10					
	11					
	12	0.012779	<1.0	170	6.3	6.6
	13	0.008104			6.5	8.0
	14				·	
	15					
	16					
	17	0.005316			6.4	8.1
	18	0.020483			7.9	8.0
	19	0.018138		we.	7.0	8.3
	20	0.018227	<1.0	260	7.3	8.3
	21	0.009406			7.1	8.9
	22					
	23	0.011654	<1.0	200	6.4	7.2
	24	0.014061			6.4	7.2
	25	0.015544			6.6	7.9
	26	0.016211			7.0	8.9
	27	0.019859			6.3	8.6
	28	0.010040			7.2	7.8
	29					
	30	0.016644		,	6.3	8.6
	31	0.009371			6.2	6.5

	Sample Point	003	003	003	003	003
	Description		Future remedial action dischg			
		044	457	35	374	373
	Parameter	211	Suspended Solids,	Arsenic, Total	pH (Minimum)	pH (Maximum)
	Description	Flow Rate	Total	Recoverable	pri (minimum)	pri (Maximum)
	Units	MGD	mg/L	ug/L	su	su
Summary Values	Monthly Avg	0.014129632	0	190	6.689473684	8.042105263
	Monthly Total					
	Daily Max	0.025037	<1	260	7.9	8.9
	Daily Min	0.004094	<1	130	6.1	6.5
	Rolling 12 Month Avg					
Limit(s) in Effect	Monthly Avg					
	Monthly Total					
	Daily Max			680 0		11 0
	Daily Min				4 0	
	Rolling 12 Month Avg					
QA/QC Information	LOD			1		
	LOQ			2		
	QC Exceedance	N	N	N	N	N
	Lab Certification		438039470	721026460		

	OI- B-i-4	002	003
	Sample Point	003	Future remedial action
	Description	dischg	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		
	18		
	19		
	20		
	21		
	22		<u> </u>
	23		
	24		
	25		
	26		
	27		
	28		
	29		
	30		
	31		

r	OI- D-I-4	003		002	
	Sample Point	003		003	
	Description	Future remedial dischg	action	dischg	
	Parameter	379		376	
	Description	pH Total Exceed Time Minute	otal Exceedance pH Exceedan Firme Minutes Greater Than Minutes		
	Units	minutes		Number	
Summary Values	Monthly Avg				
	Monthly Total				
	Daily Max				<u></u>
	Daily Min				
	Rolling 12 Month Avg				
Limit(s) in Effect	Monthly Avg				
	Monthly Total	446	0		
	Daily Max			0	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 compiliance 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
CN- is done as a grab sample per WDNR CI is done once a month and on a HACH machine On January 2-3, 2017 we did have a minor pH problem but for only 10 minutes at OF001 probes were calibrated and it resolved the problem.
Laboratory Quality Control Comments

Permit: 0001040 DOC: 374697

## **Wastewater Discharge Monitoring Long Report**

Facility Name: TYCO FIRE PROTECTION PRODUCTS LP

Contact Address: One Stanton Street

Marinette, WI 54143

Facility Contact: Judith Rost, Sr Lab Tech

Phone Number: (715) 735-7411

Reporting Period: 02/01/2017 - 02/28/2017

Form Due Date: 03/21/2017 Permit Number: 0001040

Date Received:

DOC: 374698 FIN: 7245

FID: 438039470

Region: Northeast Region Permit Drafter: Trevor J Moen Reviewer: Bruce S. Oman

Office: Peshtigo

Sample  Param Descrip  Unit Sample  Freque  Sample Results  Day  2  3  4  5  6  7  8  9  10	eter otion ss	PRIOR TO OMINEE RIVER 211 Flow Rate	Intake Water Monitoring  280  Mercury, Total Recoverable	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER	PRIOR TO MENOMINEE RIVER
Descrip  Unit Sample Freque  Sample Results  Day  2  3  4  5  6  7  8  9	eter ption	211 Flow Rate	280 Mercury, Total	487		MENOMINEE RIVER
Descrip  Unit Sample Freque  Sample Results  Day  2  3  4  5  6  7  8  9	otion	Flow Rate	Mercury, Total		or :	ļ i
Unit   Sample   Freque	s	Flow Rate	Mercury, Total		374	373
Sample   Frequency				Temperature	pH (Minimum)	pH (Maximum)
Sample   Frequency		MGD	ng/L	degF	su	su
Sample Results		ONTINUOUS	GRAB	GRAB	CONTINUOUS	CONTINUOUS
2 3 4 5 6 7 8	ency	DAILY	MONTHLY	MONTHLY	DAILY	DAILY
3 4 5 6 7 8 9	1	0.06521		49	6.9	7.2
4 5 6 7 8 9		0.06297		47	7.0	7.2
5 6 7 8 9		0.04159		45	7.0	7.1
6 7 8 9		0.03205		46	7.0	7.3
7 8 9		0.01390		49	7.0	7.3
8 9		0.05804		50	7.1	7.2
9		0.06194		51	7.1	7.2
		0.06064	6.5	50	7.1	7.2
10		0.07302		44	7.0	7.1
	)	0.03385		47	6.8	7.1
11		0.01767		50	6.7	6.8
12		0.01054		49	6.7	6.9
13	1	0.05795		50	6.8	7.0
14		0.05255		51	6.8	7.2
15		0.02845		48	7.1	7.5
16	;	0.05223		53	7.0	7.3
17	'	0.04264		62	6.9	7.1
18	1	0.01278		59	7.0	7.2
19		0.01451		61	7.3	7.8
20	)	0.07734		64	6.9	7.5
21		0.05302		63	7.1	7.5
22	!	0.05780		67	7.0	7.4
23		0.06473		65	7.0	7.4
24		0.05442		60	7.0	7.4
25	1	0.01037		59	7.0	7.6
26		0.01641		55	7.2	7.7
27	·	0.05049		79	6.9	7.2
28		0.08636		75	6.8	7.7
29	)					
30						
31						L

Permit: 0001040 DOC: 374698

For DNR Use Only

	Sample Point	001	703	001	001	001
	Description	PRIOR TO	Intake Water	PRIOR TO	PRIOR TO	PRIOR TO
		MENOMINEE RIVER	Monitoring	MENOMINEE RIVER	MENOMINEE RIVER	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	0.045123929	6.5	55.285714286	6.971428571	7.289285714
	Monthly Total					
	Daily Max	0.08636	6.5	79	7.3	7.8
	Daily Min	0.01037	6.5	44	6.7	6.8
	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			

	1			r		<b>.</b>
	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			0.170	310	68
	2					
	3					
	4					
	5					
-	6					
	7			0.130	200	F.4
	8			0.130	320	54
	10					
	11					
	12					
	13					
	14					
	15			0.820	340	58
	16					
	17					
	18					
	19					
	20					
	21					
	22			0.273	260	81
	23					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
L	31					

	Sample Point	001		001		001		001		001	
	Description	PRIOR TO	\/FD	PRIOR TO	\/ED	PRIOR TO	VED	PRIOR TO		RIOR TO	VED.
		MENOMINEE RI	IVER	MENOMINEE RI	VER	MENOMINEE RI	VER	MENOMINEE RIVE	K   WENO	MENOMINEE RIVER	
	Parameter	379		376		388		231		35	
	Description	pH Total Exceed Time Minute		pH Exceedand Greater Than Minutes		Phosphorus, Total		Hardness, Total as CaCO3		senic, Tota ecoverable	
	Units	minutes		Number		mg/L		mg/L		ug/L	
Summary Values	Monthly Avg					0.34825		307.5		65.25	
Values	Monthly										
	Total										
	Daily Max					0.82		340		81	
	Daily Min					0.13		260		54	
	Rolling 12 Month Avg					0.3					
Limit(s) in Effect	Monthly Avg										
	Monthly Total	446	0								
	Daily Max			0	0				6	680	0
	Daily Min										
	Rolling 12 Month Avg					1	0				$\prod$
QA/QC Information	LOD		· ·			0.008				1	
	LOQ					0.027				2	
	QC Exceedance	N		N		N		N		N	
	Lab Certification					438039470	0	721026460	72	1026460	)

	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
ŀ	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	0.03672	3.5	0.00189	<0.14	
	2					
	3					
	4					
-	5 6					
	7					
	8	0.02754	1.9	0.000969	0.14	14
ŀ	9	0.02104	1.5	0.000303	0.14	17
	10					
	11					
İ	12					
	13					
	14					
	15	0.01392	17	0.00408	<0.14	
	16					
	17					
	18					
	19					
	20					
-	21	0.03000	0.0	0.003036	-0.14	
}	22	0.03888	8.2	0.003936	<0.14	
-	24					
	25					
ł	26					
ŀ	27					
ŀ	28					
ł	29					
	30					

	Sample Point	001		001		001		001	001
	Description	PRIOR TO MENOMINEE RI	VED	PRIOR TO MENOMINEE RI	VED	PRIOR TO MENOMINEE R		PRIOR TO MENOMINEE RIVER	PRIOR TO R MENOMINEE RIVER
		WENOWINEE RI	VER	MENOMINEE RI	VER	WENOWINEER	IVER	WENOWINEE RIVER	NIENOWINEE RIVER
	Parameter	35	_	147	_	147		87 Cadmium, Total	152
	Description	Arsenic, Tota Recoverable		Copper, Tota	Copper, Lotal Recoverable		Copper, Total Recoverable		Cyanide, Amenable
		recoverable		Recoverable	Recoverable		C	Recoverable	
	Units	lbs/day		ug/L	ug/L lbs/day			ug/L	ug/L
Summary	Monthly	0.029265		7.65		0.0027187	<b>7</b> 5	0.035	14
Values	Avg								
	Monthly Total								
	Daily Max	0.03888	0.03888			0.00408		0.14	14
	Daily Min	0.01392				0.000969		<0.14	14
	Rolling 12 Month Avg								
Limit(s) in Effect	Monthly Avg								
	Monthly Total								
	Daily Max	12	0	69	0	0.98	0		
	Daily Min								
	Rolling 12 Month Avg								
QA/QC Information	LOD		•	1.3			•	0.14	5
	LOQ		N					0.45	15
	QC Exceedance	N				N		N	N
	Lab Certification		72		721026460			721026460	721026460

	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			0.033148	10.6	<0.99
	2			0.030343	22.9	<0.99
	3			0.026993	12.2	
	4			0.015737	7.7	
	5					
	6			0.033090	10.6	
	7			0.034098	5.8	
	8		0.96	0.034386	3.5	<0.99
	9			0.031944	6.8	<0.99
	10			0.026435	9.0	
	11			0.013090	14.3	
	12					
	13			0.029520	13.5	
	14			0.023265	6.6	
	15	10		0.014999	8.2	<0.99
	16			0.024144	6.0	<0.99
	17			0.025270	3.8	10.00
	18			0.009067	3.1	
	19			0.000007	0.1	
	20			0.035206	6.0	
	21			0.030995	3.3	
	22			0.038944	6.7	<0.99
	23			0.038944	6.8	<0.99
	24			0.028970	4.8	<u> </u>
	25			0.028970	5.0	
	26			0.011281	3.0	
				0.020120	7.2	
	27			0.028130	7.3	
	28			0.035429	4.7	
	29					-
	30					
	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	
		I WENOWINEE RIVER	INIENOMINEE RIVER	Ellidelit	Emuent	Emuent	
		112	280	011	457	0.40	
	Parameter	112 Chlorine, Total		211 Flow Rate	457	342	
	Description	Residual	Mercury, Total Recoverable	Flow Rate	Suspended Solids, Total	Oil & Grease (Freon)	
	Units	ug/L	ng/L	MGD	mg/L	mg/L	
Summary	Monthly	10	0.96	0.027347292	7.883333333	0	
Values	Avg						
	Monthly Total						
	Daily Max	10	0.96	0.041835	22.9	<0.99	
	Daily Min	10	0.96	0.009067	3.1	<0.99	
	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	•	•	0.99	
	LOQ	100	0.5			3.1	
	QC Exceedance	N	N	N	N	N	
	Lab Certification		721026460		438039470	721026460	

	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	<0.14	0.71	3.4	23	
	2	<0.14	<0.67	3.2	31	
	3					
	4					
	5					
	6					
	7					
	8	<0.14	<0.67	8.7	22	8.0
	9	<0.14	<0.67	12	35	
	10					
	11					
	12					
	13					
	14					
	15	0.17	<0.67	14	33	
	16	<0.14	<0.67	10	29	
	17					
	18					
	19					
	20					
	21					
	22	<0.14	1.4	7.5	41	
	23	<0.14	<0.67	10	20	
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					

	Sample Point	101		101		101		101		101	
	Description	Metal Finishir Effluent	ng	Metal Finishii Effluent	ng	Metal Finishi Effluent	ng	Metal Finishi Effluent	ng	Metal Finishi Effluent	ng
		Lilident		Lilidelit		Lilideili		Lilidelit		Lilidelit	
	Parameter	87		133		315		553		155	
	Description	Cadmium, Tot	tal	Chromium, To	ata l		,ı	Zinc, Total			tal
	Description	Recoverable		Recoverable		Nickel, Total Recoverable		Recoverabl		Cyanide, Total	
	Units	ug/L		ug/L		ug/L		ug/L		ug/L	
Summary Values	Monthly Avg	0.02125		0.26375 8.6		29.25		8			
	Monthly Total										
	Daily Max	0.17	0.17 <0.14			3.2		20		8	
	Daily Min	<0.14								8	
	Rolling 12 Month Avg										
Limit(s) in Effect	Monthly Avg	260	0	1710	0	2380	0	1480	0	650	0
	Monthly Total										
	Daily Max	690	0	2770	0	3980	0	2610	0	1200	0
	Daily Min										
	Rolling 12 Month Avg										
QA/QC Information	LOD	0.14	0.14		•	1.1	•	5	,	5	
	LOQ	0.45	0.45			3.4		10		15	
	QC Exceedance	N	N			N		N		N	
	Lab Certification	72102646	1026460 7210		0	72102646	0	72102646	60	72102646	iO

	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
ample Results	Day 1	5.5	1.7	<0.37	6.6	7.2
	2	4.8	3.2	<0.37	6.8	7.1
	3				6.8	7.3
	4				6.7	7.4
L	5					
	6				7.1	8.2
	7				7.1	7.8
	8	3.5	<1.5	<0.37	6.9	7.6
	9	4.9	<1.5	<0.37	6.7	7.2
	10				6.8	7.1
	11				6.6	7.0
	12					
	13				7.1	7.8
	14				7.0	7.5
	15	8.3	<1.5	0.56	7.0	7.5
	16	6.2	3.2	<0.37	6.8	7.5
	17				7.2	7.4
	18				7.1	7.6
	19					
	20				6.8	7.7
	21				6.9	7.4
	22	5.1	<1.5	<0.37	6.8	7.6
	23	5.5	1.7	<0.37	6.6	7.8
	24				6.6	7.5
	25				7.2	7.5
	26					
	27				7.2	7.6
	28				6.9	7.5
	29					
	30					
	31					

	Sample Point	101		101		101		101		101	
	Description	Metal Finishir Effluent	ng	Metal Finishin Effluent	ıg	Metal Finishi Effluent	ng	Metal Finish Effluent	ing	Metal Finish Effluent	ing
		Lilident		Lilidelit		Lilidelit		Lilidelit		Liliueiii	
	Parameter	147		264		430		374		373	
	Description	Copper, Tota	- I	Lead, Total		Silver, Tota	J	pH (Minimu	m)	pH (Maximu	.m)
	Description	Recoverable		Recoverable	•	Recoverable		pri (Minimum)		ph (Maximum)	
	Units	ug/L		ug/L		ug/L		su		su	
Summary Values	Monthly Avg	5.475		1.225 0.07		6.8875		7.4916666	67		
	Monthly Total										
	Daily Max	8.3	8.3			0.56		7.2		8.2	
	Daily Min	3.5	3.5		<1.5 <0.3			6.6		7	
	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	1.3	•	1.5	•	0.37	•		•		
	LOQ	4		4.9		1.2					
	QC Exceedance	N		N		N		N		N	
	Lab Certification	72102646	721026460 72		)	72102646	0				

	Sample Bairt	101	101	101	101	101
	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 Finishi	ng	Metal Finishi	ng	Metal Finishir	ng	Metal Finishing		Metal Finishing	g
		Effluent		Effluent		Effluent		Effluent		Effluent	
	Parameter	379		376		507		40		490	
	Description	pH Total Exceed Time Minute		Greater Than 60		Total Toxic Orga	anics	Benzene		Tetrachloroethyle	ene
				Minutes				,			
C	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
ł	Description	Metal Finishing	Metal Finishing	Metal Finishing	Metal Finishing	Metal Finishing
	200011711011	Effluent	Effluent	Effluent	Effluent	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	24 HR COMP	24 HR COMP	24 HR COMP	24 HR COMP
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	Day 1					
	2					
Ì	3					
	4					
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					
	16					
	17					
	18					
	19					
	20					
	21					
	22					
	23					
	24					
ł	25					
ł	26		+			
ŀ	27		+			
ŀ	28					
ŀ	29		+			
ł	30					
ŀ	31		+			

	Sample Point	101	101	101	101	101
	Description	Metal Finishing	Metal Finishing	Metal Finishing	Metal Finishing	Metal Finishing
		Effluent	Effluent	Effluent	Effluent	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			<u> </u>		
	LOQ					
	QC Exceedance					
	Lab Certification					

	Sample Point	101	106	106	106	107
	Description	Metal Finishing		Future remedial action		Mercury Field Blank
		Effluent	ww	ww	ww	Řesults
	Parameter	167	211	35	457	280
	Description	Di-n-butyl phthalate	Flow Rate	Arsenic, Total	Suspended Solids,	Mercury, Total
		(dibutyl phthalate)		Recoverable	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					<0.20
	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	106	106	106	107
	Description	Metal Finishing Effluent	Future remedial action ww	Future remedial action ww	Future remedial action ww	Mercury Field Blank Results
		Lilident	vv vv	vv vv	vv vv	Results
	Danamatan	407	044	25	457	200
	Parameter Description	167 Di-n-butyl phthalate	211 Flow Rate	35 Arsenic, Total	457 Suspended Solids,	280 Mercury, Total
	Description	(dibutyl phthalate)	Flow Rate	Recoverable	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	0.014975	1.0	74	6.2	8.6
	2	0.012676			7.2	8.6
	3	0.010367			6.4	8.6
	4	0.014879			6.9	7.1
	5					
	6	0.017576			7.0	8.6
	7	0.021238			7.6	8.7
	8	0.025841	0.8	130	6.9	8.5
	9	0.018398			7.0	8.4
	10	0.015077			6.9	7.2
	11	0.012551			7.3	7.8
	12					
	13	0.017510			6.8	8.4
	14	0.028007			8.0	8.7
	15	0.030248	1.1	150	7.4	8.6
	16	0.021071			7.2	8.6
	17	0.018890			6.5	7.0
	18	0.007425			7.0	7.6
	19					
	20	0.018905			7.1	7.9
	21	0.019010			7.5	8.6
	22					
	23	0.007435			6.3	7.0
	24	0.016919			6.3	8.7
	25					
	26					
	27	0.005161			8.2	8.9
	28	0.028306			7.4	8.6
	29					<del>-</del>
	30					
	31					

	Sample Point		003	003	003	003	
	Description	Future remedial action discha	Future remedial action discha	Future remedial action discha	Future remedial action discha	Future remedial action dischg	
		uistrig	uiscrig	uistrig	discrig		
	Parameter	211	457	35	374	373	
	Description	Flow Rate	Suspended Solids,	Arsenic, Total	pH (Minimum)	pH (Maximum)	
	Description	Flow Rate	Total	Recoverable	pπ (iviiiIiiiiiiiiii)	рп (махіпшіі)	
	Units	MGD	mg/L	ug/L	su	su	
Summary Values	Monthly Avg	0.017384773	0.966666667	118	7.05	8.213636364	
	Monthly Total						
	Daily Max	0.030248	1.1	150	8.2	8.9	
	Daily Min	0.005161	0.8	74	6.2	7	
	Rolling 12 Month Avg						
Limit(s) in Effect	Monthly Avg						
	Monthly Total						
	Daily Max			680 0		11 0	
	Daily Min				4 0		
	Rolling 12 Month Avg						
QA/QC Information	LOD			1			
	LOQ			2			
	QC Exceedance	N	N	N	N	N	
	Lab Certification		438039470	721026460			

	Sample Point	003	003
	Description	Future remedial action dischg	Future remedial action dischg
	D	070	070
	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		
	18		
	19		
	20		
	21		
	22		
	23		
	24		
	25		
	26		
	27		
	28		
	29		
	30		
	31		

	Sample Point	003		003	
	Description	Future remedial a	ction		ction
		dischg		dischg	
	Parameter	379		376	
	Description	pH Total Exceeda		pH Exceedance Greater Than 6	
		Time winutes	•	Minutes	00
	Units	minutes		Number	
Summary	Monthly				
Values	Avg				
	Monthly Total				
	Daily Max				
	Daily Min				
	Rolling 12 Month Avg				
Limit(s) in Effect	Monthly Avg				
	Monthly Total	446	0		
	Daily Max			0	0
	Daily Min				
	Rolling 12 Month Avg				
QA/QC	LOD				
Information					
	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.)
Based on my inquiry of the person or persons directly responsible for managing compiliance 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     cocurred 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
CI- ran on a HACH machine once a month Did not have enough time to run the sampler the last week of 7 days for OF003 because they were down until the last day.
Laboratory Quality Control Comments
Submitted by Anne Fleury(afleury16) on 3/15/2017 1:18:25 PM

Wastewater Discharge Monitoring Form
Facility Name: TYCO FIRE PROTECTION PRODUCTS LP

Reporting Period: 02/01/2017 to 02/28/2017

Permit: 0001040 DOC: 374698