



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Robert R. Scott, Commissioner



EMAIL ONLY

April 17, 2018

Christopher S. Angier
Senior Environmental Project Manager
Saint-Gobain Performance Plastics
14 McCaffrey Street
Hoosick Falls, NY 12090

Subject: Merrimack – Saint-Gobain Performance Plastics, 701 Daniel Webster Highway
DES Site #199712055, Project #36430

Work Plan for Residential Well Sampling, prepared by Golder Associates, Inc.,
dated December 22, 2017

Dear Mr. Angier:

The New Hampshire Department of Environmental Services (NHDES) has reviewed the above-referenced submittal prepared on behalf of Saint-Gobain Performance Plastics (Saint-Gobain) by Golder Associates, Inc. (Golder) for the Saint-Gobain facility (Facility) located at 701 Daniel Webster Highway in Merrimack. The work plan was submitted in response to NHDES' November 3, 2017 letter requesting routine monitoring of water supply wells outside the alternate water areas. The objective of the sampling is to establish trends and assess whether wells are at risk of having future exceedances of the Ambient Groundwater Quality Standard (AGQS) of 70 nanograms per liter (ng/L, which is equivalent to parts per trillion [ppt]).

NHDES provides the following comments on the work plan:

1. Section 2.2 Identification of Wells and Sampling Frequency and Table 1, Residential Well Sampling Locations – Proposed Locations. The work plan proposes sampling of 17 residential wells in Bedford. No wells in Merrimack or Litchfield were proposed for sampling. Only those wells outside of the alternate water areas should be included in the sampling program. Wells that are scheduled to be connected to public water or receive a point of entry treatment system under the March 2017 Consent Decree between NHDES and Saint-Gobain should be removed from the proposed sampling program. As such, only four of the wells proposed for sampling in Table 1, as listed below, should be included in the sampling plan:
 - 18 Back River Road (MTBE_7078);
 - 64 Back River Road (MTBE_5011, note the Station ID should be MTBE_15011);
 - 65 Meadowcrest Drive (MTBE_4781); and
 - 30 Woburn Abbey Drive (MTBE_4839).

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2. The following wells should be added to the sampling plan:
 - 6 Old English Road, Bedford (MTBE_8003);
 - 36 Smith Road, Bedford (MTBE_6015);
 - 39 Smith Road, Bedford (MTBE_4932);
 - 7 Woburn Abbey, Bedford (MTBE_8071);
 - 85 Wire Road, Merrimack (MTBE_5582); and
 - 10 Wildcat Falls Road, Merrimack (MTBE_8278).

3. Section 2.2 Identification of Wells and Sampling Frequency. The work plan proposes to exclude wells that fell into four categories; however, a list of wells that were excluded in each category was not provided. NHDES has the following comments on the categories that were proposed.
 - a. *Wells with combined PFOA and PFOS above the guidance value of 35 ppt but where PFOA is not above 35 ppt.* A table of wells meeting this criterion should be submitted for NHDES review, along with the associated detections of perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). For example, if PFOA was detected at 32 ppt, and PFOS was 4 ppt, NHDES would expect the well would be included in the sampling plan. Additionally, it should be noted that PFOS was detected in samples collected from the Facility monitoring wells¹, as well as soil and surface water samples collected in the vicinity of the facility.
 - b. *Wells with signature of PFAS analytes inconsistent with S-G air deposition release.* The criteria for determining analytes related to the air deposition release should be provided along with a list of wells that were excluded based on this category.
 - c. *Wells on properties with a use history that suggests PFAS sources may be present on the property or on a nearby property.* The criteria for determining the wells in this category along with a list of excluded wells should be provided.
 - d. *Wells in Hollis.* NHDES concurs that the Hollis wells do not need to be in the sampling plan. If other wells were excluded based on distance from Facility, the list should be provided.

4. Page 3, Section 2.2 Identification of Wells and Sampling Frequency. The work plan proposes quarterly monitoring if the most recent PFOA/PFOS result is less than 49 ppt. However, earlier results were greater than 49 ppt, and there are insufficient results to evaluate trends. NHDES recommends that monthly sampling continue until a decreasing or steady trend is established. NHDES recommends a minimum of 4 samples be collected to evaluate for a trend and to support a recommendation to reduce the sampling frequency.

5. Page 4, Section 2.2 Identification of Wells and Sampling Frequency. The work plan proposes that the sampling frequency for wells with PFOA/PFOS concentrations less

¹ 2017 Annual Groundwater Monitoring Summary, Volumes I and II, prepared by Golder Associates Inc, dated February 7, 2018.

than 49 ppt for the two most recent sampling results be reduced from monthly to semi-annual (every six months). NHDES believes it is important to also evaluate for a trend prior to reducing the sampling frequency. Most of the wells do not have a sufficient number of samples to evaluate the trend. Some wells proposed for semi-annual sampling have been sampled once or twice. Therefore, NHDES recommends that a minimum of four samples be collected to evaluate for a trend. The initial sampling frequency should be quarterly.

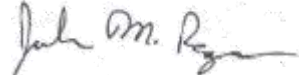
6. Page 4, Section 2.2 Identification of Wells and Sampling Frequency. The work plan indicates that Golder will communicate changes to the sampling frequency to NHDES and the property owner. Saint-Gobain should recommend changes to NHDES for review and approval prior to changing the sampling frequency.
7. Page 4, Section 2.4 Analytical Parameters. The work plan also says that parameters may be added if monitoring indicates that localized PFAS sources may be present. The data, analysis of the data and recommended sampling modifications should be submitted to NHDES for review and approval prior to any changes to the sampling plan.
8. Page 4, Section 2.6 Reporting. The analytical data should be uploaded to NHDES' environmental monitoring database.
9. Page 6, Section 3.0 Next Steps and Schedule. If needed, NHDES can help facilitate the initial discussions with property owners.
10. Table 2: Residential Well Sampling – Analytical Parameters. Given the detections of 23 PFAS in different media collected at the Facility and in the surrounding vicinity, and the potential for the presence of precursor compounds that may break down into PFOA or PFOS, NHDES recommends that samples be submitted for analysis of a longer list of PFAS analytes than that which is proposed in the work plan (20-30 analytes based on commercial laboratory capabilities).
11. Appendix C, Standard Operation Procedure. Please note the following:
 - The work plan indicates that samples should be collected as close to the well head as possible. NHDES generally prefers to collect samples at the storage tank.
 - If the samples are collected from the outdoor tap, NHDES recommends confirming that the outdoor tap is not treated.
 - The work plan indicates that field blanks for PFAS will be collected at each sampling location. NHDES typically collects a field blank every twenty samples or one for each sampling event.

The work plan is approved subject to the above comments and submittal of a revised Table 1 incorporating the properties listed in Comments 1 and 2.

Christopher S. Angier
DES #199712055
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Should you have questions regarding this letter, please contact me or Lea Anne Atwell (LeaAnne.Atwell@des.nh.gov) at NHDES' Waste Management Division.

Sincerely,



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