



November 16, 2020

MR. JEFFREY DANKO
JOHNSON CONTROLS, INC
5757 N. GREEN BAY AVENUE
MILWAUKEE, WI 53209

MR. SCOTT WAHL
TYCO FIRE PRODUCTS LP
1 STANTON STREET
MARINETTE, WI 54143

SUBJECT: Response to Comprehensive Alternative Water Management Plan
JCI/Tyco FTC PFAS, 2700 Industrial Parkway South, Marinette
JCI/Tyco Stanton PFAS, 1 Stanton Street, Marinette
BRRTS #02-38-580694 and 02-38-581955

Dear Mr. Danko and Mr. Wahl:

On May 8, 2020, the Wisconsin Department of Natural Resources (DNR) received the *Comprehensive Alternative Water Management Plan* (CAWMP) for the above-referenced site, dated March 19, 2020, and submitted by Arcadis U.S., Inc. (Arcadis), on behalf of Johnson Controls, Inc. and Tyco Fire Products LP (JCI/Tyco). The report was accompanied by the appropriate fee of \$700, required under Wisconsin Administrative Code § NR 749.04(1), for formal DNR review and response.

Background

On January 17, 2018, JCI/Tyco reported a discharge of per- and polyfluoroalkyl substance (PFAS) compounds 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 Fire Technology Center (FTC) from approximately the 1960s through the fall of 2017.

On July 23, 2018, JCI/Tyco reported a discharge of PFAS compounds at the JCI/Tyco Stanton Street facility (Stanton). The discharge occurred as a result of the use and/or storage of PFAS compounds related to AFFF at the facility.

Data collected as part of site investigation activities indicate PFAS contaminants have spread from the FTC and/or Stanton via surface water and groundwater, impacting private potable wells and private surface water features in the Town of Peshtigo and City of Marinette. Data appears to indicate PFAS contaminants have spread east to the Bay of Green Bay (Lake Michigan).

Summary of Comprehensive Alternative Water Management Plan

Arcadis prepared the CAWMP to address the interim drinking water needs of residents and businesses in the private drinking water well investigation area for PFAS related to the FTC and Stanton. Long-term solutions for drinking water were evaluated in the is described in the *Remedial Action Options Report for Long-Term Drinking Water Supply, Town of Peshtigo, Wisconsin*, dated September 10, 2019 (RAOR).

The defined private drinking water well sampling area (PWSA) is roughly outlined to the north by University Drive, to the west by County Road B, to the south by Rader Road, and to the east by the Bay of Green Bay. The PWSA is defined using data collected from desktop studies of local geology and analytical data from field investigations.

The CAWMP includes:

- Offering bottled water to all homeowners and well users within the defined PWSA;
- Offering Point of Entry Treatment Systems (POETs) to all well owners/users within the defined PWSA with sampling results indicating detections of PFOA and/or PFOS above a combined value of 20 parts per trillion (ppt). The CAWMP states that JCI/Tyco may elect to continue offering POET systems to well owners/users if PFOA and/or PFOS are detected below this threshold;
- Tyco is evaluating how to proceed with connections to a permanent community water supply system for certain properties that do not currently have a water main directly adjacent to the structure within the Marinette City limits.

The proposed final alternative water management solution recommends extension of municipal water from the City of Marinette public water system to all existing residences in the well sampling area in the Town of Peshtigo. The existing City of Marinette water distribution system would be extended by construction of additional water mains in the Town of Peshtigo and providing service connections to all properties along the newly-installed water mains.

The CAWMP indicates on-going discussions are occurring between JCI/Tyco, City of Marinette, Town of Peshtigo, and other stakeholders regarding extension of the existing City of Marinette municipal water system to the PWSA. The CAWMP also indicates that JCI/Tyco will continue to manage bottle water requests through the toll-free telephone number established for this project.

DNR Review

- The approach presented for provision of alternate water supplies, including bottled water service and POETs as an interim measure followed by a long-term remedy as outlined in the RAOR, is an acceptable approach to ensure the protection of human health.
- The CAWMP references that the PWSA is defined using desktop studies of local geology and analytical data from field investigations; however, the report does not include any depiction of the groundwater plume. The PWSA should be based on isoconcentration mapping of the contaminant plume (Wis. Admin. Code § NR 716.15(4)(c)).
- Until the extent of the groundwater plume has been fully delineated and demonstrated to be stable using a permanent monitoring well network, the PWSA should not be considered defined to ensure the protection of human health within the community (Wis. Admin. Code § NR 716.13(16)).
- The CAWMP should be expanded to include more detailed timeline/decision matrix between the various milestones. For example:
 - When residents should receive sample results;
 - How long after a positive detection or exceedance until bottled water is provided and/or bottled water service initiated;
 - How long after bottled water service would a POET be offered and installed.

- The CAWMP references that the interim drinking water needs are within the private drinking water well investigation area that includes both the FTC and Stanton sites; however, the boundaries depicted on Figure 4 do not extend to the Stanton Street facility. The CAWMP should address the means by which potable wells in area of 1 Stanton Street will be identified and incorporated into the water management plan, as necessary.
- The CAWMP should be expanded to include any unacceptable levels of PFAS detected in the DNR-led sampling effort in the expanded site investigation area. The department will be handing off these results to JCI/Tyco for implementation in their site investigation and CAWMP.
- The CAWMP only addresses PFOA, PFOS and the sum of PFOA+PFOS. Recently, on November 6, 2020, the Wisconsin Department of Health Services (DHS) provided Cycle 11 recommended groundwater standards for 16 additional PFAS compounds. The DNR directs JCI/Tyco to review all applicable Wisconsin Department of Health Services (DHS) recommendations for groundwater standards from Cycle 10 and Cycle 11 and apply these as the 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).

The DNR appreciates your efforts to investigate and remediate this Site. 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,



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

Links:

DHS Cycle 10 Health-based Recommendations for ch. NR 140 Groundwater Standards (6/21/19)
<https://dnr.wi.gov/topic/Contaminants/documents/pfas/DHSLetter20190621.pdf>

DHS Cycle 11 Health-based Recommendations for ch. NR 140 Groundwater Standards (11/6/20)
<https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/DHSCycle11Letter20201106.pdf>

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