



November 18, 2022

MS. DENICE NELSON
JOHNSON CONTROLS, INC
5757 N. GREEN BAY AVENUE
MILWAUKEE, WI 53209

Via Email Only to denice.karen.nelson@jci.com

SUBJECT: Response to 6th Revised Long-Term Potable Well Sampling Plan
JCI/Tyco FTC PFAS, 2700 Industrial Parkway South, Marinette, WI
BRRTS #02-38-580694

Dear Ms. Nelson:

On October 3, 2022, the Wisconsin Department of Natural Resources (DNR) received the sixth *Revised Long-Term Potable Well Sampling Plan* (Sampling Plan v.6) for the above-referenced site (the “Site”). The report was submitted by Arcadis U.S., Inc. (Arcadis) on behalf of Johnson Controls, Inc. and Tyco Fire Products LP (JCI/Tyco) and was accompanied by the appropriate fee required under Wisconsin Administrative Code (Wis. Admin. Code) § NR 749.04(1) for formal DNR review and response.

The DNR reviewed Sampling Plan v.6, and this response letter summarizes the DNR’s comments leading up to this current version of the Sampling Plan and provides recommendations for how to streamline future updates to the Sampling Plan.

Background

JCI/Tyco is investigating and responding to the discharge of per- and polyfluoroalkyl substances (PFAS) to the environment at the JCI/Tyco Fire Technology Center (FTC), located at 2700 Industrial Parkway South in Marinette, Wisconsin. Data collected to date by JCI/Tyco indicates PFAS contaminants have migrated from the FTC property and impacted drinking water wells and other media in the area. JCI/Tyco’s site investigation to define the degree and extent of contamination is on-going. As part of the field investigation, JCI/Tyco is required to sample known and potentially impacted water supply wells per Wis. Admin. Code § NR 716.13(16).

JCI/Tyco has sampled 173 drinking water wells in an area JCI/Tyco refers to as the potable well sampling area (PWSA). JCI/Tyco offers bottled water to all residents in the PWSA (Wis. Admin. Code § NR 708.05(4)(f)). JCI/Tyco also offered point of entry treatment (POET) systems to residents whose drinking water had perfluorooctanesulfonic acid (PFOS) or perfluorooctanoic acid (PFOA) detected above the laboratory reporting limit; JCI/Tyco currently maintains POET systems on 46 properties in the PWSA.

JCI/Tyco’s Sampling Plan for the PWSA – a plan that summarizes the testing program for private wells and the testing and maintenance program of POET systems – is updated periodically so that it stays current (Wis. Admin. Code § NR 716.17(1)). The DNR has reviewed and responded to each of the prior versions of the Sampling Plan. The DNR’s comments on prior versions are summarized below, and copies of the complete review and comments are posted to the Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web.

Summary of Comments Provided by the DNR on Previous Versions of the Sampling Plan

Ver.	Sampling Plan Date ⁽¹⁾	DNR Comment Date ⁽¹⁾	Overview of Comments
1	3/9/2018, 4/24/2018	3/30/2018	<ul style="list-style-type: none"> ▪ Include a plan to provide the owners/occupants with results within 10 business days of receiving laboratory data.
2	4/10/2020	11/16/2020	<ul style="list-style-type: none"> ▪ Summarize the sampling schedule in a table and provide rationale. ▪ Identify which wells have POETs. ▪ Include Cycle 10 and 11 recommendations in the notifications to residents.
3	3/16/2021	6/18/2021	<ul style="list-style-type: none"> ▪ Incorporate the hazard index (HI) into evaluation of results⁽²⁾. ▪ Continue to sample the POET system’s effluent prior to carbon changeout. ▪ Submit an annual report with the potable well and POET sampling results. ▪ Use results to evaluate if changes are needed to the Sampling Plan⁽²⁾.
4	10/1/2021	12/16/2021	<ul style="list-style-type: none"> ▪ Incorporate private wells in the Expanded Site Investigation Area (ESIA) into the Sampling Plan⁽²⁾.
5	5/19/2022	7/21/2022	<ul style="list-style-type: none"> ▪ Remove Preliminary Remediation Goals from the notifications to residents. ▪ Transition from using the Reporting Limit (RL) to using the Method Detection Limit (MDL) to identify wells where PFAS was detected; update the summary of sampling results accordingly⁽²⁾.

⁽¹⁾ Date document is posted on BRRTS on the Web.

⁽²⁾ Change that JCI/Tyco did not implement to date, but which remain the DNR’s position.

Summary of Sampling Plan v.6

Sampling Plan v.6 is similar to Sampling Plan v.5. Changes that JCI/Tyco made in Sampling Plan v.6 include:

- Addressed the comment to remove Preliminary Remediation Goals from the notification letter template.
- Removed the table that categorized wells with PFAS detections based on the RL.
- Removed well location markers from Figure 1.
- Identified that long-term water options are being advanced for residents in the PWSA, and if a long-term water option is implemented for a home, then there will be changes in the Sampling Plan for that home.
- Clarified that if a long-term water solution is implemented for a home that has a POET system, then JCI/Tyco will stop monitoring and maintenance of the POET system, but will offer the homeowner the option to have POET system removed or to keep and maintain the POET system on their own.

The DNR previously requested that JCI/Tyco transition from using the laboratory RL to the MDL to identify wells where PFAS were detected. JCI/Tyco removed the table that categorized detections based on the RL; however, JCI/Tyco did not replace it with a summary based on the MDL and continued to use the RL as the basis for listing the number of wells with PFAS detections in Section 2.1.

DNR Review

The DNR reviewed Sampling Plan v.6 and the comments provided below are done so with the understanding that (1) the initial sampling for most potable wells in the PWSA is complete and sampling now follows a routine schedule that is based on previous testing results; (2) JCI/Tyco is advancing the site investigation using Wis. Admin. Code ch. NR 141 monitoring wells in and around the PWSA; and (3) long-term water solutions are being explored and advanced for residents in the PWSA, such that some homes may be removed from the Sampling Plan in the future.

The following comments are recommended to streamline future updates to the Sampling Plan. If the following changes (or similar) are addressed in the next version of the Sampling Plan, then the DNR anticipates that future updates to can be limited to simple modifications to the summary tables and figures, rather than a full report.

- Figures: Add figure(s) that identifies each well location and ID and distinguishes if the well has a POET. (Figures 3 - 5 from the August 8, 2022, Potable Well Annual Summary Report, or similar, would suffice.)
- Table 1: Add a column to distinguish if a potable well had PFAS detected over the laboratory MDL, PFAS detected over the recommended standards in Table 3 or PFAS not detected over the laboratory MDL. Add another column to specify the current sampling frequency for the well.
- Section 2: Remove the summary of wells that lists the number of wells below the laboratory RL.
- Section 5: Add text to memorialize that an Annual Summary Report will be submitted to the DNR to document the previous year's testing results for the potable wells and POET systems. *The DNR offers the following comments for JCI/Tyco's consideration on these Annual Summary Reports:*
 - JCI/Tyco can continue to use the Annual Summary Reports to simply document the testing results, as it did in August 2022, if JCI/Tyco refrains from drawing conclusions about the conceptual site model and rather uses the data to evaluate if changes are needed to the Sampling Plan.
 - The DNR continues to request that Figures be updated, at a minimum, to include whether PFAS were detected in a well based on the MDL and, ideally, to also include if PFAS was detected in the well at concentrations over the recommendations listed in Table 3 of the Sampling Plan.

In the future, if changes are needed to the Sampling Plan based on evaluation of the testing data or because of implementation of a long-term drinking water solution, then the figures and tables could be updated accordingly. For example, if potable well or POET is removed from the Sampling Plan because a long-term solution is implemented for that home, then the following updates could be done:

- Figures: Add category and update to show a well/POET system that was removed from Sampling Plan.
- Table 1: Update entry for "Sampling Frequency" and "Next Sampling Event" columns to communicate the date a well was removed from the Sampling Plan and why.
- Table 2: Update entries to communicate the date the POET system was removed from the Sampling Plan and to communicate if the POET system was left in place or removed at the homeowner's request.

Next Steps:

JCI/Tyco should continue to update the Sampling Plan every 6 months (Wis. Admin. Code § NR 716.17(1)). Thus, the next version (Sampling Plan v.7) is due on, or about **April 1, 2023**. The DNR recommends including the changes discussed above in Sampling Plan v.7.

As a reminder, this Site is subject to an enforcement action and therefore all submittals to the DNR under Wis. Admin. Code chs. NR 700-799 and submittals directed by the DNR must be accompanied by an Wis. Admin. Code ch. NR 749 fee per Wis. Stat. § 292.94. These fees are not pro-ratable or refundable per Wis. Admin. Code § NR 749.04(1). If you have any questions about whether to include a fee with a submittal, please contact DNR staff prior to submitting a document without a fee.

If you have any questions about this letter, please contact me, the DNR Project Manager, at (608) 622-8606 or Alyssa.Sellwood@wisconsin.gov.

Sincerely,

A handwritten signature in black ink that reads "Alyssa Sellwood". The signature is written in a cursive style with a large, looped initial "A".

Alyssa Sellwood, PE
Complex Sites Project Manager
Remediation & Redevelopment Program

cc: Jodie Peotter, DNR (via email: Jodie.Peotter@wisconsin.gov)
Kyle Burton, DNR (via email: Kyle.Burton@wisconsin.gov)