



January 10, 2024

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 8th 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 Oct. 2, 2023, the Wisconsin Department of Natural Resources (DNR) received the eighth *Revised Long-Term Potable Well Sampling Plan* (the "Sampling Plan" v.8) 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 fee required under Wisconsin Administrative Code (Wis. Admin. Code) § NR 749.04(1) for formal DNR review and response.

JCI/Tyco should continue to submit the Sampling Plan every 6 months to keep the Sampling Plan up to date. (Wis. Admin. Code § NR 716.17(1)). The updates are anticipated to be primarily to the tables and figures, but the DNR requests that JCI/Tyco also address the few comments provided herein in the next update to the 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).

To date, JCI/Tyco has sampled 173 private water wells in an area JCI/Tyco refers to as the potable well sampling area (PWSA). JCI/Tyco offered bottled water to all residents in the PWSA (Wis. Admin. Code § NR 708.05(4)(f)) and installed point of entry treatment (POET) systems at 47 homes having PFAS detected above the laboratory reporting limit. JCI/Tyco's Sampling Plan describes the monitoring plan for private wells and the monitoring and maintenance plan for POET systems in the PWSA.

In 2022, JCI/Tyco began offering residents in the PWSA the option to replace their existing private drinking water wells with a new deep drinking water well screened in the deep aquifer approximately 500 feet below ground surface ("Replacement Well"). For those residents that opt for a Replacement Well, JCI/Tyco will no longer provide bottled water or maintain a previously installed POET system. These homes with a Replacement Well are moved off the Sampling Plan and onto the monitoring program JCI/Tyco established for the deep wells.

JCI/Tyco updates the Sampling Plan periodically so that the plan is up to date on the details and which wells and POET systems in the PWSA are covered by Sampling Plan (Wis. Admin. Code § NR 716.17(1)).

Previous Versions of Sampling Plan

The DNR 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, Revised on 4/24/2018	3/30/2018	<ul style="list-style-type: none"> ▪ Include other wells and state plan to provide the owners/occupants with results within 10 business days of receiving laboratory data. ▪ Comments addressed in 4/24/2018 revision; no further review.
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⁾
6	10/3/2022	11/18/2022	<ul style="list-style-type: none"> ▪ Identify wells having PFAS detected above the laboratory MDL ▪ Reinstate figures that show the well location and ID ▪ Reinstate figures that distinguish which wells have a POET system ▪ List next sampling event for each well and track if a well/POET was removed from the sampling plan and why (e.g., new deep well).
7	4/3/23	5/31/23	<ul style="list-style-type: none"> ▪ Continue to track next sampling event or document if a well/POET system was removed from the Sampling Plan and why (e.g., new deep well).

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

⁽²⁾ Change not implemented, but which remains the DNR’s position.

DNR Review

The DNR reviewed Sampling Plan v.8 and found that JCI/Tyco addressed the DNR’s comments to the prior version (Sampling Plan v.7), and that the current versions of Tables 1 and 2 and the Figures make clear the status and next steps for each private well and POET system in the PWSA. The DNR has the following comments and questions based on its review of Sampling Plan v.8.

- The DNR agrees with the new criteria that JCI/Tyco proposed in Section 3.2.3, for when to adjust a POET system to the next (more frequent) maintenance schedule.

- The Executive Summary and Section 1 include statements that Replacement Wells will be sampled “to confirm that the drinking water meets drinking water limits that apply to municipal water in Marinette.” Please update to include that the PFAS in the water tested in the Replacement Wells is evaluated against the Wisconsin Department of Health Services (DHS’s) current recommendations for PFAS.
- Section 1 states that bottled water service is discontinued after a Replacement Well is installed and testing results demonstrate the water is safe to drink, and Section 2.1 states that bottled water continues to private well users in the PWSA regardless of sampling participation or results. Please update Section 2.1 to include criteria for when bottled water service is discontinued and identify how many properties have had bottled water service discontinued because of a Replacement Well.
- Finally, JCI/Tyco added a statement to Section 2.3 and 3.2.2 that no new POET systems will be installed, or that if they are, the POET system will be temporary. This is a change to the criteria laid out in the March 2020 *Comprehensive Alternative Water Management Plan*. Per the approved plan, please continue to allow residents with private drinking wells having PFAS greater the DHS recommendations, and who do not opt for a Replacement Well, to continue to have option to use a POET system to provide safe drinking water.

Next Steps:

Residents who do not opt for a Replacement Well remain covered by this Sampling Plan. Thus, JCI/Tyco should continue to update the Sampling Plan every 6 months to keep it current with respect to the private wells and POET systems covered by the Sampling Plan and to their respective testing and maintenance programs (Wis. Admin. Code § NR 716.17(1)). The next version (Sampling Plan v.9) is due on, or about **Apr. 1, 2024**.

Please note, that the DNR recommends that once installation and testing of Replacement Wells are complete, that JCI/Tyco present the DNR with a comprehensive long-term water management and sampling plan for those residents who did not opt for a Replacement Well. This long-term plan can be developed based on evaluation of the available data for the private wells and the current findings and conclusions from the site investigation.

If the Sampling Plan v.9 is consistent with Sampling Plan v.8, and addresses the DNR’s comments listed above, then it is possible that JCI/Tyco will *not* need to pay the associated Wis. Admin. Code ch. NR 749 fee per Wis. Stat. § 292.94 with the next submittal. Please contact me in advance to discuss whether a review fee is required for Sampling Plan v.9.

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

Sincerely,



Alyssa Sellwood, PE
Water Resources Engineer
Remediation & Redevelopment Program

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