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Subject: Response to Wisconsin Department of Natural Resources Revised Long-Term Potable Well Sampling Plan JCI/Tyco FTC (PFAS), 2700 Industrial Parkway South, Marinette, Wisconsin  
BRRTS Activity #: 02-38-580694  
Date: January 12, 2021

Dear Ms. Sellwood,

On behalf of Tyco Fire Products, LP (Tyco), Arcadis US, Inc. (Arcadis) submits the following responses to comments (RTC) to the November 16, 2020 Wisconsin Department of Natural Resources (WDNR) comments on the April 1, 2020 *Revised Long-Term Potable Well Sampling Plan* for the Tyco Fire Technology Center (FTC) Site (the Site) in Marinette, Wisconsin, referenced above. Each WDNR comment is presented below, followed by Tyco's response.

## Background

In the November 16, 2020 letter noted above, WDNR stated the following:

“On January 17, 2018, Johnson Controls, Inc. on behalf of Tyco Fire Products, LP (JCI/Tyco) reported a discharge of per- and polyfluoroalkyl substances (PFAS) to the environment. The discharge occurred as the result of PFAS-containing aqueous film forming foams (AFFF) being discharged as part of firefighting training activities conducted at the JCI/Tyco Ansul Fire Technology Center (FTC), located at 2700 Industrial Parkway in Marinette, Wisconsin (the Site), from approximately the 1960s through the fall of 2017.”

As Tyco has noted previously, the January 17, 2018 date is incorrect. Tyco reported a discharge of per-and polyfluoroalkyl substances in (PFAS) to the environment in November 2016.

Tyco eliminated the ingestion exposure pathway beginning in December 2017 by offering bottled water service to any parcel owner or tenant with a private drinking water well within the PWSA as it was understood at that time. As investigation data were analyzed, the PWSA expanded to reach additional properties. With every expansion of the PWSA, bottled water service was offered at no cost to homeowners or residents with private drinking water wells prior to any sampling at the home or business. Tyco submitted over 1,000 pages of documents demonstrating the nature and extent of PFAS impacts from the FTC to the Town of Peshtigo which confirmed the existing PWSA sufficiently protects residents with private drinking water wells (a list of those documents is included in the response to WDNR Comment 2).

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Tyco outreach efforts to offer bottled water service within the PWSA included public meetings, letters, and phone calls. Participation in the residential sampling program was not required to receive a bottled water offer. This interim solution remains in place at no cost to homeowners regardless of previous sampling results. In some cases, Point of Entry Treatment (POET) Systems were installed when there were confirmed detections of PFOA and/or PFOS. To date, 41 POET systems have been installed. Homes and businesses with POET systems were not required to surrender their bottled water service despite regular sampling and maintenance of those systems that demonstrated their effectiveness at removing PFAS.

Bottled water and POET systems were always intended to be a short-term, interim solution. Tyco continues to work diligently with multiple stakeholders toward installing a municipal water system that will eliminate the need for bottled water service and POET systems in the area.

This Revised Long-Term Potable Well Sampling Plan (RLTPWSP) recognizes that the potential exposure pathway through ingestion for PFAS was eliminated with the provision of bottled water service independent of any sampling. If Tyco were to condition bottled water service on sampling results, then a continuous sampling program would be in order. Tyco instead voluntarily took the more conservative approach of providing bottled water to all residents with private drinking water wells within the PWSA. Investigation activities conducted to date conclude that the nature and extent of PFAS impacts from the FTC are defined and contained within the existing PWSA. While additional data will continue to be collected through a long-term monitoring well network (Figure 1), it is no longer necessary to collect individual, private drinking water well samples. However, in an effort to keep homeowners and tenants aware of their current water conditions until a long-term municipal solution is in place, Tyco is volunteering to continue sampling properties at a reduced frequency based on the number of previous samples collected and the results of those samples. New properties – parcels that were previously non-responsive – within the PWSA will be eligible for quarterly sampling for two consecutive quarters and additional sampling as defined in section 3.1.1 of the RLTPWSP. The schedule for future sampling of previously sampled properties is defined in section 3.1.2 of the RLTPWSP.

## WDNR Review

### Comment 1:

Clarify which potable wells fall into each category of proposed sampling.

- For example, it is unclear if potable wells with POET systems remain in the general monitoring program. Please clarify if the general monitoring schedule is to be separate from the POET system monitoring.
- The DNR recommends the Plan include a table to illustrate the sampling schedule for all well types discussed.

### Tyco Response:

*Summary tables of the LTMP and POETS monitoring programs since first quarter 2018 are provided in Table 1 and 2 (attached). Table 1 and 2 provide a summary of the private drinking water well and POETS programs, respectively, coded by the following criteria: 1) below the laboratory RL; 2) between the RL and the recommended enforcement standard (ES); and 3) above the recommended ES. Table 3 provides a summary of all the wells in the PWSA. The potable wells with POET systems are in a separate monitoring program, which is focused on assessing performance of the POET system during initial deployment.*

**Comment 2:**

Based upon information data provided in the Plan, the DNR does not concur with scaling back the monitoring frequency for wells identified as being previously sampled. The Plan should identify the reasoning used to support the reduction in overall monitoring frequency and should be further supported by data from previous reports, citing both data ranges (e.g., of PFAS concentrations) and report submittal dates as a part of this report.

***Tyco Response:***

*Since program inception, there have been up to nine sampling events at each potable well location. The number of samples varies due to owner participation and date entering the program. Section 3.1.2 of the RLTPWSP for further details. Bottled water and POETs are offered to owners and operators in the PWSA. This voluntary interim action provides a safe drinking water solution until construction of a long-term municipal water solution.*

*Data to support the program is provided in sampling results letters provided to WDNR and the project PFAS database to WDNR on a bi-weekly basis. On June 1, 2020, the Potable Well Sampling Program Summary Report – FTC Sampling Area was submitted to the WDNR with all analytical results.*

**Comment 3:**

DNR does not concur with reducing the monitoring schedule for new potable wells entering the monitoring program as outlined in the Plan. The DNR directs that the following monitoring schedule be applied, based on laboratory analytical results:

- Any new well with a recorded detection of PFAS compounds should be sampled quarterly for the first year, regardless of the levels of PFAS concentrations detected;
- Wells with a full year of quarterly data with PFAS contamination concentrations below the laboratory reporting limit (RL) may be reduced to semiannually (every 6 months);
- Wells with a full year of semiannual data with PFAS concentrations below the laboratory RL may move to annual sampling;
- Wells with a full year of annual data with PFAS concentrations below the laboratory RL may move to biennial (every 2 years) sampling;
- The DNR concurs with the POET monitoring and maintenance program as outlined in the plan.

***Tyco Response:***

*It is important to note that standard practice within the study area is to offer bottled water to all residences within the sampling area regardless of the presence or absence of PFAS detected in their private water supply. Tyco does not propose to change this practice at this time. Therefore, the proposed revision directed by the WDNR is unnecessary for decision making related to determination of whether a residence receives bottled water service and becomes simply a data gathering activity. In addition, a municipal water supply is the proposed long-term solution to provide safe drinking water to affected drinking water well users. However, in the interest of continued cooperation, Tyco agrees to implement the proposed sampling schedule above for new wells entering the monitoring program in the defined PWSA until such time as the municipal water supply is in place for the existing study area.*

**Comment 3:**

The plan discusses reporting results in relation to the United States Environmental Protection Agency's Health Advisory Level (HAL) of 70 ppt PFOA+PFOS. The guiding measure for health-based decision making at the Site

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are the recommendations for PFAS groundwater standards from Wisconsin DHS, rather than the 2016 EPA recommendation of 70 ppt for drinking water. Therefore, DNR directs that JCI/Tyco adhere to the following:

- When sampling results are reported to property owners, tenants or both per Wis. Admin. Code § NR 716.14, PFAS results, as well as any additional sampled parameters, should be reported in accordance with the DNR letter, dated August 12, 2020, regarding DHS's recommendations for communicating private well testing results.
- In future revisions of the Long-Term Potable Well Sampling Plan, review all applicable DHS recommendations for groundwater standards from Cycle 10 and Cycle 11 and apply these as decision-making criteria to private well sampling results. (Links to the DHS's recommended Cycle 10 and Cycle 11 groundwater standards are included below for reference).

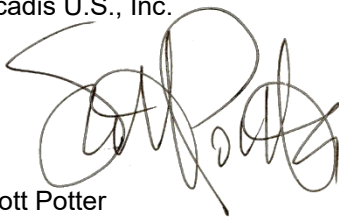
***Tyco Response:***

*Note that the proposed sampling plan was submitted well before the Cycle 11 recommendations were published. However, currently Tyco provides a Sample Results Notification letter to property owners and tenants that includes a summary of the DHS Cycle 10/Cycle 11 groundwater standard recommendations, a summary table of the sample analytical results with a comparison to the DHS recommendations, and a copy of the laboratory analytical report, which is consistent with the August 12, 2020 DNR recommendations.*

*Future revisions to the Long-Term Potable Well Sampling Plan will include comparison of the Cycle 10/Cycle 11 proposed criteria, as is currently done in practice. Tyco is committed to providing a long-term drinking water solution to affected properties through a municipal water source. Regardless of the addition of PFAS substances through DHS groundwater Cycle 11 review, the long-term solution will address the drinking water pathway.*

If you have any questions regarding these comment responses, please let me know.

Sincerely,  
Arcadis U.S., Inc.



Scott Potter  
Chief Hydrogeologist/Senior Vice President

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- CC. Bridget Kelly, David Neste – WDNR  
Jeffrey Danko, Scott Wahl – Tyco
- Enc. Table 1 – Private Drinking Water Well Program  
Table 2 – Private Drinking Water Wells in POET Program  
Table 3 – Private Drinking Water Well Results by Category  
Figure 1 – Long-term Monitoring Well Network