The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Robert R. Scott, Commissioner

October 8, 2019

SENT VIA ELECTRONIC MAIL

Thomas P. Koenig, Chairman
Merrimack Town Council
6 Baboosic Lake Road
Merrimack, NH 03054

Dear Mr. Koenig:

I am writing in response to your letter of September 30, which raises several concerns about conditions at the Saint-Gobain Performance Plastics (Saint-Gobain) facility, and suggests that the New Hampshire Department of Environmental Services (NHDES) use its authority to require the facility to suspend operations until "...sources (of contamination) are identified and meaningful measures taken." NHDES has carefully reviewed your letter and offers responses to each of your itemized concerns below; but first, I want to make you aware of recent developments regarding our efforts to address air emissions at the facility.

An application from Saint-Gobain for the installation of air pollution control equipment was received March 26, 2019. As of October 4, 2019, NHDES Air Resources Division (ARD) completed its review of the application and drafted a summary of the analysis and a draft permit. The draft permit will require that Saint-Gobain design and construct a regenerative thermal oxidizer (RTO) to control its air emissions. A public notice was published October 4, 2019, notifying the public of NHDES ARD's intent to issue a Temporary Permit and soliciting public comment on the draft documents. The close of the public comment period is the close of business on Monday, November 18, 2019. In addition, the public notice announced a public hearing which will be held on Tuesday, November 5th at 6:00 p.m. at the James Mastricola Upper Elementary School in Merrimack. NHDES ARD has 30 working days from the close of the comment period to issue a Director's Decision and Findings of Fact.

Item 1 of your letter expresses concern about the increase in the concentration of PFOA in monitoring well MW-4S, which is located on the SGPP site. Based on data reviewed by NHDES to date, the substantial increase in PFAS concentrations detected in March 2019 in water samples collected from MW-4S appear to be limited to this well and were not observed elsewhere in the onsite monitoring well network. While NHDES is always concerned about significant changes in site conditions, it is important to understand that many factors can

influence the concentration of contaminants in a single well at a given point in time. In a June 6, 2019, letter, NHDES requested additional investigation and an explanation of the elevated PFAS in monitoring well MW-4S in the forthcoming Supplemental Site Investigation Report that will be submitted by Saint-Gobain's consultants. In the meantime, it is important to note that properties surrounding the SGPP facility have been connected to public water, and that the isolated groundwater conditions in the immediate vicinity of MW-4S do not pose a current threat to people in the neighboring area.

Item 2 of your letter expresses concern about PFOA and PFNA concentrations detected in samples of raw materials taken at the facility in conjunction with stack testing that was performed in the spring of 2018. This is of particular concern to the town because it had understood that Saint-Gobain was no longer using these compounds.

On October 10, 2018, NHDES conducted a public meeting at the James Mastricola Upper Elementary School in Merrimack to update the public on the status of the southern NH PFOA investigation. At that meeting, NHDES stated that raw materials and dip pan coatings from samples taken from Saint-Gobain from 2016 – 2018 had measurable detections of PFOA and PFNA (and additional PFAS compounds). Also, at that meeting, NHDES stated that PFOA, PFHxA and PFPeA were measured at low levels during the 2016 stack tests and that PFOA and PFNA (and additional PFAS compounds) were detected during the April and May 2018 stack tests. It is for these and other reasons, as outlined in the letter NHDES sent to Saint-Gobain on September 26, 2018, that NHDES determined the facility had caused and continues to contribute to an exceedance of AGQS as a result of deposition of PFAS from the air and, therefore, was required to install best available control technology (BACT) pursuant to RSA 125-C:10-e entitled *Requirements for Air Emissions of Perfluorinated Compounds Impacting Soil and Water,* which became effective September 8, 2018.

To put this into perspective, when NHDES issued the 2006 Administrative Order ARD 06-006 (the Order), PFOA concentrations in the raw materials were 2,000 ppm (2,000,000,000 ppt). The Order required Saint-Gobain to use coating dispersions that contained less than 75 ppm (75,000,000 ppt) of PFOA in order to comply with ambient air limits for inhalation. At that time, there were no New Hampshire regulations tying air emissions of PFOA to Ambient Groundwater Quality Standard (AGQS) violations. As a result of the re-formulation and Saint-Gobain's compliance with the Order, PFOA air emissions have dropped from an estimated 897 lbs/yr in 2005 to an estimated 0.74 lbs/yr today. Installation of BACT will further greatly reduce the PFOA (and other PFAS) emissions.

Item 3 outlines the detections of PFAS contamination in stormwater discharges from roof drains at the facility. In response to the September 2018 Unvalidated Wet-Weather and Source Investigation Sampling Event Data submitted by Golder (Saint-Gobain's consultant), NHDES issued a February 22, 2019 letter. The letter requested, in part, an evaluation of the mechanisms by which roof runoff becomes contaminated, and a proposal for additional investigation to obtain the data necessary to explore and constrain the sources of PFAS in roof runoff. This evaluation and investigation were to be submitted with the BACT analysis and temporary permit application. Saint-Gobain has submitted both a roof cleaning Standard Operating Procedure (SOP) and documentation regarding roof inspections, cleaning, and maintenance of stormwater systems to NHDES. Saint-Gobain has stated on multiple occasions that control of the applicable process sources via a centralized control system would eliminate process vent discharges currently located on the roof level and thereby reduce

the potential for target compounds in roof stormwater runoff. As part of the draft temporary permit recently released by NHDES, Saint-Gobain is required to conduct another round of stormwater source sampling (i.e., all previous stormwater sampling sites including the roof drains) and roof wipe analysis. This analysis and submittal of a final report must be completed within six months of the BACT controls becoming operational in order to ascertain if continued elevated PFAS compounds are found in the stormwater and to determine if there is an ongoing source of PFAS (e.g. evaluation of the roofing material) other than from the stacks. Depending on the outcome of that analysis, further remediation of contamination from the roof or stormwater system may be necessary.

Regarding the town's statement that PFOS has not been identified as a contaminant of concern at the Saint-Gobain facility to date, NHDES notes that PFOS emissions were identified in the 2018 stack test report and in May 2016 stack residue/char data described in reports by Weston and C.T. Male. PFOS has also been detected in onsite monitoring wells at the facility and the chemical is discussed in the site investigation report. This data was outlined in the September 26, 2018, letter from NHDES to Saint-Gobain when they were informed of NHDES determination of BACT applicability. The facility is required to review best available control technology for PFOS in the same manner as PFOA. The draft temporary permit contains a minimum control efficiency of the RTO which must be demonstrated for PFOA, PFOS, PFHxS and PFNA or a post-controlled emission limitation for PFOA, PFOS, PFHxS and PFNA. In addition, the draft permit contains annual emission limits (lb/yr) for PFOA, PFOS, PFHxS and PFNA to ensure the emissions from the RTO do not cause or contribute to future water contamination.

Item 4 discusses the Regulated Toxic Air Pollutant (RTAP) analysis that was conducted for ammonia, fluorides, and PFOA, and asserts that the ambient air limits for PFOA must be re-visited in light of the new drinking water maximum contaminant level that NHDES has established for PFOA.

Ambient air limits (AALs) and maximum contaminant levels (MCLs) are developed and used for very different purposes. Both are meant to be protective of public health, but are protective of two different exposure pathways, inhalation and ingestion, respectively. RTAPs are defined by RSA 125-I *Air Toxic Control Act*, as those substances or compounds listed as hazardous air pollutants pursuant to Section 112(b) of the Clean Air Act (42 U.S.C. 7412), as amended, and those chemical substances for which a threshold limit value (TLV) has been established by the American Conference of Governmental Industrial Hygienists as of December 31, 1995, as amended.

Once an RTAP has been established pursuant to the definition above, the commissioner shall adopt rules (Env-A 1400) and designate each RTAP as Class I, Class II, or Class III. For each RTAP, the commissioner shall adopt rules which designate a short-term and long-term AAL. In establishing AALs, NHDES shall rely on threshold limit values, reference concentration limits, and such other generally accepted scientific data as may be available. Again, the AALs are specifically only focused on inhalation risks.

Unless and until the ACGIH TLV changes, NHDES has no basis to revise the AALs under the statute. At this time, the American Conference of Governmental Industrial Hygienists has only established a threshold limit value for ammonium perfluorooctanoate (APFO - CAS #3825-26-1) and therefore, NHDES has designated APFO a Class I RTAP and established short-term [0.050 $\mu g/m^3$ 24-hour] and long-term [0.024 $\mu g/m^3$ annual] AAL for

APFO which we apply to the emission of PFOA. Changing the MCL has no impact on the AALs established under RSA 125-I and Env-A 1400.

NHDES has advocated for and continues to request that inhalation studies be conducted to provide the data necessary to establish AALs for PFAS compounds or review the existing AALs for APFO using up-to-date science.

Per RSA 125-C:10-e, the facility has 12 months from issuance of the permit to complete construction and installation of controls consistent with the permit. This timeline may seem long, but air treatment systems are complex and unique. A sufficient timeline needs to be used to ensure the designed and installed system is adequate and functions reliably. Operation of the source may continue through the permitting, construction, and installation time period. As previously noted, PFOA emissions today are already significantly lower than in past years.

Item 5 expresses concern that despite the installation of a treatment system by Saint-Gobain to remove PFAS from its wastewater, residual contamination in the sewer line will cause continued discharge of PFAS to the Merrimack Wastewater Treatment Facility.

NHDES understands that the town has scheduled testing to understand what levels of PFAS are being received at the wastewater treatment plant. Based on the results of that testing, NHDES will work with Merrimack to understand and address the test results.

NHDES understands and is sympathetic to Merrimack's concerns about continued threats to groundwater and drinking water contamination. We are working hard every day to address these concerns on many levels. This includes ensuring that Saint-Gobain fulfills its investigation and response obligations. These obligations include designing and installing emissions controls, completing site investigations in the vicinity of the facility, conducting expanded drinking water sampling in the impacted areas, and providing safe, clean alternate drinking water to impacted properties.

With regard to conditions on the facility property, NHDES will continue to require Saint-Gobain to advance and complete its site investigations, leading to the development and implementation of a remedial action plan for the site. We understand that the seemingly slow pace of investigations can be frustrating, but we note that this is a complex site, with significant soil and groundwater contamination. NHDES knows from extensive prior experience how important it is to have a complete and comprehensive understanding of the extent and nature of contamination before the successful design and implementation of a remedial action can be accomplished.

At present, NHDES does not believe it has a basis or legal authority to require the facility to cease operations. To date, Saint-Gobain has cooperated and continues to cooperate with NHDES to meet its investigation and response obligations, and we intend to ensure that this continues.

In view of the concerns expressed in your letter, I believe it may be helpful for NHDES to provide more regular and frequent updates to the Council in order to address any questions or concerns that you may have as they

arise. I would suggest perhaps an update at your regularly scheduled meetings at some interval, and would welcome your suggestions for improved communications. NHDES is aware of the significant burden that this site has imposed on your community and the neighboring towns, and we want to help you shoulder that burden in any way that we can. Please feel free to contact me if you wish to discuss this further.

Sincerely,

Robert R. Scott

ec: Governor Christopher T. Sununu
Clark Freise, Assistant Commissioner, NHDES
Executive Councilor Deborah Pignatelli
NH Senator Shannon Chandley
NH House Minority Leader Richard Hinch
NH Representative Richard Barry
NH Representative Robert L'Heureux
NH Representative Nancy Murphy
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NH Representative Rosemarie Rung
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