



February 19, 2020

Mr. Jeff 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: Direction to Expand Site Investigation Including Potable Well Sampling
Submit Site Investigation Schedule by March 2, 2020
Fire Technology Center, 2700 Industrial Parkway, Marinette, Wisconsin
DNR BRRTS # 02-38-580694

Dear Mr. Danko & Mr. Wahl:

This communication provides site investigation direction following the two meetings held between representatives of the Wisconsin Department of Natural Resources (DNR), Johnson Controls, Inc. (JCI), and Tyco Fire Products, LP (Tyco) on January 23, 2020 and February 7, 2020. At the January 23 meeting, DNR outlined specific requirements (e.g. an action items list) and a proposed schedule of future submittals for administration of an open remedial action site under Wis. Admin. Code chs. NR 700 to 754. At the February 7 meeting, JCI and Tyco presented site investigation information to DNR with the goal of geographically defining the area of groundwater impacted by per- and polyfluoroalkyl substances (PFAS).

Following these meetings, DNR, JCI, and Tyco are poised to make considerable progress to improve communication and expectations of sampling submittal requirements for various media. However, additional actions are necessary to address compliance issues with the site investigation. On January 23, DNR outlined additional activities necessary for completion of the site investigation for the Fire Technology Center site, located at 2700 Industrial Parkway, Marinette (FTC). On January 31, JCI and Tyco submitted an incomplete response to DNR's action items list. In response to the omission of requested work products from the action items list, DNR requests a **schedule inclusive of all open site investigation activities at the FTC, including the items directed by DNR in this letter, to be submitted to DNR by Monday, March 2, 2020**. If the following actions are not included in the schedule, DNR will consider the failure to address these items as on-going non-compliance of remedial action site investigation requirements.

DNR's comments and response to the information presented by JCI and Tyco at the above-mentioned meetings are included in the discussion below. Most significantly, DNR directs JCI and Tyco to **expand the current site investigation area** (herein "study area") and includes a requirement to **sample potable wells within a larger geographic area** around the FTC. The expanded study area where DNR is directing JCI and Tyco to evaluate potentially affected wells is found on the attached figure titled *Expanded Site Investigation Area – JCI/Tyco Fire Technology Center (BRRTS # 02-38-580694)*. In addition, DNR directs JCI and Tyco to investigate, evaluate and rule out the remaining potential exposure pathways in the study area and to define the degree and extent of the PFAS contamination from the FTC within the study area identified on the attached figure.

JCI and Tyco Proposed Schedule of Meetings and Written Communications

On January 31, JCI and Tyco proposed a frequency of future meetings and schedule of written communications, as follows:

- Weekly conference calls with DNR, and JCI and Tyco staff. Additional calls or meetings may be conducted on an as-needed basis to address specific issues;
- Conduct project specific face-to-face status update meetings on a quarterly basis;
- Conduct semi-annual face-to-face summit meeting including JCI and Tyco, and DNR leadership;
- Quarterly submittal of a brief status report that summarizes activities completed, data collected, issues and corrective actions, and JCI-Tyco-DNR correspondence for the quarter, as well as planned activities for the upcoming quarter;
- Schedule of planned site investigation activities and submittals, in Gantt chart format, to be updated on a monthly basis to reflect current activities.

The DNR agrees to all the above proposed meetings, except for weekly conference calls, at this time. Until DNR receives a schedule with the required site investigation activities included, DNR suspends all standing weekly calls, effective immediately. DNR may resume weekly project meetings following the submission of a schedule with all contemplated site investigation actions by JCI and Tyco. As stated previously, **DNR requests the submittal of this schedule to DNR by March 2, 2020**. In addition to the meetings listed above, DNR will meet with JCI and Tyco following receipt of a Wis. Admin. Code chs. NR 700-754 submittal and accompanying Wis. Admin. Code ch. NR 749 review fee.

Site Investigation Activities

The DNR is requiring JCI and Tyco undertake the following site investigation actions by the specified date:

- Sample wells in the study area which are affected or potentially affected by PFAS contamination from the FTC. The study area is expanded as directed by DNR and is depicted on the attached figure titled *Expanded Site Investigation Area – JCI/Tyco Fire Technology Center (BRRTs # 02-38-580694)*. Wis. Admin. Code §§ NR 716.13(16)(a) and (b). Begin field investigation and sampling by April 1, 2020.
- Concurrent with the field investigation, submit a site investigation work plan per Wis. Admin. Code § NR 716.09(1) including a well survey, identifying proposed sampling locations within the study area identified on the attached figure prior to April 1, 2020.
- Submit an updated long-term potable well sampling plan (Sampling Plan) for the study area. Wis. Admin. Code § NR 716.17(1). Submit a Sampling Plan semi-annually on April 1 and October 1 of each year; therefore, the first plan is due April 1, 2020. A semi-annual Sampling Plan is necessary for the DNR to understand the study area activities where wells will be sampled as depicted in maps and figures, the frequency of sampling events for all wells within the study area, the process for including and excluding wells with PFAS below detection limits, and other requirements determined by DNR.

- Submit a surface water pathway site investigation work plan within 60 days of receipt of this letter, by Monday, April 20, 2020. Wis. Admin. Code § NR 716.09(1).
- Submit a storm water pathway site investigation work plan within 60 days of receipt of this letter, by Monday, April 20, 2020. Wis. Admin. Code § NR 716.09(1).
- Submit an air pathway site investigation work plan within 60 days of receipt of this letter, by Monday, April 20, 2020. Wis. Admin. Code § NR 716.09(1).
- Submit a site investigation report of the site investigation activities to date presented at the meetings in January and February by Monday, April 20, 2020 per Wis. Admin. Code § NR 716.15.

Additional Requirements

Please find additional requirements outlined at the January 23, 2020 meeting which JCI and Tyco expressed agreement on fulfilling for future reports and data:

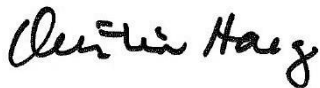
- Submit data within 10 days of receipt and comply with the notification requirements to DNR and affected property owners per Wis. Admin. Code §§ NR 716.14(1) and (2).
 - For potable well monitoring data: provide data electronically (via Equis database) twice a month as well as in a PDF report to DNR that identifies any wells with results exceeding 20 ppt for PFOA and PFOS (combined or individually) and an analysis of the cause and significance of PFAS found in sample results per Wis. Admin. Code § NR 716.14(1) and (2).
- For all other site investigation data, establish an end date for the end of each quarterly monitoring event and submit compiled results and maps to the DNR 10 days after the established end date per Wis. Admin. Code § NR 716.14(3).
 - Provide data electronically (submittal of via Equis database) in addition to a PDF report to DNR, with an analysis of the cause and significance of PFAS found in sample results per Wis. Admin. Code §§ NR 716.14(1) and (2).
- For all future sampling, ensure all sample data is provided in an Electronic Data Deliverable (EDD) format at Level 4 per Wis. Admin. Code § NR 716.17(1). This action is substantively the same as the commitment to provide data electronically via submittal of Equis database. Detailed and uniformly presented sampling data is necessary to fully understand and compare the data in aggregate.
- For all future sampling and data submittals, test for 36 PFAS analytes and specify the analytes by media in a quality assurance project plan (QAPP), discussed below per Wis. Admin. Code § NR 716.17(1). The site investigation warrants evaluation of additional PFAS analytes, given the volume of different chemical formulations of PFAS-containing products that were discharged to the environment over time from the FTC.
- Submit a comprehensive alternative water management plan (Alternative Water Plan) per Wis. Admin. Code § NR 716.17(1). Include a decision matrix on what interim action(s) will be conducted to provide safe drinking water to well owners affected by PFAS contamination. The Alternate Water Plan is necessary to understand short, medium and long-term interim actions JCI and Tyco are providing to a well owner affected by PFAS contamination from the FTC. Submit this plan by March 15, 2020.

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Mr. Jeff Danko & Mr. Scott Wahl
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- Submit a QAPP per Wis. Admin. Code § NR 716.17(1). A QAPP is necessary due to the various open site investigations and the need for uniformity, where possible, in sampling procedures and methods. Submit this QAPP by April 15, 2020.
- Consider the advice found in guidance documents RR967 and RR690 (attached). Use Technical Assistance Form 4400-249, and ensure submittals are accompanied by applicable fees, per Wis. Admin. Code ch. NR 749.

Your cooperation in this matter is appreciated. If you have any questions regarding the content of this letter, please contact me at (608) 266-0244 or by email at christine.haag@wisconsin.gov.

Sincerely,



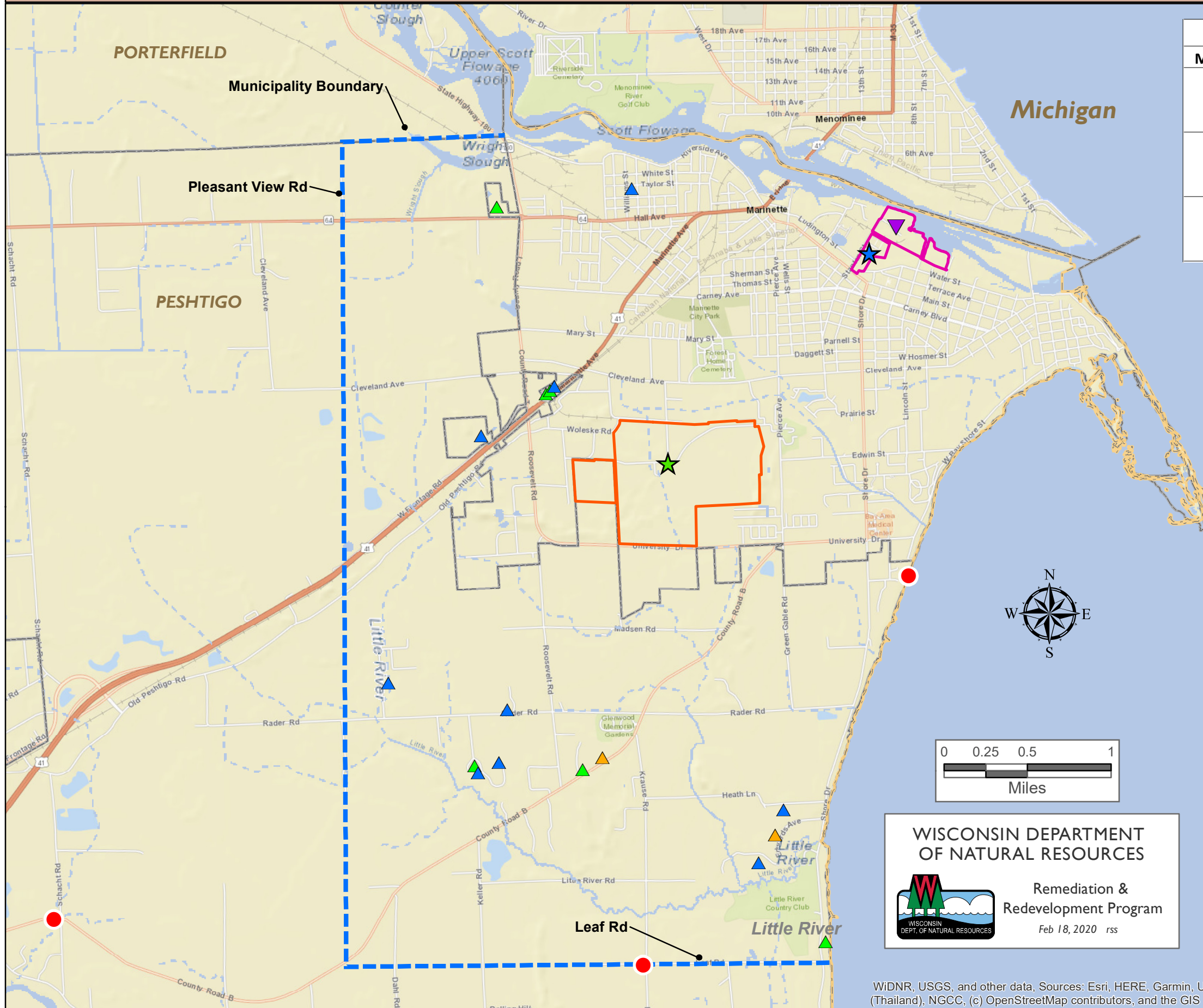
Christine Haag, Director
Remediation & Redevelopment Program

Att. Expanded Site Investigation Area – JCI/Tyco Fire Technology Center (BRRTs # 02-38-580694), 2/19/2020

Encl. NR700 Process & Timeline Overview, [RR-967](#)
Guidance for Submitting Documents, [RR-690](#)

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EXPANDED SITE INVESTIGATION AREA¹ - JCI/TYCO FIRE TECHNOLOGY CENTER (BRRTS #: 02-38-580694)



LEGEND		
Map Symbol	Facility/Site Name - Address	BRRTS Case
★	JCI/Tyco 1 Stanton St Marinette, WI	JCI/Tyco Stanton (PFAS) Case No. 02-38-581955
★	JCI/Tyco Fire Training Center 2700 Indsutiral Parkway Marinette, WI	JCI/Tyco FTC (PFAS) Case No. 02-38-580694
▼	ChemDesign 2 Stanton St Marinette, WI	ChemDesign (PFAS) Case No. 02-38-583852

LEGEND

- Reported Foam Sightings
- Expanded Site Investigation Area¹
- ▭ JCI/Tyco FTC Property Boundary
- ▭ JCI/Tyco Stanton St Property Boundary
- ▭ County Boundary
- ▭ Municipality Boundary

DNR/PRIVATE WELL OWNER SAMPLING DATA²

- ▲ ND PFOS/PFOA
- ▲ 0 - 20 ppt PFOS/PFOA
- ▲ 20 - 70 ppt PFOS/PFOA


WISCONSIN DEPARTMENT OF NATURAL RESOURCES
 Remediation & Redevelopment Program
 Feb 18, 2020 rss

¹DNR instructed JCI and Tyco to expand the site investigation area at the Fire Technology Center in a letter dated February 19, 2020.

²Private well data submitted to DNR. Sample results were submitted by private well owners, City of Marinette, and DNR's contractor.

The data shown on this map have been obtained from various sources, and are of varying age, reliability and resolution. This map is not intended to be used for navigation, nor is this map an authoritative source of information about legal land ownership or public access. Users of this map should confirm the ownership of land through other means in order to avoid trespassing. No warranty, expressed or implied, is made regarding accuracy, applicability for a particular use, completeness, or legality of the information depicted on this map.

WisDNR, USGS, and other data. Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community