



August 11, 2025

Shane Waterman
3M
3M Center, 225-1N-22
St. Paul, MN 55144-1000

SUBJECT: Site Investigation Work Plan Not Approved
3M Co - Wausau Greystone Quarry, 410 Decator Drive, Wausau, WI
DNR BRRTS Activity #: 02-37-596321

Dear Mr. Waterman:

On June 12, 2025, the Department of Natural Resources (DNR) received a Site Investigation Work Plan (SIWP) prepared for 3M by Tetra Tech, Inc. (Tetra Tech). The SIWP was submitted with a \$700.00 review fee in accordance with Wisconsin Administrative Code (Wis. Admin. Code) ch. NR 749. The DNR reviewed the SIWP for consistency with Wis. Admin. Code §§ NR 716.07 and 716.09 to determine if the general code requirements are met.

Background

The 3M Co. – Wausau Greystone Quarry facility (Site) began mining operation in 1936 and throughout its history has expanded to encompass its current size of approximately 1,222 acres. The mine consists of a quarry approximately 200-acres and a 10-acre rock processing facility. The remainder of the Site consists of undeveloped land and formerly agricultural property, waste fine disposal mounds that are generally vegetated, and a flood plain associated with the Wisconsin River that borders the Site. The Site includes thirteen (13) identified drainage areas that utilize a complex stormwater management system that consists of twelve (12) interconnected basins with piping and valves to divert stormwater and dewatering water as needed to promote the settling of fines, maximize infiltration, and minimize the discharge of stormwater to the Wisconsin River. The quarry mines volcanic rock, which is crushed and sorted onsite before being transported to a 3M manufacturing plant in Wausau for further processing to produce roofing granules.

Groundwater and surface basin sampling was initiated due to the presence of per- and polyfluoroalkyl substances (PFAS) detected in the production well located at the Site. The prominent PFAS analytes detected during the September 2024 sampling activities were perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). Several monitoring wells were historically advanced within the alluvial valley of the Site for monitoring metals in groundwater within the former coloring wastewater disposal area, along with two (2) bedrock wells near the central portion of the Site as part of a 2017 hydrogeological study regarding an expansion of the quarry. All alluvial well samples contained one or more detectable PFAS compounds, and one or more compounds were detected in one of the bedrock monitoring wells, although to a lesser concentration than the alluvial wells. In addition to the sampling of existing wells, seven of the surface basins were sampled for PFAS, as well as the quarry sump pit. All surface water samples, and the quarry sump pit sample, contained one or more detectable PFAS compounds. A notice of a hazardous substance discharge at the Site was submitted to DNR on February 14, 2025. Subsequently, the DNR issued a Responsible Party (RP) letter on March 10, 2025, directing 3M to develop a SIWP.

SIWP Summary

The SIWP activities are proposed to further characterize the horizontal and vertical extent of PFAS groundwater impacts to better understand potential on-Site sources and identify potential off-Site sources and inform future selection of remedial action, if any.

This proposed scope of work (SOW) includes:

- Clearing utilities prior to conducting field activities.
- Installing shallow and deep groundwater monitoring wells.
- Collecting soil samples for laboratory analysis.
- Collecting groundwater and surface basin samples for laboratory analysis.
- Collecting quality control samples.
- Handling investigation derived waste (IDW).

Determination

The DNR does not approve the proposed SOW outlined in this SIWP and requests that the activities listed above include the following modifications:

- Section 2.3.2 Source Area Alluvial Well, and Section 2.4 Surface Soil Sampling, state that soil samples collected will be composite soil samples. DNR will not accept the laboratory analytical results from composite soil samples and requires all soil samples be discrete samples from a specified boring depth. The SOW needs to be modified to include the boring depth(s) from which the soil samples will be collected from.
- As stated in Section 1.0 Introduction, the objective of this SIWP is to further refine delineation and characterization of PFAS previously identified in groundwater and surface basin sampling. The DNR does not believe the proposed monitoring well network will achieve the stated objective, nor is it comprehensive enough to define the degree and extent of PFAS contamination identified at the Site. Given the fact that PFAS has been detected in nearly every sample collected to date, the currently proposed monitoring well network is too concentrated around the previous sampling areas that contained the highest concentration of PFAS compounds. Further delineation must include a broader area to properly define the extent of contamination at the Site.

Thank you for your efforts to protect Wisconsin's environment. If you have any questions regarding this letter, please contact me at 608-219-2240 or Timothy.Zeichert@wisconsin.gov.

Sincerely,



Tim Zeichert
Hydrogeologist
West Central Region
Remediation and Redevelopment Program

cc: Chris Bonniwell, Tetra Tech (via email)