

Ms. Alyssa Sellwood
Remediation and Redevelopment Program
Wisconsin Department of Natural Resources
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Date: January 13, 2025
Subject: Q4 2024 Project Status; Tyco Fire Technology Center (FTC) PFAS and VOCs at 2700 Industrial Parkway South and Stanton Street PFAS at One Stanton Street, Marinette, Wisconsin
BRRTS Activity#: 02-38-580694, 03-38-001345, and 02-38-581955

Dear Ms. Sellwood,

On behalf of Tyco Fire Products LP (Tyco), Arcadis submits this status report to summarize activities completed, data collected, corrective actions, and WDNR/Tyco correspondence for Q4 2024, as well as planned activities for the upcoming quarter (Q1 2025). As noted in previous quarterly status reports to WDNR, Tyco will continue to provide updates on a quarterly basis to reflect current and planned activities.

PROJECT STATUS

Below is a summary of the project status for the Tyco Fire Technology Center (FTC) and Stanton Street facilities and long-term drinking water supply for the period from October 1, 2024 to December 31, 2024 (Q4 2024) and planned activities from January 1, 2025 to March 31, 2025 (Q1 2025).

Activities Completed

Field Work

- October 1, 2024 to October 4, 2024 – GETS extraction well re-development by Cascade Drilling to improve extraction well performance at EX-1S, EX-2S, EX-3, and EX-4. Extraction well redevelopment is planned, at minimum, to occur on a semi-annual basis in the future
- October 1, 2024 to December 31, 2024 – Point-of-Entry Treatment (POET) system sampling and operation, maintenance, and monitoring (OMM)
- October 1, 2024 to December 31, 2024 – Private well sampling
- October 1, 2024 to December 31, 2024 – Ditch A Treatment System OMM, weekly and quarterly sampling for the Wisconsin Pollution Discharge Elimination System (WPDES) permit, monthly downstream surface water sampling
- October 1, 2024 to December 31, 2024 – Ditch B Treatment System OMM, weekly and quarterly sampling for the WPDES permit, monthly downstream surface water sampling
- October 1, 2024 to December 31, 2024 – Deep private well installations (12 locations)

- October 1, 2024 to December 31, 2024 – Short-Term Phase groundwater and surface water monitoring associated with the July 2021 Groundwater Extraction and Treatment System (GETS) Long-Term Monitoring (LTM) Plan
- October 1, 2024 to December 31, 2024 – Deep monitoring well quarterly and semi-annual sampling
- October 1, 2024 to December 31, 2024 – Continued operation of the GETS
- October 1, 2024 to December 31, 2024 – Continued design and contractor bidding for GETS optimization and expansion by including five new extraction wells (EX-10, EX-11, EX-12, EX-13, and EX-14) into the connected extraction well network
- October 1, 2024 to December 31, 2024 – Continued GETS design modifications for installation of new multi-media filter, upgraded pumps, and new bag filters in accordance with the WPDES permit modification submitted August 21, 2024 and approved by WDNR on September 17, 2024
- October 1, 2024 to December 2, 2024 – Weekly foam monitoring at Ditch A through Ditch E. Foam collection booms at Ditch B were replaced on November 6 due to partial submergence from bio-fouling. Booms for foam collection were removed for the season from Ditches A, and C through E on November 26, 2024, prior to the ice forming temperatures. The booms for Ditch B were removed for the season from Ditch B on December 2, 2024 due to the formation of ice. No foam was observed during this period at Ditches A and C through E
- October 1, 2024 to December 5, 2024 – Solids handling pilot test at the GETS utilizing Geotube® solids condensing system, in lieu of filter press use
- October 7, 2024 to December 3, 2024 – Drilling construction of four new extraction wells (EX-10, EX-11, EX-12, and EX-13) by GroundSource
- October 9, 2024 to December 31, 2024 – Began using H₂O₂ as oxidant in the GETS. Tested various dosing regimes from 1 ppm to 12 ppm of 34% H₂O₂ and have since continued operation as of November 13, 2024 at 1 ppm of 34% H₂O₂. This change has resulted in a lower solids loading on the GAC and IX Resin vessels by reducing the manganese in the system. The iron concentrations have increased slightly and are continuously monitored with weekly GETS sampling
- October 21, 2024 to November 14, 2024 – Q4 groundwater and surface water monitoring in accordance with the March 2024 Interim LTM Plan for Groundwater and Surface Water for the FTC
- October 22, 2024 – Surface water sampling in Menominee River pursuant to the May 2024 Additional Site Investigation Work Plan for Stanton Street
- November 7, 2024 – Semi-annual FTC and Stanton Street sanitary sewer outfall sampling
- December 2, 2024 – The Sontek stream flow instrument at Ditch B was removed and returned to the manufacturer for shop repairs due to unresolvable communications error with the instrument. New stilling well instrument remains active for the stream flow rating curve calculated flow rate
- December 12, 2024 to December 17, 2024 – Monitoring well installations in accordance with the August 2023 Additional Site Investigation Work Plan for the FTC and the Response to April 17, 2024 Comments – Response to Interim Long Term Monitoring Plan for Groundwater and Surface Water for the FTC dated June 3, 2024
- December 18, 2024 – Annual calibration of GETS flow meters completed by equipment vendor, Endress+Hauser, for effluent flow meter and all existing extraction well flow meters

Deliverables Submitted to WDNR

- October 1, 2024 – Revised Long-Term Potable Well Sampling Plan, v.10; Tyco FTC
- October 3, 2024 – Response to GETS Progress Report #3 (Nov. 13, 2023 – May 12, 2024); Tyco FTC
- October 3, 2024 – Notification of Construction for Hydrogen Peroxide Modification at GETS; Tyco FTC
- October 10, 2024 – Q3 2024 Project Status; Tyco FTC, Stanton Street
- October 17, 2024 – Ditch A, Ditch B, and GETS Monthly WPDES Discharge Monitoring Reports (September 2024); Tyco FTC
- October 18, 2024 – Ditch A Semi-Annual Operation, Maintenance, and Optimization Progress Report #11; Tyco FTC
- October 18, 2024 – Ditch B Semi-Annual Operation, Maintenance, and Optimization Progress Report #10; Tyco FTC
- October 21, 2024 – Combined (GETS, Ditch A, and Ditch B) WPDES Permit Pre-Application Form 3400-256; Tyco FTC
- October 23, 2024 – Deep Aquifer Bedrock Well Design and Long-Term Monitoring Update – Interim Quarterly Deep Private Well Update (August –September 2024); Tyco FTC
- November 21, 2024 – Ditch A, Ditch B, and GETS Monthly WPDES Discharge Monitoring Reports (October 2024); Tyco FTC
- December 4, 2024 – Notification of Construction for Lime Dosing and Geotextile Tube; Tyco FTC
- December 19, 2024 – GETS Expansion Stormwater Control Notice of Intent; Tyco FTC
- December 20, 2024 – Ditch A, Ditch B, and GETS Monthly WPDES Discharge Monitoring Reports (November 2024); Tyco FTC
- December 20, 2024 – GETS Short-Term Monitoring Phase Report #4; Tyco FTC

WDNR/Tyco Correspondence

Tyco Submittal to WDNR

- October 1, 2024; October 25, 2024; November 29, 2024 – Database Uploads
- October 7, 2024; October 10, 2024; October 23, 2024; November 19, 2024; November 27, 2024; December 12, 2024; December 24, 2024 – Sample Results Notifications

WDNR Submittal to Tyco

- October 3, 2024 – Response to the 2024 Site Investigation Status and Interim Long-Term Monitoring Report; BRRTS #02-38-580694
- October 24, 2024 – Response to 10th Revised Long-Term Potable Well Sampling Plan; BRRTS #02-38-580694
- October 28, 2024 – Semi-Annual Operation, Maintenance, and Optimization Progress Report #11 Ditch A Interim Action Treatment System (Jan. 1 – June 30, 2024); BRRTS #02-38-580694
- October 28, 2024 – Semi-Annual Operation, Maintenance, and Optimization Progress Report #10 Ditch B Interim Action Treatment System (Jan. 1– June 30, 2024); BRRTS #02-38-580694
- November 2, 2024 – High Capacity Well Conditional Approval (EX-0, EX-10, EX-11) – City of Marinette – Marinette County; High Capacity Well File Number: 38-06-014805

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- November 2, 2024 – High Capacity Well Conditional Approval (EX-12, EX-13) – City of Marinette – Marinette County; High Capacity Well File Number: 38-06-014807

WDNR/Tyco Summits and Periodic Meetings

- Weekly calls between WDNR and Tyco
- November 21, 2024 – Community update communication and corresponding Tyco website update

Planned Activities

- Continue field work related to the GETS LTM Plan Short-Term Monitoring Phase and optimization activities approved by WDNR
- Construction of WDNR approved GETS interior system modifications. Work is planned to begin in February 2025
- Connect new GETS wells to the GETS: EX-10, EX-11, EX-12, EX-13, and EX-14 (formerly named PZ-64-67) to be connected via horizontal drilling to the GETS. Horizontal drilling intended to begin January 2025, new extraction wells intended to begin pumping to GETS by Spring 2025
- Ongoing use of hydrogen peroxide for oxidation and solids removal at GETS
- Ongoing use of Geotube® and lime mixing system for solids handling at GETS
- Ongoing design and contractor bidding for GETS optimization activities. Interior GETS modifications intended to be completed by Spring 2025, as approved by WDNR
- GETS extraction well redevelopment planned for February 2025
- Continued field work related to the FTC Interim LTM Plan for Groundwater and Surface Water
- Commence field work related to the May 2024 Additional Site Investigation Work Plan for Stanton Street
- Continue field work related to the FTC 2023 Additional SIWP and in consideration of November 17, 2023 WDNR comments on the 2023 Additional SIWP
- Resume foam monitoring activities at Ditch A through Ditch E once the channels are free of ice
- Continue outreach to Town of Peshtigo residents in the Potable Well Sampling Area (PWSA) to implement long-term drinking water solution(s)
- Continue installation of private deep drinking water wells
- Continue sampling of deep monitoring wells
- Continue OMM activities associated with the LTM Plan and reporting for the Ditch A and B Treatment Systems
- Continue OMM activities associated with the GETS building
- Continue quarterly private well sampling and POET OMM per the Revised Long-Term Potable Well Sampling Plan, v.10
- Begin quarterly groundwater sampling of volatile organic compounds (VOCs) at the FTC in January 2025

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Tyco and Arcadis appreciate WDNR's collaboration on this project. Should you have any questions, please contact the undersigned.

Sincerely,
Arcadis U.S., Inc.



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