



November 4, 2019

MR JEFFREY DANKO  
JOHNSON CONTROLS INC  
5757 NORTH GREEN BAY AVENUE  
MILWAUKEE WI 53209

MR SCOTT WAHL  
TYCO FIRE PRODUCTS LP  
ONE STANTON STREET  
MAREINTTE WI 54143

**Subject: Reported Contamination at the City of Marinette Waste Water Treatment Facility and Associated Fields Utilized for Landspreading of Biosolids; Marinette, WI  
DNR BRRTS Activity # 02-38-583856**

Dear Mr. Danko and Mr. Wahl,

**Submit Site Investigation Workplan by November 15, 2019 Pursuant to Wis. Admin. Code NR 700.11(bm)**

As stated in the July 3, 2019 responsible party letter, the September 20, 2019 clarification letter and the October 16, 2019 notice of non-compliance, the Wisconsin Department of Natural Resources (the "DNR") maintains Johnson Controls, Inc. ("JCI") and Tyco Fire Products, LP ("Tyco") are responsible parties under Wis. Stat. § 292.11 (3) for BRRTS Activity #02-38-583856. The purpose of this responsible party letter is to remind JCI and Tyco they are responsible for submitting a site investigation work plan to address BRRTS Activity #02-38-583856. Therefore, consistent with the previous DNR correspondence and specifically Wis. Admin. Code § NR 700.11 (bm), the DNR directs JCI and Tyco to submit a site investigation work plan meeting the requirements of Wis. Admin. Code § NR 716.09 by close of business on **Friday, November 15, 2019**.

**JCI and Tyco Operate Multiple Facilities Where PFAS Discharges Have Occurred in Marinette**

On June 12, 2018, the DNR was notified by the city of Marinette of per- and polyfluoroalkyl substances ("PFAS") contamination present in influent wastewater received by the city of Marinette Waste Water Treatment Plant (the "WWTP"). In July 2018, the city of Marinette conducted sampling for twelve (12) PFAS compounds in five (5) manholes representing five (5) sectors of the sanitary sewer system within the city. See attached City of Marinette PFAS Sanitary Sewer Results. On July 6, 2018, the DNR was notified again by the city of Marinette of significant levels of PFAS contamination present in biosolids sludge generated by the WWTP for years 2017 and 2018. See attached City of Marinette PFAS Biosolid Results.

JCI and Tyco are responsible parties for the discharge of per- and polyfluoroalkyl substances ("PFAS") from two facilities. The first facility is the Fire Training Center ("FTC") located at 2700 Industrial Parkway in Marinette, Wisconsin. The second facility is the Stanton Street JCI campus located at 1 Stanton Street, Marinette, Wisconsin. There are five (5) sectors of the sanitary sewer system within the city of Marinette. The sector of the sanitary sewer system serving the FTC where JCI and Tyco discharge PFAS-containing wastewater is the only sector that

contained PFOS detections (at levels of 211 parts per trillion) according to the data submitted to the DNR by the city of Marinette. The other four (4) sectors tested were non-detect for PFOS. PFAS, including PFOS, is found in groundwater samples at the FTC. There is PFAS, including PFOS, in the biosolids which were landspread on fields.

Regarding the Stanton Street facility, the city of Marinette submitted PFAS results that indicate the sector of the sanitary sewer system where JCI and Tyco discharge PFAS-containing wastewater detected perfluorohexanoic acid (PFHxA at 334 ppt), perfluoroheptanoic acid (PFHpA at 204 ppt) and perfluorooctanoic acid (PFOA at 178 ppt). The city's efforts in June 2018 were taken within days of JCI and Tyco's environmental consultant Arcadis' PFAS sampling on June 8, 2018 in response to a request from EPA to sample for PFAS at the Stanton Street facility. See attached Arcadis PFAS Sampling Results to EPA.

### **Clarification of DNR Role in Remedial Action Response Sites**

An investigation of the PFAS contamination discharged to the city of Marinette's wastewater was performed by the city of Marinette in June 2018, not the DNR. Wis. Stat. § 292.31(1)(b)2 provides the DNR may (not shall) conduct an investigation to identify persons who are potentially responsible for actual or potential environmental pollution from a site or facility. The environmental repair law, Wis. Stat. § 292.31, does **not** require the DNR to find all parties responsible for environmental pollution.

### **Legal Responsibilities:**

JCI and Tyco are responsible party causers of repeated discharges of hazardous substances to the groundwater, the wastewater and the aggregate biosolids generated from the wastewater in the city of Marinette. Wis. Stat. § 292.11 (3) imposes strict, joint and several liability by requiring a responsible party who possesses or controls a hazardous substance which is discharged or who causes the discharge of a hazardous substance shall take the actions necessary to restore the environment to the extent practicable and minimize the harmful effects from the discharge to the air, lands or waters of this state. Violators of the Spills Law are liable for complete and thorough remediation of hazardous substance spills regardless of whether they knew of the discharge. State v. Chrysler Outboard Corp., 219 Wis. 2d 130, 164 and 171, (1998). Causing a discharge includes the failure to remediate any and all hazardous substance discharges. Id. at 169. Responsible parties have an obligation to conduct environmental response actions whether or not the DNR directs them to do so.

The DNR is aware JCI and Tyco are not the only entities who discharged PFAS-containing wastewater at the Stanton Street campus. A responsible party letter was sent to ChemDesign Products, Inc. requiring the evaluation of PFAS discharges to the sanitary sewer within the city of Marinette to its Waste Water Treatment Plant, the biosolids sludge generated by the plant, and the associated fields utilized for landspreading the biosolids sludge in the area.

The July 3, 2019 responsible party letter, the September 20, 2019 clarification letter and the October 16, 2019 notice of non-compliance are attached as enclosures.

Persons meeting the definition of "responsible party" under Wis. Admin. Code § NR 700.03(51) must follow applicable law to address the discharge of a hazardous substance to the environment or other environmental pollution. Wisconsin Statutes ch. 292 and Wis. Admin. Code chs. NR 700 through NR 754 provide specific requirements for undertaking appropriate response actions to address contamination, including requirements for emergency and interim actions, public information, site investigations, remedy selection, design and operation of remedial action systems, and case closure.

### **General Recommendations for Responsible Parties:**

The DNR recommends that you:

#### *1. Hire a Qualified Environmental Consultant*

Hiring a consulting firm with staff that have the appropriate State of Wisconsin qualifications to supervise and certify the submittals is a critical component and necessary to meet your requirements. Further, an environmental consultant should be knowledgeable of Wisconsin's technical procedures and laws and be able to answer questions regarding cleanup requirements. Required qualifications for environmental consultants are specified in Wis. Admin. Code ch. NR 712. Program guidance is available, see *Wis. Admin. Code ch. NR 712 Qualifications and Certifications, RR-081*.

#### *2. Properly Submit Reports on Time with Required Information Included*

Wisconsin law includes timeframes for submitting technical documents and conducting work, as well as specifications for what should be included in those submittals. This letter provides a general overview of the timeframes and first steps to take for site investigation and cleanup. For an overview of timing requirements, please refer to *NR 700 Process and Timeline Overview, RR-967, enclosed*.

The DNR developed the publication *Guidance for Electronic Submittals for the Remediation and Redevelopment Program, RR-690*, to assist responsible parties and consultants in properly submitting documents. Wis. Admin. Code § NR 700.11(3g), and other specific provisions within Wis. Admin. Code ch. NR 700, outline the requirements for submittals, including electronic submittals. Consultants and representatives of responsible parties are required to submit one paper copy and one electronic copy of submittals, including case closure documents. The electronic version must be an exact duplicate of the paper version. Failure to submit both a paper copy and electronic copy delays acceptance of your submittals.

#### *3. Consider the Benefits of a Fee-based Technical Review of your Submittals*

In-depth DNR review of technical reports and submittals is available for a fee. The Remediation and Redevelopment (RR) Program project managers are available throughout the process to answer general questions and provide general input as the site moves toward closure. However, if you want a formal written response from the DNR, a meeting or both on a specific submittal, a review fee will be required in accordance with Wis. Admin. Code ch. NR 749. **Obtaining technical assistance from DNR project managers throughout the process is an effective way to prevent problems and delays at the end of the process when case closure is requested.** Forms, a fee schedule, and further information on technical assistance is available at [dnr.wi.gov](http://dnr.wi.gov) and searching "brownfield fees".

### **Required Steps to Take and Documents to Submit:**

The steps listed below serve as a general overview only — all mandatory steps and submittals specified in state law must be met before the DNR can grant "case closure", which is a determination by the DNR that no further cleanup is necessary at a site, as defined in Wis. Admin. Code § NR 700.03(3m).

1. **Scoping and Work Plan Submittal – NR 716.07 and 716.09:** The DNR has directed you to scope out your site investigation and submit a work plan by November 15, 2019 for completing a site investigation. The work plan must comply with the requirements in Wis. Admin. Code, chs. NR 700 through NR 754. For

additional assistance, the DNR has extensive guidance on its web page at [dnr.wi.gov](http://dnr.wi.gov) and search “brownfield publications”.

Prior to and during a site investigation, you must evaluate whether any interim actions are needed to contain or stabilize a hazardous substance discharge or environmental pollution, pursuant to Wis. Admin. Code § NR 708.11. If you undertake an interim action (e.g., free product removal), you must submit documentation of the action per Wis. Admin. Code § NR 708.15.

As you develop the site investigation work plan, you must include an assessment of the vapor intrusion pathway. Wis. Admin. Code § NR 716.11(5) outlines the requirements for when to evaluate for the presence of vapors in the sub-surface and in indoor air. The results and conclusions from the vapor assessment must be included in the Wis. Admin. Code § NR 716.15 site investigation report whether or not you elected to take vapor samples. *Addressing Vapor Intrusion at Remediation & Redevelopment Sites in Wisconsin, RR-800*, is available to help responsible parties and their consultants comply with these requirements.

2. **Field Investigation – NR 716.11**: Following submission of the work plan, the site investigation must be started within the timeframe provided under law. The timeframe varies depending on whether you are requesting the DNR’s fee-based review of the work plan. If you do not request a fee-based review of the work plan, you must initiate the field investigation within 90 days of submitting the work plan, and you may proceed with the field investigation upon DNR notification to proceed; however, if the DNR has not responded within 30 days, from submittal of the work plan, you may then proceed with the field investigation. If a fee and request for DNR review of the work plan is submitted, the field investigation must begin within 60 days after receiving DNR approval.
3. **Sample Results Notification Requirements – NR 716.14**: You must report sampling results to the DNR, owners, occupants, and various other parties within 10 business days after receiving the sampling results, unless a different timeframe is approved by the DNR, in accordance with Wis. Admin. Code § NR 716.14.
4. **Site Investigation Report – NR 716.15**: Within 60 days after completion of the field investigation and receipt of the laboratory data, the law requires you to submit a Site Investigation Report (SIR) to the DNR. As part of the SIR or in the Remedial Actions Options Report (RAOR), if there is soil contamination, the responsible party shall identify the current land use (i.e., industrial or non-industrial) and zoning for the site or facility in accordance with Wis. Admin. Code § NR 720.05(5). Also, as part of the SIR or in the RAOR, you must include any interim action report that may be required under Wis. Admin. Code § NR 708.15.
5. **Remedial Actions Options Report – NR 722**: Within 60 days after submitting the SIR, the law requires you to submit a RAOR. The selected remedy in the RAOR should include an evaluation of green and sustainable remediation criteria, as appropriate, as required by Wis. Admin. Code § NR 722.09(2m). This may be submitted as part of a broader SIR.
6. **Remedial and Interim Action Design, Implementation, Operation, Maintenance and Monitoring Reports – NR 724**: Unless otherwise directed by the DNR, the responsible party shall submit all plans and reports required in Wis. Admin. Code ch. NR 724.
7. **Notification of Residual Contamination or Continuing Obligations – NR 725**: In situations where notification is required, the responsible party must provide submittal(s) that confirms that continuing obligations have been identified and affected property owners have been notified by the responsible parties 30 days prior to case closure, as required by Wis. Admin. Code ch. NR 725.

8. **Semi-annual Reporting -- NR 700.11:** Wis. Admin. Code § NR 700.11(1)(a) requires responsible parties to submit semi-annual site progress reports to the DNR until final case closure is granted. The reports summarize the work completed over six months and additional work planned to adequately complete the response action at the site. Consultants may submit these reports on behalf of responsible parties. These reports are due in January and July of each year. Please refer to DNR publication *NR 700 Semi-Annual Site Progress Report, RR-082*, for more information.

#### Submittals required under Wis. Admin. Code chs. NR 700 - 726

These documents, as applicable, must be submitted to the DNR prior to the responsible party requesting case closure, unless otherwise directed by the DNR:

- Ch. NR 708 reports and documentation for any immediate or interim actions.
- Ch. NR 712 professional certifications and signatures are included with applicable submittals.
- Ch. NR 716 work plan(s) and site investigation report.
- Ch. NR 722 remedial action options report (exception is for Dry Cleaners Environmental Response Fund sites), with the selected remedial action identified.
- Ch. NR 724 design, construction documentation, operation, maintenance and monitoring plans and reports, including vapor mitigation commissioning.
- Ch. NR 725 submittal(s) that confirms that continuing obligations have been identified and affected property owners have been notified by the responsible parties 30 days prior to case closure.
- If requesting case closure, the Ch. NR 726 case closure form and documentation substantiating compliance with the NR 700 rule series.
- Ch. NR 749 fees have been paid, as applicable, including closure and database fees.
- Ch. NR 700 semi-annual site progress reports starting six months after notification.

#### **Additional Information:**

The DNR understands JCI is a parent company of Tyco Fire Products, LP. All submittals by you or your environmental consultant on your behalf are requested to be submitted by or on behalf of JCI or JCI and Tyco. Pursuant to Wis. Admin. Code § NR 700.11 (1), the DNR directs you and your consultant to submit reports on behalf of JCI and Tyco. Previous acceptance of Tyco-only submittals does not constitute a waiver of liability for JCI by the DNR.

The DNR tracks information on all cleanup sites in a DNR database available at [dnr.wi.gov](http://dnr.wi.gov) and search "BOTW". The Bureau for Remediation and Redevelopment Tracking System (BRRTS) identification number for this site is listed at the top of this letter. You may view information related to your site on this database at any time.

As previously noted, you are required to submit one paper copy and one electronic copy of plans and reports. To speed up processing, your correspondence should reference the BRRTS and Facility Identification (FID) numbers (if assigned) listed at the top of this letter.

All correspondence regarding this site should be directed to:

David Neste  
Remediation and Redevelopment Program  
Wisconsin Department of Natural Resources  
625 E. County Road Y, Suite 700  
Oshkosh, WI 54901  
David.Neste@wisconsin.gov

Please visit the DNR's Remediation and Redevelopment Program website at [dnr.wi.gov](http://dnr.wi.gov) and search "Brownfields", for information on selecting a consultant, seeking financial assistance, and understanding the investigation and cleanup process. Information regarding review fees, liability clarification letters, post-cleanup liability and more is also available.

If you have questions, please call the Dave Neste at (920) 424-0399 or by email at [david.neste@wisconsin.gov](mailto:david.neste@wisconsin.gov) for more information.

Thank you for your cooperation.

Sincerely,



Roxanne N. Chronert  
Team Supervisor, Northeast Region  
Remediation & Redevelopment Program

Attachments:

1. City of Marinette PFAS Sanitary Sewer Results
2. City of Marinette PFAS Biosolid Results
3. Arcadis PFAS Sampling Results to EPA
4. Responsible Party Letter - July 3, 2019
5. Responsible Party Clarification Letter – September 20, 2019
6. Notice of Noncompliance Letter – October 16, 2019

ec: Darsi Foss, DNR  
William J. Nelson, DNR  
David Neste, DNR  
Linda Benfield, Foley & Lardner  
David Mielke, ChemDesign

# ANALYTICAL REPORT

**Client:** Marinette Wastewater Utility  
 Attn: Warren Howard  
 501 Water Street  
 Marinette, WI 54143

**NLS Project:** 302949

**NLS Customer:** 20089

**Fax:** 715 732 5482 **Phone:** 715 732 5184

**Project:** Collection System Investigation

MH428 NLS ID: 1065595

COC: 219494:1 Matrix: WW  
 Collected: 07/09/18 14:23 Received: 07/10/18

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Perfluorinated Chemicals by EPA Method 537 Rev 1.1	see attached					07/13/18	EPA 537 Rev 1.1	721026460
Solid Phase Extraction by EPA Method 537	yes					07/11/18	EPA 537	721026460

MH346A NLS ID: 1065596

COC: 219494:2 Matrix: WW  
 Collected: 07/09/18 14:33 Received: 07/10/18

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Perfluorinated Chemicals by EPA Method 537 Rev 1.1	see attached					07/13/18	EPA 537 Rev 1.1	721026460
Solid Phase Extraction by EPA Method 537	yes					07/11/18	EPA 537	721026460

MH433 NLS ID: 1065597

COC: 219494:3 Matrix: WW  
 Collected: 07/09/18 14:41 Received: 07/10/18

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Perfluorinated Chemicals by EPA Method 537 Rev 1.1	see attached					07/12/18	EPA 537 Rev 1.1	721026460
Solid Phase Extraction by EPA Method 537	yes					07/11/18	EPA 537	721026460

MH700A NLS ID: 1065598

COC: 219494:4 Matrix: WW  
 Collected: 07/09/18 14:55 Received: 07/10/18

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Perfluorinated Chemicals by EPA Method 537 Rev 1.1	see attached					07/13/18	EPA 537 Rev 1.1	721026460
Solid Phase Extraction by EPA Method 537	yes					07/11/18	EPA 537	721026460

MH001A NLS ID: 1065599

COC: 219494:5 Matrix: WW  
 Collected: 07/09/18 15:05 Received: 07/10/18

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Perfluorinated Chemicals by EPA Method 537 Rev 1.1	see attached					07/12/18	EPA 537 Rev 1.1	721026460
Solid Phase Extraction by EPA Method 537	yes					07/11/18	EPA 537	721026460

Values in brackets represent results greater than or equal to the LOD but less than the LOQ and are within a region of "Less-Certain Quantitation". Results greater than or equal to the LOQ are considered to be in the region of "Certain Quantitation". LOD and/or LOQ tagged with an asterisk(\*) are considered Reporting Limits. All LOD/LOQs adjusted to reflect dilution and/or solids content.

ND = Not Detected (< LOD)    LOD = Limit of Detection    LOQ = Limit of Quantitation    NA = Not Applicable  
 DWB = Dry Weight Basis    %DWB = (mg/kg DWB) / 10000    1000 ug/L = 1 mg/L  
 MCL = Maximum Contaminant Levels for Drinking Water Samples.    Shaded results indicate >MCL.

Reviewed by:



Authorized by:  
 R. T. Krueger  
 President

**ANALYTICAL RESULTS: Perfluorinated Chemicals by EPA 537 Rev 1.1 Safe Drinking Water Analysis**

**Customer: Marinette Wastewater Utility NLS Project: 302949**

**Project Description: Collection System Investigation**

**Project Title: Template: 537PPT2 Printed: 07/18/2018 15:59**

Sample: 1065595 MH428 Collected: 07/09/18 Analyzed: 07/13/18 - Analytes: 12 Notes: HX

ANALYTE NAME	RESULT	UNITS WWB	DIL	LOD	LOQ	Note
perfluorobutanesulfonic acid (PFBS)	[7.43]	ppt	2	7.1	23	J
perfluorohexanoic acid (PFHxA)	11.6	ppt	2	1.7	5.3	
perfluoroheptanoic acid (PFHpA)	5.89	ppt	2	0.90	2.9	
perfluorohexanesulfonic acid (PFHxS)	ND	ppt	2	2.6	8.3	
perfluorooctanoic acid (PFOA)	9.92	ppt	2	1.4	4.4	
perfluorononanoic acid (PFNA)	ND	ppt	2	2.6	8.2	
perfluorooctanesulfonic acid (PFOS)	ND	ppt	2	2.9	9.3	
perfluorodecanoic acid (PFDA)	ND	ppt	2	2.4	7.7	
perfluoroundecanoic acid (PFUnA)	ND	ppt	2	2.3	7.4	
perfluorododecanoic acid (PFDoA)	ND	ppt	2	1.9	6.0	
perfluorotridecanoic acid (PFTrDA)	ND	ppt	2	1.9	6.2	
perfluorotetradecanoic acid (PFTA)	ND	ppt	2	1.8	5.6	
C13-PFHxA (SURR)	79.847%		2			S
C13-PFDA (SURR)	30.87%		2			SR S

**NOTES APPLICABLE TO THIS ANALYSIS:**

J = Result enclosed in brackets is between LOD and LOQ, a region of less certain quantitation.  
 S = This compound is a surrogate used to evaluate the quality control of a method.  
 HX = A dilution was required due to complex sample matrix.  
 IV = Initial extract is 125 mL.  
 SR = Surrogate recovery was outside QC limits.  
 C13-PFDA recovered below QC limits.  
 The internal standard, C13-PFOS, area count was outside QC limits. PFBS result may have a high bias.

Sample: 1065596 MH346A Collected: 07/09/18 Analyzed: 07/13/18 - Analytes: 12 Notes: HX

ANALYTE NAME	RESULT	UNITS WWB	DIL	LOD	LOQ	Note
perfluorobutanesulfonic acid (PFBS)	ND	ppt	2	7.1	23	
perfluorohexanoic acid (PFHxA)	26.2	ppt	2	1.7	5.3	
perfluoroheptanoic acid (PFHpA)	13	ppt	2	0.90	2.9	
perfluorohexanesulfonic acid (PFHxS)	ND	ppt	2	2.6	8.3	
perfluorooctanoic acid (PFOA)	41.5	ppt	2	1.4	4.4	
perfluorononanoic acid (PFNA)	ND	ppt	2	2.6	8.2	
perfluorooctanesulfonic acid (PFOS)	ND	ppt	2	2.9	9.3	
perfluorodecanoic acid (PFDA)	ND	ppt	2	2.4	7.7	MS
perfluoroundecanoic acid (PFUnA)	ND	ppt	2	2.3	7.4	MS
perfluorododecanoic acid (PFDoA)	ND	ppt	2	1.9	6.0	MS
perfluorotridecanoic acid (PFTrDA)	ND	ppt	2	1.9	6.2	MS
perfluorotetradecanoic acid (PFTA)	ND	ppt	2	1.8	5.6	MS
C13-PFHxA (SURR)	75.478%		2			S
C13-PFDA (SURR)	34.53%		2			SR S

**NOTES APPLICABLE TO THIS ANALYSIS:**

S = This compound is a surrogate used to evaluate the quality control of a method.  
 HX = A dilution was required due to complex sample matrix.  
 IV = Initial extract is 120 mL.  
 SR = Surrogate recovery was outside QC limits.  
 C13-PFDA recovered below QC limits.  
 MS = Matrix spike recovery was outside QC limits.  
 perfluorodecanoic acid (PFDA) recovered below QC limits.  
 perfluorododecanoic acid (PFDoA) recovered below QC limits.  
 perfluorotetradecanoic acid (PFTA) recovered below QC limits.  
 perfluorotridecanoic acid (PFTrDA) recovered below QC limits.  
 perfluoroundecanoic acid (PFUnA) recovered below QC limits.



**ANALYTICAL RESULTS: Perfluorinated Chemicals by EPA 537 Rev 1.1 Safe Drinking Water Analysis**

**Customer: Marinette Wastewater Utility NLS Project: 302949**

**Project Description: Collection System Investigation**

**Project Title: Template: 537PPT2 Printed: 07/18/2018 15:59**

Sample: 1065597 MH433 Collected: 07/09/18 Analyzed: 07/12/18 - Analytes: 12

Notes: HX

ANALYTE NAME	RESULT	UNITS WWB	DIL	LOD	LOQ	Note
perfluorobutanesulfonic acid (PFBS)	27.1	ppt	2	7.1	23	
perfluorohexanoic acid (PFHxA)	46.8	ppt	2	1.7	5.3	
perfluoroheptanoic acid (PFHpA)	17.1	ppt	2	0.90	2.9	
perfluorohexanesulfonic acid (PFHxS)	62.4	ppt	2	2.6	8.3	
perfluorooctanoic acid (PFOA)	38.2	ppt	2	1.4	4.4	
perfluorononanoic acid (PFNA)	42.3	ppt	2	2.6	8.2	
perfluorooctanesulfonic acid (PFOS)	211	ppt	2	2.9	9.3	
perfluorodecanoic acid (PFDA)	ND	ppt	2	2.4	7.7	
perfluoroundecanoic acid (PFUnA)	[3.12]	ppt	2	2.3	7.4	J
perfluorododecanoic acid (PFDoA)	ND	ppt	2	1.9	6.0	
perfluorotridecanoic acid (PFTrDA)	ND	ppt	2	1.9	6.2	
perfluorotetradecanoic acid (PFTA)	ND	ppt	2	1.8	5.6	
C13-PFHxA (SURR)	87.99%		2			S
C13-PFDA (SURR)	61.566%		2			SR S

**NOTES APPLICABLE TO THIS ANALYSIS:**

J = Result enclosed in brackets is between LOD and LOQ, a region of less certain quantitation.

S = This compound is a surrogate used to evaluate the quality control of a method.

HX = A dilution was required due to complex sample matrix.

IV = Initial extract is 120 mL.

SR = Surrogate recovery was outside QC limits.

C13-PFDA recovered below QC limits.

Sample: 1065598 MH700A Collected: 07/09/18 Analyzed: 07/13/18 - Analytes: 12

Notes: HX

ANALYTE NAME	RESULT	UNITS WWB	DIL	LOD	LOQ	Note
perfluorobutanesulfonic acid (PFBS)	ND	ppt	2	7.1	23	
perfluorohexanoic acid (PFHxA)	9.07	ppt	2	1.7	5.3	
perfluoroheptanoic acid (PFHpA)	6.09	ppt	2	0.90	2.9	
perfluorohexanesulfonic acid (PFHxS)	ND	ppt	2	2.6	8.3	
perfluorooctanoic acid (PFOA)	10.3	ppt	2	1.4	4.4	
perfluorononanoic acid (PFNA)	ND	ppt	2	2.6	8.2	
perfluorooctanesulfonic acid (PFOS)	ND	ppt	2	2.9	9.3	
perfluorodecanoic acid (PFDA)	ND	ppt	2	2.4	7.7	
perfluoroundecanoic acid (PFUnA)	ND	ppt	2	2.3	7.4	
perfluorododecanoic acid (PFDoA)	ND	ppt	2	1.9	6.0	
perfluorotridecanoic acid (PFTrDA)	ND	ppt	2	1.9	6.2	
perfluorotetradecanoic acid (PFTA)	ND	ppt	2	1.8	5.6	
C13-PFHxA (SURR)	67.911%		2			SR S
C13-PFDA (SURR)	31.012%		2			SR S

**NOTES APPLICABLE TO THIS ANALYSIS:**

S = This compound is a surrogate used to evaluate the quality control of a method.

HX = A dilution was required due to complex sample matrix.

IV = Initial extract is 120 mL.

SR = Surrogate recovery was outside QC limits.

C13-PFDA recovered below QC limits.

C13-PFHxA recovered below QC limits.

**ANALYTICAL RESULTS: Perfluorinated Chemicals by EPA 537 Rev 1.1 Safe Drinking Water Analysis**

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**Customer: Marinette Wastewater Utility NLS Project: 302949****Project Description: Collection System Investigation****Project Title: Template: 537PPT2 Printed: 07/18/2018 15:59**

Sample: 1065599 MH001A Collected: 07/09/18 Analyzed: 07/12/18 - Analytes: 12

Notes: HX

ANALYTE NAME	RESULT	UNITS WWB	DIL	LOD	LOQ	Note
perfluorobutanesulfonic acid (PFBS)	ND	ppt	2	7.1	23	
perfluorohexanoic acid (PFHxA)	334	ppt	2	1.7	5.3	
perfluoroheptanoic acid (PFHpA)	204	ppt	2	0.90	2.9	
perfluorohexanesulfonic acid (PFHxS)	ND	ppt	2	2.6	8.3	
perfluorooctanoic acid (PFOA)	178	ppt	2	1.4	4.4	
perfluorononanoic acid (PFNA)	14	ppt	2	2.6	8.2	
perfluorooctanesulfonic acid (PFOS)	ND	ppt	2	2.9	9.3	
perfluorodecanoic acid (PFDA)	[2.84]	ppt	2	2.4	7.7	J
perfluoroundecanoic acid (PFUnA)	ND	ppt	2	2.3	7.4	
perfluorododecanoic acid (PFDoA)	ND	ppt	2	1.9	6.0	
perfluorotridecanoic acid (PFTrDA)	ND	ppt	2	1.9	6.2	
perfluorotetradecanoic acid (PFTA)	ND	ppt	2	1.8	5.6	
C13-PFHxA (SURR)	95.632%		2			S
C13-PFDA (SURR)	74.471%		2			S

**NOTES APPLICABLE TO THIS ANALYSIS:**

J = Result enclosed in brackets is between LOD and LOQ, a region of less certain quantitation.

S = This compound is a surrogate used to evaluate the quality control of a method.

HX = A dilution was required due to complex sample matrix.

IV = Initial extract is 120 mL.

The PFOA branch isotope peak is included in the PFOA calculation per EPA directive.

# SAMPLE COLLECTION AND CHAIN OF CUSTODY RECORD

# NORTHERN LAKE SERVICE, INC.

Analytical Laboratory and Environmental Services

400 North Lake Avenue • Crandon, WI 54520-1298

Tel: (715) 478-2777 • Fax: (715) 478-3060

CLIENT <i>Marquette WWTP</i>	
ADDRESS <i>1603 Ely Street</i>	
CITY <i>Marquette</i>	STATE <i>WI</i>
ZIP <i>54143</i>	
PROJECT DESCRIPTION / NO.	QUOTATION NO.
DNR FID # <i>Collection Sys. Investigation</i>	DNR LICENSE #
CONTACT	PHONE <i>715-923-0760</i>
PURCHASE ORDER NO.	FAX

Wisconsin DNR cert ID  
721026460 (Cran) / 268533760 (Wauk)  
Wisconsin DATCP ID  
105-000330 (Cran) / 105-000479 (Wauk)

MATRIX:  
SW = surface water  
WW = waste water  
GW = groundwater  
DW = drinking water  
TIS = tissue  
AIR = air  
SOIL = soil  
SED = sediment  
PROD = product  
SL = sludge  
OTHER

USE BOXES BELOW: Indicate Y or N if GW Sample is field filtered.  
Indicate G or C if WW Sample is Grab or Composite.

ANALYZE PER ORDER OF ANALYSIS	PARAMETER									



ITEM NO.	NLS LAB. NO.	SAMPLE ID	COLLECTION		MATRIX (See above)	ANALYZE PER ORDER OF ANALYSIS										COLLECTION REMARKS (i.e. DNR Well ID #)			
			DATE	TIME															
1.	<i>1065545</i>	<i>MH 428</i>	<i>7-9-18</i>	<i>1423</i>	<i>WW</i>	<i>X</i>	<i>G</i>												
2.	<i>546</i>	<i>MH 346A</i>	<i>7-9-18</i>	<i>1433</i>	<i>WW</i>	<i>X</i>	<i>G</i>												
3.	<i>547</i>	<i>MH 433</i>	<i>7-9-18</i>	<i>1441</i>	<i>WW</i>	<i>X</i>	<i>G</i>												
4.	<i>548</i>	<i>MH 700A</i>	<i>7-9-18</i>	<i>1455</i>	<i>WW</i>	<i>X</i>	<i>G</i>												
5.	<i>549</i>	<i>MH 001A</i>	<i>7-9-18</i>	<i>1505</i>	<i>WW</i>	<i>X</i>	<i>G</i>												
6.																			
7.																			
8.																			
9.																			
10.																			

COLLECTED BY (signature) <i>Mohd Akbar</i>	CUSTODY SEAL NO. (IF ANY)	DATE/TIME <i>7-9-18 1505</i>	REPORT TO
RELINQUISHED BY (signature)	RECEIVED BY (signature)	DATE/TIME	
DISPATCHED BY (signature) <i>Mohd Akbar</i>	METHOD OF TRANSPORT <i>UPS Ground</i>	DATE/TIME	
RECEIVED AT NLS BY (signature) <i>Karla Bleume</i>	DATE/TIME <i>7-10-18 1015</i>	CONDITION <i>on ice</i>	INVOICE TO
COOLER #	REMARKS & OTHER INFORMATION		
PRESERVATIVE: NP = no preservative S = sulfuric acid	N = nitric acid Z = zinc acetate M = methanol	OH = sodium hydroxide HA = hydrochloric & ascorbic acid H = hydrochloric acid	
WDNR FACILITY NUMBER		E-MAIL ADDRESS	

1. TO MEET REGULATORY REQUIREMENTS, THIS FORM **MUST** BE COMPLETED IN DETAIL AND INCLUDED IN THE COOLER CONTAINING THE SAMPLES DESCRIBED.
2. PLEASE USE ONE LINE PER SAMPLE, **NOT** PER BOTTLE.
3. RETURN THIS FORM WITH SAMPLES - CLIENT MAY KEEP YELLOW COPY.
4. PARTIES COLLECTING SAMPLE, LISTED AS **REPORT TO** AND LISTED AS **INVOICE TO** AGREE TO STANDARD TERMS & CONDITIONS ON REVERSE.

# NORTHERN LAKE SERVICE, INC.

400 NORTH LAKE AVENUE  
CRANDON, WI 54520 (715) 478-2777

## ORDER OF ANALYSIS

RESULTS ORDERED BY:	CHAIN OF CUSTODY RECORD NUMBER:
Gabriel Aschbacher Marinette WWTP LAB 1603 Ely Street Marinette, WI 54143	219494
	QUOTATION NUMBER:
	ANALYZE FOR DISSOLVED OR TOTAL PARAMETERS?
SEND RESULTS TO:	SEND INVOICE TO:
Warren Howard Marinette WWTP LAB 501 Water Street Marinette, WI 54143	Marinette Wastewater Utility 501 Water Street Marinette, WI 54143

Samples on line(s) : 1 through 5 to be analyzed for the parameters below:

Perflourinated Compounds (Method 537)

Special Instructions: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

CLIENT: Marinette Wastewater Utility  
501 Water Street  
Marinette, WI 54143  
715-732-5184  
no FBs needed

SHIP TO: Gabe Aschbacher  
1603 Ely Street  
Marinette, WI 54143  
--

Cust #: 20089  
Order #: 64560  
Ship Date: 07/02/2018  
Type: DW

**Sample ID: Perfluorinated**  
**5 SETS**

EPA 537 -- 2 x 250mL 1.25g Trizma

*A reminder to our public drinking water customers, NLS is fully certified for SDWA coliform testing. If you are interested in a quote for your regular bacteria testing please call our client service department at 715-478-2777*

**PLEASE SUBMIT COMPLETED DNR FORMS WITH SAMPLES.**  
**NLS IS REQUIRED TO SEND RESULTS DIRECTLY TO DNR PER NR809.80(4).**

**Shipped and Completed by: \_\_\_\_\_**

# Sanitary Sewer Manhole Numbers



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Sacramento  
880 Riverside Parkway  
West Sacramento, CA 95605  
Tel: (916)373-5600

TestAmerica Job ID: 320-39756-1  
Client Project/Site: PFAS Analysis

For:  
Marinette WWTP  
1603 Ely Street  
Marinette, Wisconsin 54143

Attn: Gabe Aschbacher



Authorized for release by:  
6/22/2018 8:08:12 AM

Sandie Fredrick, Project Manager II  
(920)261-1660  
[sandie.fredrick@testamericainc.com](mailto:sandie.fredrick@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Definitions/Glossary

Client: Marinette WWTP  
Project/Site: PFAS Analysis

TestAmerica Job ID: 320-39756-1

## Qualifiers

### LCMS

Qualifier	Qualifier Description
J	Reported value was between the limit of detection and the limit of quantitation.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Case Narrative

Client: Marinette WWTP  
Project/Site: PFAS Analysis

TestAmerica Job ID: 320-39756-1

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**Job ID: 320-39756-1**

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**Laboratory: TestAmerica Sacramento**

## Narrative

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### Job Narrative 320-39756-1

#### Comments

No additional comments.

#### Receipt

The sample was received on 5/24/2018 9:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.5° C.

#### LCMS

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

Method(s) SHAKE: Due to absorbency of the matrix, (fiber carpet), sample was weighed out at 1.0 grams instead of 5.0 grams, which deviates from the standard procedure: OF 003 SLUDGE (320-39756-1). The reporting limits (RLs) have been adjusted proportionately. Method code: Shake\_Bath\_14D. Matrix: solid Prep batch 320-226103

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



# Detection Summary

Client: Marinette WWTP  
Project/Site: PFAS Analysis

TestAmerica Job ID: 320-39756-1

**Client Sample ID: OF 003 SLUDGE**

**Lab Sample ID: 320-39756-1**

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid (PFHxA)	290		5.9	1.2	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	3.7	J	5.9	0.86	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	10		5.9	2.5	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	3.2	J	5.9	1.1	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	5.3	J	5.9	0.65	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	14		5.9	1.1	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	7.6		5.9	2.0	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorotridecanoic Acid (PFTriA)	4.4	J	5.9	1.5	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	3.0	J	5.9	1.6	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	30		5.9	0.92	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	210		15	5.9	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Sacramento

# Client Sample Results

Client: Marinette WWTP  
Project/Site: PFAS Analysis

TestAmerica Job ID: 320-39756-1

**Client Sample ID: OF 003 SLUDGE**

**Lab Sample ID: 320-39756-1**

Date Collected: 05/23/18 14:00

Matrix: Solid

Date Received: 05/24/18 09:00

Percent Solids: 3.4

## Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid (PFHxA)	290		5.9	1.2	ug/Kg	☼	05/30/18 03:46	06/19/18 17:04	1
Perfluoroheptanoic acid (PFHpA)	3.7	J	5.9	0.86	ug/Kg	☼	05/30/18 03:46	06/19/18 17:04	1
Perfluorooctanoic acid (PFOA)	10		5.9	2.5	ug/Kg	☼	05/30/18 03:46	06/19/18 17:04	1
Perfluorononanoic acid (PFNA)	3.2	J	5.9	1.1	ug/Kg	☼	05/30/18 03:46	06/19/18 17:04	1
Perfluorodecanoic acid (PFDA)	5.3	J	5.9	0.65	ug/Kg	☼	05/30/18 03:46	06/19/18 17:04	1
Perfluoroundecanoic acid (PFUnA)	14		5.9	1.1	ug/Kg	☼	05/30/18 03:46	06/19/18 17:04	1
Perfluorododecanoic acid (PFDoA)	7.6		5.9	2.0	ug/Kg	☼	05/30/18 03:46	06/19/18 17:04	1
Perfluorotridecanoic Acid (PFTriA)	4.4	J	5.9	1.5	ug/Kg	☼	05/30/18 03:46	06/19/18 17:04	1
Perfluorotetradecanoic acid (PFTeA)	3.0	J	5.9	1.6	ug/Kg	☼	05/30/18 03:46	06/19/18 17:04	1
Perfluorobutanesulfonic acid (PFBS)	<0.74		5.9	0.74	ug/Kg	☼	05/30/18 03:46	06/19/18 17:04	1
Perfluorohexanesulfonic acid (PFHxS)	30		5.9	0.92	ug/Kg	☼	05/30/18 03:46	06/19/18 17:04	1
Perfluorooctanesulfonic acid (PFOS)	210		15	5.9	ug/Kg	☼	05/30/18 03:46	06/19/18 17:04	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	78		25 - 150	05/30/18 03:46	06/19/18 17:04	1
13C4-PFHpA	89		25 - 150	05/30/18 03:46	06/19/18 17:04	1
13C4 PFOA	89		25 - 150	05/30/18 03:46	06/19/18 17:04	1
13C5 PFNA	68		25 - 150	05/30/18 03:46	06/19/18 17:04	1
13C2 PFDA	61		25 - 150	05/30/18 03:46	06/19/18 17:04	1
13C2 PFUnA	75		25 - 150	05/30/18 03:46	06/19/18 17:04	1
13C2 PFDoA	48		25 - 150	05/30/18 03:46	06/19/18 17:04	1
13C2-PFTeDA	28		25 - 150	05/30/18 03:46	06/19/18 17:04	1
13C3-PFBS	83		25 - 150	05/30/18 03:46	06/19/18 17:04	1
18O2 PFHxS	88		25 - 150	05/30/18 03:46	06/19/18 17:04	1
13C4 PFOS	53		25 - 150	05/30/18 03:46	06/19/18 17:04	1

## General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	96.6		0.1	0.1	%			06/01/18 16:04	1
Percent Solids	3.4		0.1	0.1	%			06/01/18 16:04	1

# Isotope Dilution Summary

Client: Marinette WWTP  
Project/Site: PFAS Analysis

TestAmerica Job ID: 320-39756-1

## Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Solid

Prep Type: Total/NA

### Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFHxA (25-150)	PFHpA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)	PFDaA (25-150)	PFTDA (25-150)
320-39756-1	OF 003 SLUDGE	78	89	89	68	61	75	48	28
LCS 320-226103/2-A	Lab Control Sample	83	86	92	87	89	86	75	79
MB 320-226103/1-A	Method Blank	87	89	93	90	91	87	85	78

### Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	3C3-PFB: (25-150)	PFHxS (25-150)	PFOS (25-150)
320-39756-1	OF 003 SLUDGE	83	88	53
LCS 320-226103/2-A	Lab Control Sample	79	86	85
MB 320-226103/1-A	Method Blank	82	91	87

### Surrogate Legend

PFHxA = 13C2 PFHxA  
PFHpA = 13C4-PFHpA  
PFOA = 13C4 PFOA  
PFNA = 13C5 PFNA  
PFDA = 13C2 PFDA  
PFUnA = 13C2 PFUnA  
PFDaA = 13C2 PFDaA  
PFTDA = 13C2-PFTeDA  
13C3-PFBS = 13C3-PFBS  
PFHxS = 18O2 PFHxS  
PFOS = 13C4 PFOS

# QC Sample Results

Client: Marinette WWTP  
Project/Site: PFAS Analysis

TestAmerica Job ID: 320-39756-1

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Lab Sample ID: MB 320-226103/1-A**

**Matrix: Solid**

**Analysis Batch: 229906**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 226103**

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid (PFHxA)	<0.042		0.20	0.042	ug/Kg		05/30/18 03:45	06/19/18 14:51	1
Perfluoroheptanoic acid (PFHpA)	<0.029		0.20	0.029	ug/Kg		05/30/18 03:45	06/19/18 14:51	1
Perfluorooctanoic acid (PFOA)	<0.086		0.20	0.086	ug/Kg		05/30/18 03:45	06/19/18 14:51	1
Perfluorononanoic acid (PFNA)	<0.036		0.20	0.036	ug/Kg		05/30/18 03:45	06/19/18 14:51	1
Perfluorodecanoic acid (PFDA)	<0.022		0.20	0.022	ug/Kg		05/30/18 03:45	06/19/18 14:51	1
Perfluoroundecanoic acid (PFUnA)	<0.036		0.20	0.036	ug/Kg		05/30/18 03:45	06/19/18 14:51	1
Perfluorododecanoic acid (PFDoA)	<0.067		0.20	0.067	ug/Kg		05/30/18 03:45	06/19/18 14:51	1
Perfluorotridecanoic Acid (PFTriA)	<0.051		0.20	0.051	ug/Kg		05/30/18 03:45	06/19/18 14:51	1
Perfluorotetradecanoic acid (PFTeA)	<0.054		0.20	0.054	ug/Kg		05/30/18 03:45	06/19/18 14:51	1
Perfluorobutanesulfonic acid (PFBS)	<0.025		0.20	0.025	ug/Kg		05/30/18 03:45	06/19/18 14:51	1
Perfluorohexanesulfonic acid (PFHxS)	<0.031		0.20	0.031	ug/Kg		05/30/18 03:45	06/19/18 14:51	1
Perfluorooctanesulfonic acid (PFOS)	<0.20		0.50	0.20	ug/Kg		05/30/18 03:45	06/19/18 14:51	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	87		25 - 150	05/30/18 03:45	06/19/18 14:51	1
13C4-PFHpA	89		25 - 150	05/30/18 03:45	06/19/18 14:51	1
13C4 PFOA	93		25 - 150	05/30/18 03:45	06/19/18 14:51	1
13C5 PFNA	90		25 - 150	05/30/18 03:45	06/19/18 14:51	1
13C2 PFDA	91		25 - 150	05/30/18 03:45	06/19/18 14:51	1
13C2 PFUnA	87		25 - 150	05/30/18 03:45	06/19/18 14:51	1
13C2 PFDoA	85		25 - 150	05/30/18 03:45	06/19/18 14:51	1
13C2-PFTeDA	78		25 - 150	05/30/18 03:45	06/19/18 14:51	1
13C3-PFBS	82		25 - 150	05/30/18 03:45	06/19/18 14:51	1
18O2 PFHxS	91		25 - 150	05/30/18 03:45	06/19/18 14:51	1
13C4 PFOS	87		25 - 150	05/30/18 03:45	06/19/18 14:51	1

**Lab Sample ID: LCS 320-226103/2-A**

**Matrix: Solid**

**Analysis Batch: 229906**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 226103**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorohexanoic acid (PFHxA)	2.00	1.78		ug/Kg		89	75 - 125
Perfluoroheptanoic acid (PFHpA)	2.00	1.89		ug/Kg		94	76 - 124
Perfluorooctanoic acid (PFOA)	2.00	1.70		ug/Kg		85	76 - 121
Perfluorononanoic acid (PFNA)	2.00	1.85		ug/Kg		93	74 - 126
Perfluorodecanoic acid (PFDA)	2.00	1.69		ug/Kg		85	74 - 124
Perfluoroundecanoic acid (PFUnA)	2.00	1.80		ug/Kg		90	74 - 114
Perfluorododecanoic acid (PFDoA)	2.00	1.95		ug/Kg		97	75 - 123
Perfluorotridecanoic Acid (PFTriA)	2.00	1.91		ug/Kg		96	43 - 116
Perfluorotetradecanoic acid (PFTeA)	2.00	1.78		ug/Kg		89	22 - 129
Perfluorobutanesulfonic acid (PFBS)	1.77	1.74		ug/Kg		99	73 - 142
Perfluorohexanesulfonic acid (PFHxS)	1.82	1.62		ug/Kg		89	75 - 121
Perfluorooctanesulfonic acid (PFOS)	1.86	1.63		ug/Kg		88	69 - 131

TestAmerica Sacramento

# QC Sample Results

Client: Marinette WWTP  
Project/Site: PFAS Analysis

TestAmerica Job ID: 320-39756-1

<i>Isotope Dilution</i>	<i>LCS</i>	<i>LCS</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>13C2 PFHxA</i>	83		25 - 150
<i>13C4-PFHpA</i>	86		25 - 150
<i>13C4 PFOA</i>	92		25 - 150
<i>13C5 PFNA</i>	87		25 - 150
<i>13C2 PFDA</i>	89		25 - 150
<i>13C2 PFUnA</i>	86		25 - 150
<i>13C2 PFDoA</i>	75		25 - 150
<i>13C2-PFTeDA</i>	79		25 - 150
<i>13C3-PFBS</i>	79		25 - 150
<i>18O2 PFHxS</i>	86		25 - 150
<i>13C4 PFOS</i>	85		25 - 150

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# QC Association Summary

Client: Marinette WWTP  
Project/Site: PFAS Analysis

TestAmerica Job ID: 320-39756-1

## LCMS

### Prep Batch: 226103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-39756-1	OF 003 SLUDGE	Total/NA	Solid	SHAKE	
MB 320-226103/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 320-226103/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

### Analysis Batch: 229906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-39756-1	OF 003 SLUDGE	Total/NA	Solid	537 (modified)	226103
MB 320-226103/1-A	Method Blank	Total/NA	Solid	537 (modified)	226103
LCS 320-226103/2-A	Lab Control Sample	Total/NA	Solid	537 (modified)	226103

## General Chemistry

### Analysis Batch: 226751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-39756-1	OF 003 SLUDGE	Total/NA	Solid	D 2216	



# Lab Chronicle

Client: Marinette WWTP  
Project/Site: PFAS Analysis

TestAmerica Job ID: 320-39756-1

**Client Sample ID: OF 003 SLUDGE**

**Date Collected: 05/23/18 14:00**

**Date Received: 05/24/18 09:00**

**Lab Sample ID: 320-39756-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1			226751	06/01/18 16:04	TCS	TAL SAC

**Client Sample ID: OF 003 SLUDGE**

**Date Collected: 05/23/18 14:00**

**Date Received: 05/24/18 09:00**

**Lab Sample ID: 320-39756-1**

**Matrix: Solid**

**Percent Solids: 3.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.00 g	10.00 mL	226103	05/30/18 03:46	HJA	TAL SAC
Total/NA	Analysis	537 (modified)		1			229906	06/19/18 17:04	D1R	TAL SAC

## Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Accreditation/Certification Summary

Client: Marinette WWTP  
Project/Site: PFAS Analysis

TestAmerica Job ID: 320-39756-1

## Laboratory: TestAmerica Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-020	01-20-21
Arizona	State Program	9	AZ0708	08-11-18
Arkansas DEQ	State Program	6	88-0691	06-17-19
California	State Program	9	2897	01-31-19
Colorado	State Program	8	CA00044	08-31-18
Connecticut	State Program	1	PH-0691	06-30-19
Florida	NELAP	4	E87570	06-30-19
Georgia	State Program	4	N/A	01-28-19
Hawaii	State Program	9	N/A	01-29-19
Illinois	NELAP	5	200060	03-17-19
Kansas	NELAP	7	E-10375	10-31-18
L-A-B	DoD ELAP		L2468	01-20-21
Louisiana	NELAP	6	30612	06-30-19
Maine	State Program	1	CA0004	04-14-20
Michigan	State Program	5	9947	01-31-20
Nevada	State Program	9	CA00044	07-31-18
New Hampshire	NELAP	1	2997	04-18-19
New Jersey	NELAP	2	CA005	06-30-19
New York	NELAP	2	11666	03-31-19
Oregon	NELAP	10	4040	01-29-19
Pennsylvania	NELAP	3	68-01272	03-31-19
Texas	NELAP	6	T104704399	05-31-19
US Fish & Wildlife	Federal		LE148388-0	07-31-18
USDA	Federal		P330-11-00436	01-17-21
USEPA UCMR	Federal	1	CA00044	11-06-18
Utah	NELAP	8	CA00044	02-28-19
Vermont	State Program	1	VT-4040	04-30-19
Virginia	NELAP	3	460278	03-14-19
Washington	State Program	10	C581	05-05-19
West Virginia (DW)	State Program	3	9930C	12-31-18
Wyoming	State Program	8	8TMS-L	01-28-19

## Laboratory: TestAmerica Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-18 *

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

# Method Summary

Client: Marinette WWTP  
Project/Site: PFAS Analysis

TestAmerica Job ID: 320-39756-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
D 2216	Percent Moisture	ASTM	TAL SAC
SHAKE	Shake Extraction with Ultrasonic Bath Extraction	SW846	TAL SAC

**Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600



# Sample Summary

Client: Marinette WWTP  
Project/Site: PFAS Analysis

TestAmerica Job ID: 320-39756-1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-39756-1	OF 003 SLUDGE	Solid	05/23/18 14:00	05/24/18 09:00

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# Login Sample Receipt Checklist

Client: Marinette WWTP

Job Number: 320-39756-1

**Login Number: 39756**  
**List Number: 1**  
**Creator: Nelson, Kym D**

**List Source: TestAmerica Sacramento**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Mr. Conor Neal  
USEPA REGION 5  
77 West Jackson Boulevard  
Mail Code: LU-16J  
Chicago, IL 60604-3507

Arcadis U.S., Inc.  
126 North Jefferson Street  
Suite 400  
Milwaukee  
Wisconsin 53202  
Tel 414 276 7742  
Fax 414 276 7603  
www.arcadis.com

Subject:  
Summary of Groundwater Sampling  
Ansul Inc. Stanton Street Facility, Marinette, Wisconsin  
EPA ID: WID006125215

ENVIRONMENT

Date:  
June 21, 2018

Dear Mr. Neal:

Contact:  
Michael Bedard

On behalf of Tyco Fire Products LP (Tyco), Arcadis US, Inc. (Arcadis) has prepared this *Summary of Groundwater Sampling* for the Ansul Inc. Stanton Street Facility located at 1 Stanton Street, Marinette, Wisconsin (Site). The sampling focused on analysis for potential per- and polyfluoroalkyl substances (PFAS) including perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) in groundwater. The samples were collected in accordance with the *PFAS Sampling Procedures and Low-flow Groundwater Purging for Monitoring Wells and Treatment System Influent* document prepared by Arcadis (Revision #0, March 1, 2018).

Phone:  
267.685.1821

Email:  
[michael.bedard@arcadis.com](mailto:michael.bedard@arcadis.com)

Our ref:  
WI001651.0001

On April 30 and May 1, 2018, Arcadis collected groundwater samples for PFAS analyses from 7 existing monitoring wells. The monitoring wells included six shallow wells (10-25 feet deep) and one intermediate well (approximately 30 feet deep). Additionally, one sample was collected of combined groundwater influent to the existing groundwater treatment system.

Prior to groundwater sampling, a round of water level measurements was collected. Low-flow sampling procedures using a peristaltic pump and dedicated HDPE disposable tubing were used for collection of all groundwater samples. The samples were collected after groundwater parameter measurements, including dissolved oxygen, pH, specific conductivity, and oxidation-reduction potential, stabilized at each well. All samples, including Quality Assurance/Quality Control (QA/QC) samples such as equipment blanks, field duplicates, matrix spike, and matrix spike duplicates, were collected in laboratory-supplied containers and shipped to the laboratory on ice, under

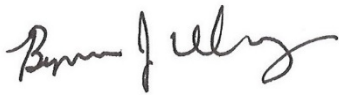
Mr. Conor Neal  
USEPA Region 5  
June 21, 2018

standard chain of custody procedures and screened for the presence of PFAS using the United States Environmental Protection Agency (EPA) Method 537.

A summary of the results is presented in the attached table and figure. A copy of the full Level 4 laboratory report is also included. Please feel free to contact us if you have any questions.

Sincerely,

Arcadis U.S., Inc.



Benjamin J. Verburg, PE  
Principal Engineer



Michael F. Bedard  
Project Lead/Associate Vice President

Copies:

Richard Mator - JCI  
David Neste - WDNR

Enclosures:

**Tables**

- 1 Stanton Street Groundwater Sample Results - June 8, 2018

**Figures**

- 1 Site Map – Proposed PFOA/PFOS Sampling Locations

**Attachments**

- 1 Level 4 Laboratory Analytical Reports



**STANTON STREET GROUNDWATER SAMPLE RESULTS - JUNE 8, 2018**

**NOTE: LEVEL 4 VALIDATION IS COMPLETE. FINAL RESULTS PRESENTED BELOW.**

Location	Sample Date	PFOA	PFOS	EtFOSAA	MeFOSAA	PFBS	PFDA	PFDoA	PFHpA	PFHxS	PFHxA	PFNA	PFTeA	PFTriA	PFUnA
INF-01	5/1/2018	<b>1800 DJ</b>	<b>64 J</b>	< 1.9	< 3.1	<b>3.4</b>	<b>10 J</b>	< 0.55	<b>2000 DJ</b>	<b>19 J</b>	<b>5200 DJ</b>	<b>110 J</b>	< 0.29	< 1.3	< 1.1
INF-01 DUP	5/1/2018	<b>1700 DJ</b>	<b>67 J</b>	< 1.9	< 3.1	<b>3.2</b>	<b>10 J</b>	< 0.55	<b>2100 DJ</b>	<b>19 J</b>	<b>4900 DJ</b>	<b>120 J</b>	< 0.29	< 1.3	< 1.1
MW008M	5/1/2018	<b>3700 DJ</b>	<b>350 J</b>	R	R	<b>14 J</b>	5.8 J	R	<b>2600 DJ</b>	<b>69 J</b>	<b>9400 DJ</b>	<b>210 J</b>	R	R	R
MW008M DUP	5/1/2018	<b>4100 DJ</b>	<b>340 J</b>	R	R	<b>15 J</b>	5.5 J	R	<b>2700 DJ</b>	<b>70 J</b>	<b>9200 DJ</b>	<b>220 J</b>	R	R	R
MW032S	4/30/2018	<b>520 DJ</b>	<b>140 J</b>	< 2.0 J	< 3.3 J	< 0.21 J	<b>61 J</b>	0.75 J	<b>780 DJ</b>	< 2.1 UB	<b>2100 DJ</b>	<b>120 J</b>	< 0.31 J	< 1.4 J	4.3 J
MW041S	5/1/2018	<b>1500 DJ</b>	<b>650 DJ</b>	< 2.2 J	5.5 J	<b>3.0 J</b>	<b>7.1 J</b>	< 0.63 J	<b>1400 DJ</b>	9.3 J	<b>3400 DJ</b>	<b>130 J</b>	< 0.33 J	< 1.5 J	< 1.3 J
MW044S	4/30/2018	<b>1500 DJ</b>	<b>340 J</b>	1.8 J	< 3.0 J	0.98 J	<b>600 DJ</b>	0.65 J	<b>2200 DJ</b>	4.0 J	<b>5300 DJ</b>	<b>770 DJ</b>	< 0.28 J	< 1.3 J	<b>28 J</b>
MW054S	4/30/2018	<b>3800 DJ</b>	<b>210 J</b>	< 2.2 J	< 3.5 J	1.3 J	<b>520 DJ</b>	0.81 J	<b>5200 DJ</b>	7.4 J	<b>8500 DJ</b>	<b>2800 DJ</b>	< 0.33 J	< 1.5 J	<b>31 J</b>
MW054S DUP	4/30/2018	<b>4100 DJ</b>	<b>200 J</b>	< 2.0 J	< 3.3 J	1.4 J	<b>510 DJ</b>	0.92 J	<b>4800 DJ</b>	7.7 J	<b>9100 DJ</b>	<b>2900 DJ</b>	< 0.31 J	< 1.4 J	<b>28 J</b>
MW102S	4/30/2018	<b>130</b>	<b>25</b>	< 1.9	< 3.1	<b>4.2</b>	< 0.31	< 0.56	<b>2100 DJ</b>	3.2	<b>3200 DJ</b>	<b>0.31 J</b>	< 0.29	< 1.3	< 1.1
MW108S	5/1/2018	<b>9100 DJ</b>	<b>530 DJ</b>	R	R	4.3 J	<b>19 J</b>	R	<b>7000 DJ</b>	13	<b>20000 DJ</b>	<b>1200 DJ</b>	R	R	R

**Notes:**

Detections are boldfaced

< = Compound not detected at method detection limit

D = Dilution required for sample analysis

DUP = Field Duplicate

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.

R = The sample results are rejected.

UB = Compound considered non-detect at the listed value due to associated blank contamination.

PFBS = Perfluorobutanesulfonic acid (C4)

PFHpA = Perfluoroheptanoic acid (C7)

PFHxS = Perfluorohexanesulfonic acid (C6)

PFNA = Perfluorononanoic acid (C9)

PFOS = Perfluorooctanesulfonic acid (C8)

PFOA = Perfluorooctanoic acid (C8)

EtFOSAA=ethylperfluorooctane sulfonamido acetate

MeFOSAA = methylperfluorooctane sulfonamido acetate

PFDA = perfluorodecanoic acid (C10)

PFDoA = perfluorododecanoic acid (C12)

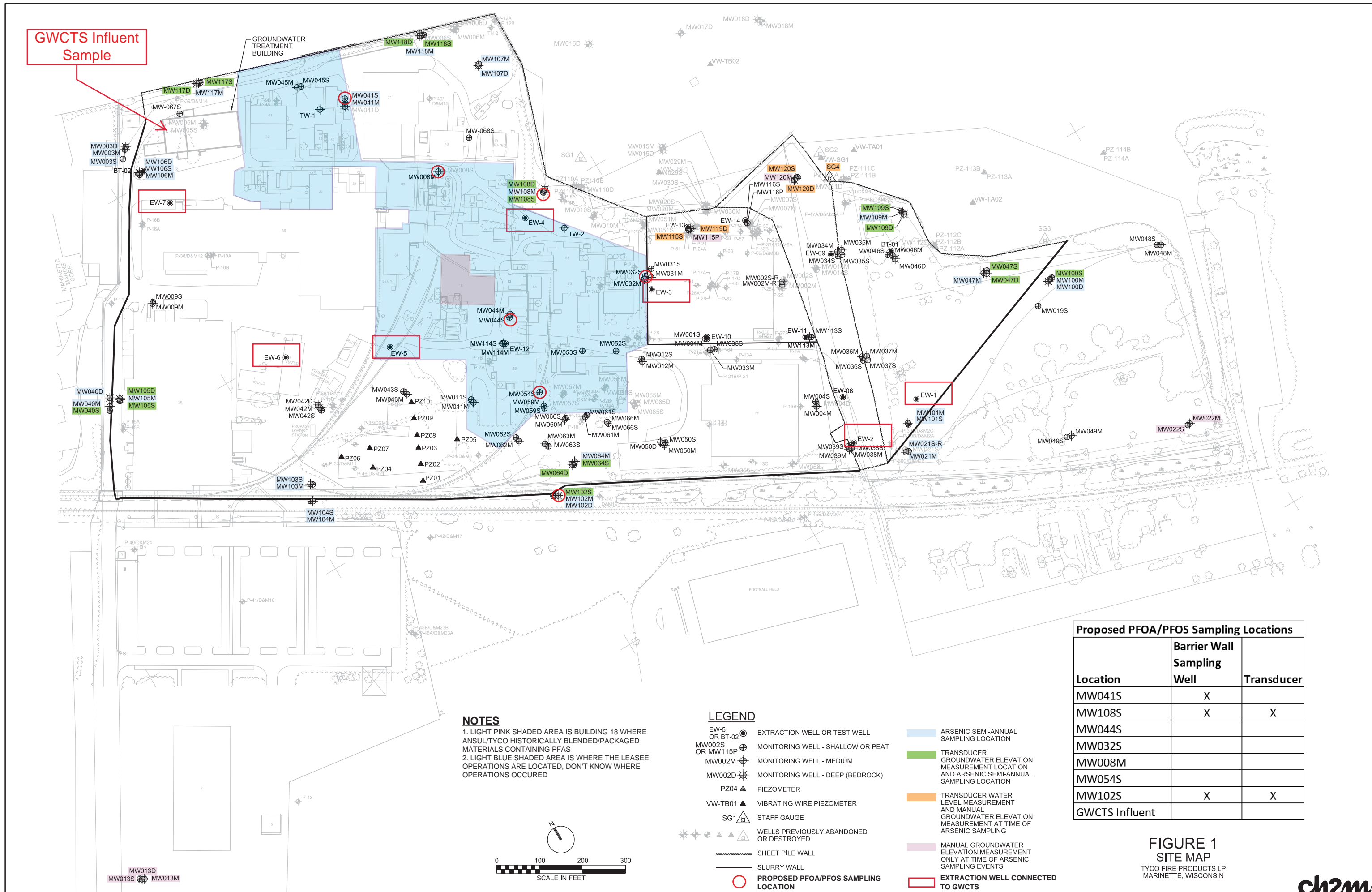
PFHxA = perfluorohexanoic acid (C6)

PFTeA = perfluorotetradecanoic acid (C14)

PFTriA = perfluorotridecanoic acid (C13)

PFUnA = perfluoroundecanoic acid (C11)

Units are in ng/L (nanogram per liter) unless otherwise stated





July 3, 2019

Jeffery Danko  
EHS Manager – Environmental Remediation  
Johnson Controls International, plc  
5757 North Green Bay Avenue  
P.O. Box 591  
Milwaukee, WI 53201

**Subject: Reported Contamination at the City of Marinette Waste Water Treatment Facility and Associated Fields Utilized for Landspreading of Biosolids Sludge; Marinette, WI**  
DNR BRRTS Activity # 02-38-583856

Dear Mr. Danko,

On June 12, 2018, the Wisconsin Department of Natural Resources (“the “department”) was notified by the city of Marinette of per- and polyfluoroalkyl substances (“PFAS”) contamination present in influent wastewater received by the city of Marinette Waste Water Treatment Plant (the “WWTP”). On July 6, 2018, the department was notified again by the city of Marinette of significant levels of PFAS contamination present in biosolids sludge generated by the WWTP for years 2017 and 2018.

The department understands that firefighting foams containing PFAS were discharged onto the ground as a result of regular training and testing exercises at the Fire Training Center (“FTC”) located at 2700 Industrial Parkway South in Marinette, Wisconsin since approximately 1962. The department understands that as of November 2017, Johnson Controls International, plc (“JCI”) has suspended outdoor testing and training sessions utilizing firefighting foams at the FTC.

The department understands through your investigation efforts addressing BRRTS case number 02-38-580694 at the FTC that wastewater disposal practices included the discharge of fire-fighting foams containing PFAS to the sanitary sewer system. The department understands JCI and its predecessor companies provided anti-foaming chemical agents to the WWTP to assist with excessive foaming from its wastewater that disturbed the WWTP operations. These wastewater handling processes were implemented by predecessor companies that are now JCI regarding the disposal of firefighting foams. The department understands this practice of disposal to the sanitary sewer system continued by JCI until approximately March 2019.

The department has data indicating wastewater containing PFAS from the FTC were present in the influent of the WWTP for the years 2017 and 2018. The department understands that PFAS accumulate in biosolid sludges generated by WWTPs. As stated above, the department has data indicating significant levels of PFAS contamination present in the biosolids sludge from the WWTP for the years 2017 and 2018. The department understands that as of September 10, 2018, the City of Marinette suspended all permitting for the spreading of biosolids from the WWTP to any applicators of farm fields.

The department has reviewed maps of farm fields depicting where biosolids sludge from the WWTP has applied in the surrounding Marinette area from at least 1997 to 2017. This map is available on the City of Marinette website (<https://wi-marinette.civicplus.com/371/1996-to-2018-Land-Application-Fields>). The department understands JCI, through its consultant, has requested and obtained biosolids sludge from the WWTP to evaluate safe disposal methodology and reduction of total waste products. The department applauds JCI's collaborative efforts with the city to identify and implement additional wastewater treatment as a long-term solution to improve the WWTP processes.

Therefore, the department requests JCI to expand its evaluation of biosolids sludge to the fields on which they were applied. In the interest of protecting human health, safety, welfare and the environment, the department specifically requests that JCI - as a responsible party for the discharge of PFAS compounds to the WWTP - evaluate the impact of historic landspreading of PFAS-contaminated biosolids sludge onto farm fields sites, including analysis of potentially impact private wells. JCI needs to identify in their evaluation all potential transport pathways and routes of exposure, as required by ch. NR 716, Wis. Admin. Code.

In addition to the evaluation of the WWTP and associated landspreading fields, the department requests JCI expand their testing of surface waters. As there is associated discharge and runoff pathways to the Peshtigo and Menomonie Rivers associated with the WWTP and fields utilized for landspreading, the site investigation work plan must include sampling of the Peshtigo and Menomonie Rivers on a regular schedule until such time that it is determined that PFAS contamination is not an issue in these water bodies, or until the degree and extent of PFAS contamination is defined in the Marinette and Peshtigo area that is associated with JCI and its predecessor companies.

Information submitted to the department regarding this site indicates you are responsible for the discharge of a hazardous substance or other environmental pollution (hereafter referred to as "contamination") at the above-described sites. "Sites" refers to the property where the contamination occurred (WWTP and landspreading fields) and any other property it has migrated to, as defined in Wisconsin Administrative Code ("Wis. Admin. Code") § NR 700.03(56).

This letter explains how to initiate the investigation and cleanup of contamination of the site, and how to access further information and assistance from the department. The longer contamination is left in the environment, the farther it can spread and the more it may cost to clean up. Quick action may lessen damage to your property and neighboring properties and reduce your costs in investigating and cleaning up the contamination.

### **Legal Responsibilities:**

Persons meeting the definition of "responsible party" under Wis. Admin. Code § NR 700.03(51) must follow applicable law to address the discharge of a hazardous substance to the environment or other environmental pollution. Wisconsin Statutes ("Wis. Stats.") ch. 292 and Wis. Admin. Code chs. NR 700 through NR 754 provide specific requirements for undertaking appropriate response actions to address contamination, including requirements for emergency and interim actions, public information, site investigations, remedy selection, design and operation of remedial action systems, and case closure.

### **General Recommendations for Responsible Parties:**

The department recommends that you:

1. *Hire a Qualified Environmental Consultant*

To ensure response actions you plan to undertake comply with Wisconsin law, you should hire an environmental consultant within **30 days**, by August 3, 2019 to meet the regulatory deadlines listed below. A delay in hiring an environmental consultant could result in you missing key submittal deadlines.

Hiring a consulting firm with staff that have the appropriate State of Wisconsin qualifications to supervise and certify the submittals is a critical component and necessary to meet your requirements. Further, an environmental consultant should be knowledgeable of Wisconsin's technical procedures and laws and be able to answer questions regarding cleanup requirements. Required qualifications for environmental consultants are specified in Wis. Admin. Code ch. NR 712. Program guidance is available, see *Wis. Admin. Code ch. NR 712 Qualifications and Certifications, RR-081*.

## 2. *Properly Submit Reports on Time with Required Information Included*

Wisconsin law includes timeframes for submitting technical documents and conducting work, as well as specifications for what should be included in those submittals. This letter provides a general overview of the timeframes and first steps to take for site investigation and cleanup. For an overview of timing requirements, please refer to *NR 700 Process and Timeline Overview, RR-967, enclosed*.

The department developed the publication *Guidance for Electronic Submittals for the Remediation and Redevelopment Program, RR-690*, to assist responsible parties and consultants in properly submitting documents. Wis. Admin. Code § NR 700.11(3g), and other specific provisions within Wis. Admin. Code ch. NR 700, outline the requirements for submittals, including electronic submittals. Consultants and representatives of responsible parties are required to submit one paper copy and one electronic copy of submittals, including case closure documents. The electronic version must be an exact duplicate of the paper version. Failure to submit both a paper copy and electronic copy delays acceptance of your submittals.

## 3. *Consider the Benefits of a Fee-based Technical Review of your Submittals*

In-depth department review of technical reports and submittals is available for a fee. The Remediation and Redevelopment (RR) Program project managers are available throughout the process to answer general questions and provide general input as the site moves toward closure. However, if you want a formal written response from the department, a meeting or both on a specific submittal, a review fee will be required in accordance with Wis. Admin. Code ch. NR 749. **Obtaining technical assistance from department project managers throughout the process is an effective way to prevent problems and delays at the end of the process when case closure is requested.** Forms, a fee schedule, and further information on technical assistance is available at [dnr.wi.gov](http://dnr.wi.gov) and searching "brownfield fees".

### **Required Steps to Take and Documents to Submit:**

The steps listed below serve as a general overview only — all mandatory steps and submittals specified in state law must be met before the department can grant "case closure", which is a determination by the department that no further cleanup is necessary at a site, as defined in Wis. Admin. Code § NR 700.03(3m).

1. **Scoping and Work Plan Submittal – NR 716.07 and 716.09:** The law requires that you appropriately scope out your site investigation and submit a work plan within **60 days of this notification**, by September 3, 2019 for completing a site investigation. The work plan must comply with the requirements in Wis. Admin. Code, chs. NR 700 through NR 754. For additional assistance, the department has extensive guidance on its web page at [dnr.wi.gov](http://dnr.wi.gov) and search "brownfield publications".

Prior to and during a site investigation, you must evaluate whether any interim actions are needed to contain or stabilize a hazardous substance discharge or environmental pollution, pursuant to Wis. Admin. Code § NR

708.11. If you undertake an interim action (e.g., free product removal), you must submit documentation of the action per Wis. Admin. Code § NR 708.15.

As you develop the site investigation work plan, you must include an assessment of the vapor intrusion pathway. Wis. Admin. Code § NR 716.11(5) outlines the requirements for when to evaluate for the presence of vapors in the sub-surface and in indoor air. The results and conclusions from the vapor assessment must be included in the Wis. Admin. Code § NR 716.15 site investigation report whether or not you elected to take vapor samples. *Addressing Vapor Intrusion at Remediation & Redevelopment Sites in Wisconsin, RR-800*, is available to help responsible parties and their consultants comply with these requirements.

2. **Field Investigation – NR 716.11**: Following submission of the work plan, the site investigation must be started within the timeframe provided under law. The timeframe varies depending on whether you are requesting the department’s fee-based review of the work plan. If you do not request a fee-based review of the work plan, you must initiate the field investigation within 90 days of submitting the work plan, and you may proceed with the field investigation upon department notification to proceed; however, if the department has not responded within 30 days, from submittal of the work plan, you may then proceed with the field investigation. If a fee and request for department review of the work plan is submitted, the field investigation must begin within 60 days after receiving department approval.
3. **Sample Results Notification Requirements – NR 716.14**: You must report sampling results to the department, owners, occupants, and various other parties within 10 business days after receiving the sampling results, unless a different timeframe is approved by the department, in accordance with Wis. Admin. Code § NR 716.14.
4. **Site Investigation Report – NR 716.15**: Within 60 days after completion of the field investigation and receipt of the laboratory data, the law requires you to submit a Site Investigation Report (SIR) to the department. As part of the SIR or in the Remedial Actions Options Report (RAOR), if there is soil contamination, the responsible party shall identify the current land use (i.e., industrial or non-industrial) and zoning for the site or facility in accordance with Wis. Admin. Code § NR 720.05(5). Also, as part of the SIR or in the RAOR, you must include any interim action report that may be required under Wis. Admin. Code § NR 708.15.
5. **Remedial Actions Options Report – NR 722**: Within 60 days after submitting the SIR, the law requires you to submit a RAOR. The selected remedy in the RAOR should include an evaluation of green and sustainable remediation criteria, as appropriate, as required by Wis. Admin. Code § NR 722.09(2m). This may be submitted as part of a broader SIR.
6. **Remedial and Interim Action Design, Implementation, Operation, Maintenance and Monitoring Reports – NR 724**: Unless otherwise directed by the department, the responsible party shall submit all plans and reports required in Wis. Admin. Code ch. NR 724.
7. **Notification of Residual Contamination or Continuing Obligations – NR 725**: In situations where notification is required, the responsible party must provide submittal(s) that confirms that continuing obligations have been identified and affected property owners have been notified by the responsible parties 30 days prior to case closure, as required by Wis. Admin. Code ch. NR 725.
8. **Semi-annual Reporting -- NR 700.11**: Wis. Admin. Code § NR 700.11(1)(a) requires responsible parties to submit semi-annual site progress reports to the department until final case closure is granted. The reports summarize the work completed over six months and additional work planned to adequately complete the response action at the site. Consultants may submit these reports on behalf of responsible parties. These

reports are due in January and July of each year. Please refer to department publication *NR 700 Semi-Annual Site Progress Report, RR-082*, for more information.

### Submittals required under Wis. Admin. Code chs. NR 700 - 726

These documents, as applicable, must be submitted to the department prior to the responsible party requesting case closure, unless otherwise directed by the department:

- Ch. NR 708 reports and documentation for any immediate or interim actions.
- Ch. NR 712 professional certifications and signatures are included with applicable submittals.
- Ch. NR 716 work plan(s) and site investigation report.
- Ch. NR 722 remedial action options report (exception is for Dry Cleaners Environmental Response Fund sites), with the selected remedial action identified.
- Ch. NR 724 design, construction documentation, operation, maintenance and monitoring plans and reports, including vapor mitigation commissioning.
- Ch. NR 725 submittal(s) that confirms that continuing obligations have been identified and affected property owners have been notified by the responsible parties 30 days prior to case closure.
- If requesting case closure, the Ch. NR 726 case closure form and documentation substantiating compliance with the NR 700 rule series.
- Ch. NR 749 fees have been paid, as applicable, including closure and database fees.
- Ch. NR 700 semi-annual site progress reports starting six months after notification.

### **Additional Information:**

The department understands JCI is the parent company of Tyco Fire Products, LP (“Tyco”). All submittals by you or your environmental consultant on your behalf are requested to be submitted by or on behalf of JCI or JCI and Tyco. Any submittals received from ‘Tyco’ only will not be accepted. Previous acceptance of Tyco-only submittals does not constitute a waiver of liability for JCI by the department.

The department tracks information on all cleanup sites in a department database available at [dnr.wi.gov](http://dnr.wi.gov) and search “BOTW”. The Bureau for Remediation and Redevelopment Tracking System (BRRTS) identification number for this site is listed at the top of this letter. You may view information related to your site on this database at any time.

As previously noted, you are required to submit one paper copy and one electronic copy of plans and reports. To speed up processing, your correspondence should reference the BRRTS and Facility Identification (FID) numbers (if assigned) listed at the top of this letter.

All correspondence regarding this site should be directed to:

David Neste  
Remediation and Redevelopment Program  
Wisconsin Department of Natural Resources  
625 E. County Road Y, Suite 700  
Oshkosh, WI 54901  
[David.Neste@wisconsin.gov](mailto:David.Neste@wisconsin.gov)

Please visit the department's Remediation and Redevelopment Program website at [dnr.wi.gov](http://dnr.wi.gov) and search "Brownfields", for information on selecting a consultant, seeking financial assistance, and understanding the investigation and cleanup process. Information regarding review fees, liability clarification letters, post-cleanup liability and more is also available.

Information on the NR 700 process and selecting a consultant is enclosed.

If you have questions, please call the Dave Neste at (920) 424-0399 or by email at [david.neste@wisconsin.gov](mailto:david.neste@wisconsin.gov) for more information.

Thank you for your cooperation.

Sincerely,



David Neste  
Hydrogeologist  
Remediation & Redevelopment Program

Enclosures:

1. NR 700 Process and Timeline Overview, RR-967
2. Environmental Contamination Basics, RR-674
3. Selecting a Consultant, RR-502
4. Environmental Services Contractor List, RR-024





September 20, 2019

Mr. Jeffery Danko  
Johnson Controls, Inc.  
5757 North Green Bay Avenue  
Milwaukee, WI 53209

Mr. Scott Wahl  
Tyco Fire Products, LP  
One Stanton Street  
Marinette, WI 54143

Subject: Responsible Party Designation for the Activities Related to BRRTS Nos. 02-38-000011,  
02-38-559214, 02-38-580694, 02-38-581955, 02-38-583856, and 03-38-001345

Dear Mr. Wahl and Mr. Danko:

This letter is to provide clarification regarding the administration of the remediation activities in the area of Marinette, Wisconsin and specify who the department will contact for each respective entity on all future communications. Based on available information, the department does **not** consider **Johnson Controls International, plc** a responsible party for the activities listed below. Based on available information, the responsible parties for the following BRRTS activities and sites associated with the BRRTS activity numbers are **Johnson Controls, Inc.** and **Tyco Fire Products, LP**:

BRRTS No.	FID	Activity Name
02-38-000011	438039470	JCI/TYCO (ANSUL)
02-38-559214	438039470	JCI/TYCO STANTON (VOCS)
02-38-580694	438005590	JCI/TYCO FTC (PFAS)
02-38-581955	438039470	JCI/TYCO STANTON (PFAS)
03-38-001345	438005590	JCI/TYCO FTC (VOCS)
02-38-583856	--	JCI/TYCO (BIOSOLIDS)

Accordingly, with respect to the above sites, the acronym "JCI" shall mean **Johnson Controls, Inc.** and **not Johnson Controls International, plc**. A copy of this letter will be uploaded to each BRRTS entry listed above. For future communication with **Johnson Controls, Inc.** and **Tyco Fire Products, LP**, such as this letter, the department will address the following respective addresses and personnel:

Mr. Jeffery Danko  
Johnson Controls, Inc.  
5757 North Green Bay Avenue  
Milwaukee, WI 53209  
[Jeffery.Howard.Danko@JCI.com](mailto:Jeffery.Howard.Danko@JCI.com)

Mr. Scott Wahl  
Tyco Fire Products, LP  
One Stanton Street  
Marinette, WI 54143  
[Scott.Wahl@JCI.com](mailto:Scott.Wahl@JCI.com)

Sincerely,

Roxanne N. Chronert  
Team Supervisor, Northeast Region  
Remediation and Redevelopment Program

cc: Darsi Foss, DNR  
William Nelson, DNR  
David Neste, DNR



October 16, 2019

Mr. Jeffery Danko  
Johnson Controls, Inc.  
5757 North Green Bay Avenue  
Milwaukee, WI 53209

Mr. Scott Wahl  
Tyco Fire Products, LP  
One Stanton Street  
Marinette, WI 54143

**Subject: Notice of Noncompliance for the Reported Contamination at the City of Marinette Waste Water Treatment Facility and Associated Fields Utilized for Landspreading of Biosolids Sludge; Marinette County, WI**  
DNR BRRTS Activity # 02-38-583856

Dear Mr. Danko and Mr. Wahl:

On July 3, 2019 the Department of Natural Resources (DNR) sent a Responsible Party (RP) letter requiring a site investigation (SI) workplan to address the fields associated with the land spreading of biosolids (the fields) from the City of Marinette Waste Water Treatment Plant. As you know, we have received correspondence from you and recently met with your representatives to discuss our request.

Our letter requested an SI workplan by September 3, 2019, as required by Wis. Admin. Code NR 716.09(1). As of October 15, 2019, the DNR has not received an SI workplan. Given the need to complete an SI, the DNR has developed an outline for a preliminary SI workplan to address the fields, private wells and surface water. Please note that this preliminary SI workplan does not constitute a full SI for the fields and wells but serves as a reasonable starting point for you to initiate the investigation that is already past due. Please be aware that additional site investigation activities may be required to determine to full degree and extent of contamination.

We are hopeful that we can continue a dialog with you and your consultant to commence the work outlined below. Our technical staff is available to meet with you and your consultant to discuss what may be needed to finalize the SI workplan. The DNR expects JCI and Tyco to submit an SI workplan to address the fields by **Friday, November 15, 2019**. If you do not submit an adequate SI workplan to address the fields by this date, the DNR will take direct action under Wis. Stat. §§ 292.31(1)(b) and 292.31(3)(b)1. to implement a SI workplan and evaluate further environmental enforcement actions and cost recovery under Wis. Stat. § 292.31(8).

#### **Preliminary Biosolids SI Workplan Components**

- Develop an SI workplan that complies with the requirements in Wis. Admin. Code, chs. NR 700 through NR 754. See the attached SI Workplan Checklist (form 4400-316) for assistance in developing the SI workplan.

October 16, 2019

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Johnson Controls, Inc. & Tyco Fire Products, LP  
Notice of Noncompliance for of Biosolids Sludge  
DNR BRRTS Activity # 02-38-583856

- The SI workplan must address sampling and investigation plans for a minimum of 15 fields; this includes the fields upon which biosolids were most frequently and recently landspread, according to available records (see Attachment – Fields to be Evaluated in Initial Site Investigation Workplan).
- In accordance with Wis. Admin. Code ch. NR 716, include detailed information for each field investigated. Also include information regarding crop type, crop rotations, and typical crop management practices.
- A plan to sample potable wells and residences on each of the 15 fields and on any parcel within a 1200-ft buffer of each of the fields.
- The SI work plan must include a plan for surface water sampling which may be collected from any standing water in fields, nearby drainage ditches, or intermittent streams within the designated fields.
- For all sampling conducted, provide detailed information regarding the density of sampling for a given field. For example, soil samples were collected at from 0-25 cm depth and 25-50 cm depth; the final SI report will need to include detailed maps and/or graphics illustrating sample locations.
- For all proposed sampling to be conducted, provide a detailed explanation of the procedures and methodology utilized in developing a sampling strategy for determining the degree and extent of PFAS contamination associated with landspreading of PFAS contaminated biosolids. This includes substantiation of the total depth profile selected for all soil sampling to be conducted, substantiation of the total depth profile selected for all groundwater samples to be collected, the lab methods that will be utilized in analysis, and the list of PFAS analytes that will be tested.

This outline is an effort to move this process forward. We expect JCI and Tyco to complete this work and, as noted above, we request you submit an SI workplan to the DNR by November 15, 2019 with associated Wis. Admin. Code NR 749 review fee. Please understand that if you fail to take the actions required by Wis. Stat. § 292.11 to address this contamination, the DNR will move forward under Wis. Stat. § 292.31 to implement the SI workplan and evaluate further environmental enforcement actions and cost recovery under Wis. Stat. § 292.31(8). If you have questions concerning the SI workplan, please do not hesitate to write or call David Neste at 920-424-0399. Thank you for your prompt attention to this matter.

Sincerely,



Roxanne N. Chronert  
Team Supervisor, Northeast Region  
Remediation and Redevelopment Program

Attachments:

1. Fields to be Evaluated in Initial Site Investigation Workplan
2. Site Investigation Work Plan Preparation Checklist Form 4400-316

cc: Darsi Foss, DNR  
William J. Nelson, DNR  
David Neste, DNR  
Linda Benfield, Foley & Lardner

Fields to be Evaluated in Initial Site Investigation Workplan

<b>DNR #</b>	<b>Site #</b>	<b>Field #</b>	<b>Owner</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Municipality</b>
32302	GW	119	A	45.1429389	-87.8609861	LAKE
32712	GW	123	A	45.1373765	-87.8661669	LAKE
38724	MN1	2	B	45.1082152	-87.7883596	PORTERFIELD
38727	NN	5	C	45.175575	-87.8340028	GROVER
38728	NN	3	C	45.175575	-87.8340028	LAKE
46051	MN1	1	B	45.1064861	-87.7913556	GROVER
51051	GW	124	A	45.1394528	-87.87125	LAKE
62081	NN	1	C	45.1447064	-87.8403047	LAKE
77299	SP	1	D	45.1081767	-87.7832009	PORTERFIELD
77300	SP	2	D	45.119033	-87.7931973	PORTERFIELD
77302	SP	5	D	45.1191643	-87.813617	PORTERFIELD
81386	GW	121	A	45.1410128	-87.8558495	PORTERFIELD
81402	GW	120	A	45.1410128	-87.8558495	LAKE
81403	GW	122	A	45.1375	-87.8712608	LAKE
81404	SP	3	D	45.1227443	-87.8084148	PORTERFIELD
89662	NN	2	C	45.1410223	-87.8296914	LAKE

**Wisconsin DNR – NR 700 Process**

**Remediation and Redevelopment Program**

**April 2019**

**Purpose**

This guidance is offered as an optional tool to help develop and review site investigation work plans for compliance with Wis. Admin. Code ch. NR 716 Site Investigation requirements. Consultants may choose to use this checklist as an outline for preparation of the site investigation work plan. Use of this checklist is not required. Rule citations are added for clarity. The checklist is meant for use with Wis. Admin. Code § NR 716.09 and other site investigation related guidance. For more comprehensive site investigation related information, visit our web page at [dnr.wi.gov](http://dnr.wi.gov) and search: "site investigation."

<b>Receipt of Site Investigation Work Plan</b> NR 716.09 (1)		<b>Comments</b>
<input type="checkbox"/> NR 716.09 (1)	Within 60 days of receipt of RP letter, or other notification that a site investigation is required	
<input type="checkbox"/> NR 716.09 (1), NR 700.11 (3g)	One paper copy	
<input type="checkbox"/> NR 716.09 (1), NR 700.11 (3g)	One electronic copy	
<input type="checkbox"/> NR 749	Review fee, if review by DNR is requested	
<b>Purpose</b> NR 716.01		<b>Comments</b>
<input type="checkbox"/> NR 716.01	Proposed investigation will define the nature, degree and extent of contamination	
<input type="checkbox"/> NR 716.01	Proposed investigation will define the source or sources of contamination	
<input type="checkbox"/> NR 716.01	Proposed investigation will determine the need for an interim and/or remedial action	
<input type="checkbox"/> NR 716.01	Proposed investigation will provide information needed to select an interim and/or remedial action	
<b>Contents</b> NR 716.09 (2)		<b>Comments</b>
<input type="checkbox"/> NR 716.09 (2) (a)	Site name and address	
<input type="checkbox"/> NR 716.09 (2) (a)	Site location – ¼ ¼ section, Township, Range, County	
<input type="checkbox"/> NR 716.09 (2) (a)	WTM coordinates	
<input type="checkbox"/> NR 716.09 (2) (b)	RP's name and address (May be more than one RP – current property owner, lessee, operator, other RP.)	
<input type="checkbox"/> NR 716.09 (2) (b)	Consultant or contractor's name and address	
<input type="checkbox"/> NR 716.09 (2) (c)	Site location on a USGS topo map	
<input type="checkbox"/> NR 716.09 (2) (c)	Site layout map(s) with: buildings, roads, discharge location & other relevant site features	
<input type="checkbox"/> NR 716.09 (2) (d)	Scoping of the Investigation:	
<input type="checkbox"/> NR 716.07 (1)	<ul style="list-style-type: none"> <li>History of the site or facility, including land uses that may have one or more associated hazardous substance discharges or environmental pollution, including emerging contaminants such as PFAS</li> </ul>	
<input type="checkbox"/> NR 716.07 (2)	<ul style="list-style-type: none"> <li>Type and amount of contamination, if known</li> </ul>	

## Site Investigation Work Plan Preparation Checklist Wis. Admin. Code § NR 716.07

Form 4400-316 (R 07/19)

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Contents (continue) NR 716.09 (2)	Comments
<input type="checkbox"/> NR 716.07 (3)	• History of previous hazardous substance discharges or environmental pollution
<input type="checkbox"/> NR 716.07 (4)	• Environmental media affected or potentially affected by contamination
<input type="checkbox"/> NR 716.07 (5)	• Location of the site or facility and its proximity to other sources of contamination
<input type="checkbox"/> NR 716.07 (6)	• Need for permission from property owners to allow access to the site or facility and to adjacent or nearby properties
<input type="checkbox"/> NR 716.07 (7)	• Potential or known impacts to receptors, including buildings, utilities or other subsurface improvements, and water supply wells within 1,200 feet of outermost edge of contamination
<input type="checkbox"/> NR 716.07 (8) (a), (b), (c), (d)	• Potential for impacts to sensitive species, habitats or ecosystems, wetlands, resource waters, sites of historical/archaeological significance
<input type="checkbox"/> NR 716.07 (9)	• Potential interim and remedial actions applicable to the contamination
<input type="checkbox"/> NR 716.07 (10)	• Immediate or interim actions taken or in progress, including any evaluations made of whether an interim action is necessary
<input type="checkbox"/> NR 716.07 (11)	• Any other items, including climatological conditions and background water or soil quality info that may affect the scope or conduct of the investigation
<input type="checkbox"/> NR 716.07 (12)	• Need to gather data to determine the hydraulic conductivity of materials where contaminated groundwater is found
<input type="checkbox"/> NR 716.09 (2) (e)	Physiographical and geological setting of the site necessary to choose sampling methods and locations, including:
<input type="checkbox"/> NR 716.09 (2) (e) 1.	• Existing topography, including prominent topographic features
<input type="checkbox"/> NR 716.09 (2) (e) 2.	• Surface water drainage patterns and significant hydrologic features, such as surface waters, springs, drainage basins, divides, wetlands, floodplain or floodway
<input type="checkbox"/> NR 716.09 (2) (e) 3.	• Texture and classification of surficial soils
<input type="checkbox"/> NR 716.09 (2) (e) 4.	• Nature and distribution of geologic materials, including the thickness and type of unconsolidated materials and type and nature of bedrock
<input type="checkbox"/> NR 716.09 (2) (e) 5.	• General hydrogeologic information
<input type="checkbox"/> NR 716.09 (2) (e) 6.	• Potential hazardous substance migration pathways
<input type="checkbox"/> NR 716.09 (2) (f)	Sampling and analysis strategy to be used during the field investigation, including:
<input type="checkbox"/> NR 716.09 (2) (f) 1.	• Description of the investigative techniques to be used to characterize the site or facility
<input type="checkbox"/> NR 716.09 (2) (f) 2.	• Site layout map(s), in planimetric and vertical views, with locations from which samples of environmental media will be obtained or a description of the strategy to be used for determining sample locations

## Site Investigation Work Plan Preparation Checklist Wis. Admin. Code § NR 716.07

Form 4400-316 (R 07/19)

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Contents (continue) NR 716.09 (2)	Comments
<input type="checkbox"/> NR 716.09 (2) (f) 3.	• Description of sampling methods to be used, including methods for collecting, preserving, and delivering samples and leak detection methods (for vapor sampling)
<input type="checkbox"/> NR 716.09 (2) (f) 4.	• List of the parameters for which samples will be analyzed, analytical methods to be used including method detection limits
<input type="checkbox"/> NR 716.09 (2) (f) 5.	• Description of quality control and quality assurance procedures to be used per sampling method, including the items listed in NR 716.13
<input type="checkbox"/> NR 716.09 (2) (f) 6.	• Description of procedures to prevent cross-contamination between samples
<input type="checkbox"/> NR 716.09 (2) (f) 7.	• Description of the type of investigative wastes that will be generated during the site investigation and how they will be collected, stored, transported, treated or disposed
<input type="checkbox"/> NR 716.09 (2) (f) 8.	• Discussion of how the sampling and analysis results will be related to previous investigations at the site or facility and how the results will be used to determine the degree and extent of contamination and the selection of a remedial action, including natural attenuation, where appropriate
<input type="checkbox"/> NR 716.09 (2) (g)	Description of other procedures to be used for site management, including erosion control and repair of structural, soil or ground disturbance
<input type="checkbox"/> NR 716.09 (2) (h)	Schedule for conducting the field investigation and reporting the results to the DNR
<input type="checkbox"/> NR 712	Certification of professional(s) that will conduct or supervise the work necessary to obtain data, develop conclusions and recommendations, and prepare the site investigation submittal, per Wis. Admin. Code NR 712

This document is intended solely as guidance and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. This guidance does not establish or affect legal rights or obligations and is not finally determinative of any of the issues addressed. This guidance does not create any rights enforceable by any party in litigation with the State of Wisconsin or the Department of Natural Resources. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.

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