

**From:** Verburg, Ben <Ben.Verburg@arcadis.com>  
**Sent:** Tuesday, September 15, 2020 7:23 PM  
**To:** Neste, David E - DNR; Chronert, Roxanne N - DNR; Haag, Christine T - DNR  
**Cc:** Rick Bethel; Scott D Wahl; Danko, Jeff; John D Perkins; Katie McGinty; Bedard, Michael; Cobb, Michael; Milionis, Peter; Dunn, Shannon; Peters, Chris  
**Subject:** Proposed Work Scope - Tyco Fire Products LP FTC PFAS, Marinette, WI - BRRTS 02-38-580694

Dave, Roxanne, and Christine-

On behalf of Tyco Fire Products LP (Tyco), Arcadis U.S., Inc. is requesting WDNR concurrence with the following work scope in accordance with NR 716.09 (3)(a) of the administrative code. The concurrence of this provision is requested in the interest of time. The objective of the work scope outlined below is to install the necessary infrastructure and collect surface water and groundwater data during this field season before freezing conditions prohibit additional data collection until next Spring. We will follow-up with a work plan (i.e., Monitoring Work Plan) with specific details of the work and payment of fee for WDNR review.

The data collection goal is to further delineate where groundwater containing per- and poly-fluorinated alkyl substances (PFAS) is discharging to Ditch B. These data, when combined with existing data, will provide timely and useful information for assessment of ditch conditions.

The scope of the near-term investigation will be focused on Ditch B and will include the following tasks:

1. Evaluation of access to Ditch B and determination of need for permits for the data collection
2. Utility clearance
3. Installation of up to 30 stream-bed mini-piezometers in 3 specific segments of Ditch B
  - a. Approximately 10 mini-piezometers installed between PZ-05 and PZ-06
  - b. Approximately 10 mini-piezometers installed between PZ-06 and PZ-07
  - c. Approximately 10 mini-piezometers installed between PZ-07 and PZ-09
4. Collection of groundwater and surface water samples monthly for up to one year; the expectation is to complete up to three events in Fall 2020. The groundwater samples will be collected from the mini-piezometers. The surface water samples will also be collected next to each of the mini-piezometers. Therefore, a total of up to 60 samples (30 groundwater samples from mini-piezometers and 30 surface water samples) will be collected and analyzed for 36 PFASs during each monthly event.
5. Collection of monthly elevation data of surface water and groundwater from the locations of the 30 mini-piezometers in the ditch (groundwater elevation from mini-piezometer and surface water elevation from water surface adjacent to mini-piezometer).
6. Collection of continuous surface water and groundwater elevation data from piezometers and stilling well pairs PZ-05/STW-05, PZ-06/STW-06, PZ-07/STW-07, PZ-08/STW-08, and PZ-09/STW-09 using pressure transducers deployed. The exact deployment time will be dependent on weather.
7. Compilation and review of the surface water/groundwater analytical results and surface water/groundwater elevation data on a real-time basis.
8. Reporting of the data collection efforts and data interpretation in periodic teleconference calls with WDNR.

The scope of the sampling may be modified based on the evaluation of data (e.g., some locations may be eliminated from sampling in subsequent events, the frequency of sampling may be increased or decreased, etc.). In addition, sampling frequency may be modified based on weather (freezing) conditions, access limitations or other factors beyond Tyco's control.

Please do not hesitate to contact us if there are any questions.

Regards,  
Ben

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