FINDINGS OF FACT AND DIRECTOR'S DECISION

In the Matter of the Petition for a Variance from
Saint-Gobain Performance Plastics Corporation Located at
701 Daniel Webster Highway, Merrimack, New Hampshire
Facility Identification # 3301100165; Application # 20-0145

The New Hampshire Revised Statutes Annotated (RSA), Chapter 125-C *Air Pollution Control*, contains a variance provision (in Section 125-C:16 *Variances*) which allows for the Commissioner of the NH Department of Environmental Services (NHDES) to suspend enforcement in whole or in part of RSA 125-C or any rule adopted thereunder to any person who, upon application and after a hearing, has shown that the enforcement thereof would produce serious economic hardship on such person without equal or greater benefits to the public.

In determining the conditions and extent under which a variance may be granted, the Commissioner is directed under RSA 125-C:16, II to give due recognition to:

- The progress which the person requesting such variance shall have made in eliminating or preventing air pollution;
- The character and degree of injury to, or interference with, the health and physical property of the people; and
- The social and economic value of the source of air pollution.

In such cases, the Commissioner shall consider the reasonableness of granting a variance conditioned on the person's effecting a partial abatement of pollution or a progressive abatement thereof or such other circumstances as the Commissioner may deem reasonable.

No variance shall be granted to any person applying therefor who is causing air pollution which creates a danger to public health, welfare or safety.

Any variance granted under RSA 125-C:16 shall be granted for such period of time, not exceeding one year, as the Commissioner shall specify. No variance shall be construed to relieve the person receiving it from any liability imposed by law for the commission or maintenance of a nuisance.

Pursuant to RSA 125-C:8 *Administration of Chapter; Delegation of Duties*, the Commissioner shall be responsible for the implementation of RSA Chapter 125-C and any rules adopted thereunder and may delegate to a subordinate or subordinates any and all duties vested in them, except rulemaking authority. The NHDES Commissioner has delegated his authority in this matter to the Director of the NHDES, Air Resources Division.

The rules associated with the statute for variances are specified in the New Hampshire Code of Administrative Rules, Env-A 200, *Procedural Rules*. Pursuant to these rules, a petition for variance shall include the following:

- The name, address, and daytime telephone number of the petitioner and, if the petitioner is other than an individual, the name and telephone number of an individual who can answer questions about the petition on behalf of the petitioner;
- The specific relief requested by the petitioner, including the requirement(s) from which the petitioner is specifically seeking relief and the proposed timetables for partial or progressive abatement of the air pollution involved; and
- Information addressing the factors identified in RSA 125-C:16, II and as stated above.

There are three procedural steps in the variance petition process. They are as follows:

- First, an applicant files a written petition for a variance. Once the petition is received and in accordance with RSA 541-A:29 *Agency Action on Applications, Petitions and Requests*, the department conducts an initial review to ensure that the information submitted is complete and includes all applicable regulatory requirements.
- Second, within 10 days after the receipt of a petition for a variance, a notice is published in accordance with Env-A 202.05, *Notice of Petition*. The public and any other interested parties are invited to submit comments on the petition for a variance. The date and location of a public hearing is also provided in the notice.
- Finally, after all public comments have been received and evaluated by the department and within 15 working days after the close of the public hearing, the department shall issue a written decision on the petition that sets forth the findings on which the decision is based. All pertinent comments received during the public comment period are addressed in a formal document. This document is called the "Findings of Fact and Director's Decision."

Pursuant to Env-A 202.07, *Decision*, the department shall grant a variance if the department determines that:

(1) The petitioner has taken reasonable steps to eliminate or prevent air pollution;

(2) Granting a variance would not create a danger to public health, welfare, or safety;

(3) The source of air pollution has social and economic value to the area in which it is located; and

(4) Enforcement of the requirement for which the variance is sought would produce serious economic hardship on the petitioner without equal or greater benefits to the public.

The department shall include in the variance any conditions necessary to minimize the threat to or impact on the public health and safety. If the department determines that the petitioner has not met the criteria listed in (1) – (4) above, the department shall deny the petition.

Any person aggrieved by the department's decision may appeal the decision to the NH Air Resources Council in accordance with RSA 21-O:14 and the NH Air Resources Council's Env-AC 200, *Procedural Rules*.

Facility and Description of Variance Sought

Saint-Gobain Performance Plastics Corporation (SGPP) primarily manufactures polytetrafluoroethylene (PTFE) coated fabrics and PTFE films. The fabrics are manufactured for a variety of chemical and weather resistant applications. Pursuant to RSA 125-C:10-e, *Requirements for Air Emissions of Perfluorinated Compounds Impacting Soil and Water*, NHDES determined that devices operated at SGPP have emitted and continue to emit to the air perfluorinated compounds[1] (PFCs) and precursors[2]. The emission of these PFCs have caused and continue to contribute to an exceedance of ambient groundwater quality standards (AGQS) as a result of deposition of the PFCs and precursors from the air. Therefore, the devices located at SGPP are subject to the application of best available control technology (BACT) as

1 "Perfluorinated compounds" or "PFCs" means the list of compounds identified in paragraph 1.1 of Environmental Protection Agency Document #: EPA/600/R-08/092 Method 537. "Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS)", Version 1.1 (September 2009).

2 "Precursor" means any substance that has been shown by sound science to be transformed into a PFC under ambient conditions reasonably expected to occur in New Hampshire.

defined in RSA 125-C:10-b, I(a). NHDES issued Temporary Permit No. TP-0256 on February 11, 2020 for the installation of a regenerative thermal oxidizer (RTO) as BACT for the control of PFC and precursor emissions associated with the facility's coating operations. The deadline of completion of construction and installation of the RTO is February 11, 2021, pursuant to the requirements of RSA 125-C:10-e.

On March 10, 2020, the Town of Merrimack submitted an appeal of Temporary Permit No. TP-0256 (NH Air Resources Council Appeal Docket No. 20-05 ARC). On June 4, 2020, SGPP submitted a petition requesting a variance of the February 11, 2021, deadline to complete construction and installation of a RTO. Specifically, SGPP requested that a variance be granted until February 11, 2022, or one year from the date of a final, non-appealable order disposing of the Town of Merrimack's appeal of the Temporary Permit No. TP-0256 to the NH Air Resources Council, whichever is earlier. A formal hearing on the Town of Merrimack appeal before the NH Air Resources Council will take place on December 14, 2020.

On June 11, 2020, as supplemental information and as a requirement of Temporary Permit No. TP-0256, SGPP submitted an *Air Pollution Control Equipment Monitoring Plan Monthly Update* which set forth the basis for the need for a scheduled extension. On July 9, 2020, NHDES requested additional information in relation to the SGPP variance petition and on July 24, 2020, SGPP submitted the additional information.

In the variance petition, SGPP stated that the basis of the variance request is two-fold. First, that the Town of Merrimack's appeal of the air permit creates uncertainty in the final design of the RTO. Second, that the COVID-19 pandemic has led to material delays in the supply chain and vendors' and subcontractors' ability to meet project schedules, which makes SGPP's ability to meet the deadline unworkable.

Public Notice and Public Hearing

In accordance with Env-A 202.05, *Notice of Petition,* a notice of request for public comments and a scheduled public hearing was published in the *Union Leader* on June 15, 2020, and the *Merrimack Journal* on June 21, 2020. The notice invited public comment and indicated that any comments received during the public comment period would be considered by the Director in reaching a final decision. The public notice specified that the deadline for written comments was August 5, 2020.

Due to the State of Emergency declared by the Governor as a result of the COVID-19 pandemic and in accordance with the Governor's Emergency Order #12 pursuant to Executive Order 2020-04, the Department conducted an online public hearing on August 5, 2020. The purpose of the hearing was to receive public comments and testimony on the variance petition. At the August 5, 2020 public hearing, NHDES announced that because an electronic hearing format is relatively new and may be challenging for some, or that technical issues could be encountered during the hearing, the public comment period would continue to remain open until August 12, 2020. Because Env-A 202.07 requires a final decision be made within 15 working days after the public hearing and doesn't anticipate an extension of a public comment period, NHDES was required to keep the public hearing record open during the extended public comment period. On August 19, 2020, NHDES conducted an online session to come out of recess from the August 5, 2020 public hearing, to provide a brief statement as to the status of the variance petition to date, and to officially close the public hearing.

Discussion

During the August 5, 2020 public hearing and during the public comment period, approximately 220 different people or entities submitted written comments to NHDES, and 16 people provided oral testimony. The information provided by SGPP, as well as the comments received from the public, were

evaluated based upon the conditions identified in RSA 125-C:16, II and Env-A 200 upon which a variance decision is required to be based and as outlined below[3].

(1) The petitioner has taken reasonable steps to eliminate or prevent air pollution

SGPP's statement

In the variance petition, SGPP states that perfluorooctanoic acid (PFOA) emissions from the facility have dropped dramatically since 2006, and in current years, emissions have been at a rate of less than 1 lb/yr. Emissions of perfluorooctane sulfonic acid (PFOS) are less than 0.05 lb/yr. The RTO is intended to control emissions of two PFCs which the facility currently emits pre-controlled at a rate of less than 13 ounces (or 0.80 pounds) per year, combined. The pre-control rate of emissions for PFOS is already lower than the annual emissions limit set in the permit and although the permit requires control of emissions of PFOA and PFOS, as a matter of fact, the RTO controls emissions of all PFCs.

Public Comments received

Comment 1: If SGPP was able to eliminate air pollution from their process operations which has resulted in contamination of Merrimack's drinking water, there would be no need for the RTO. Clearly their efforts have not been sufficient.

Comment 2: As of this date, SGPP has done nothing to remediate the issue of PFAS spewing from its 13 stacks as an intermediate step until the completion of the project. That is the reason why NHDES issued the Temporary Air Permit on Feb. 11, 2020. That permit required the installation of a Regenerative Thermal Oxidizer (RTO). That is the only technology, short of shutting down the plant, that will remediate the constant PFAS air pollution that occurs on a daily basis, 24/7.

Comment 3: Any delay in reducing the PFAS air emissions from SGPP would be contrary to taking reasonable steps to eliminate air pollution.

Comment 4: Saint Gobain has had years, more than four (in fact), as supposedly environmentally conscious good stewards of the environment to place filters on all its manufacturing operations everywhere.

Comment 5: The permit which was issued on February [11, 2020] by NHDES and was a process spanning 1 ½ years, proves that Saint Gobain has had ample time to figure out and implement the proper RTO and added scrubbers that were asked for, yet they continue to challenge every ask that is made and still spew over 190 different PFAS chemicals from their 13 air stacks, NOT only the 2 they continually reference. They also have not accounted for GenX which turns into [hydrogen fluoride].

Comment 6: Residents in Merrimack were informed of the presence of PFAS chemicals in our public water supply in March of 2016 and an investigation by NHDES has shown the presence of between 23 and 34 PFAS compounds in our groundwater and 190 distinctly different PFAS compounds in the air stacks. Air emissions from the Saint Gobain Merrimack facility's PTFE (TEFLON) fabric coating operations are on record as problematic from 2003 to date, and are not only the source of our environmental contamination, but a CDC recognized pathway of exposure that threatens human health... the failure of Saint Gobain to eliminate or prevent air pollution that has created at a minimum a 65 square mile area of environmental contamination over the last 17 years...the petitioner believes 17 years of community exposure to emitted PFAS and VOCS constitutes having taken reasonable steps to eliminate or prevent air pollution.

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[3] Both SGPP's statements and the public comments contained in this document were quoted directly from the submittals to the extent possible. In some cases, clarification or corrections were noted in [].

Comment 7: Every day they are allowed to operate without air emission treatment is a day the residents of Merrimack and other towns are subject to pollution. The continued lack of air filtration results in Saint-Gobain emissions not only in the air but falling to the ground.

Comment 8: SGPP has made a conscious decision not to take voluntary reasonable steps to eliminate/prevent emission of PFAS, despite having knowledge of the need, and access to the financial resources and technology to do so.

NHDES Response

The estimated historical PFOA emissions cited in SGPP's variance petition come from NHDES' permit application review summary dated February 11, 2020. Those estimates are based on 2004 stack tests conducted at SGPP along with several assumptions as outlined in NHDES' September 26, 2018 Air Deposition Modeling Report. NHDES issued Administrative Order by Consent ARD 06-006 to SGPP on August 7, 2006. The Order required SGPP to reformulate the raw materials utilized at the Merrimack facility to reduce ammonium perfluorooctanoate (APFO) concentrations in the raw materials in order to achieve compliance with the ambient air limits contained in Env-A 1400, *Regulated Toxic Air Pollutants (RTAPs)*. The Order, along with the EPA Stewardship Agreement[4] with raw material suppliers, resulted in significant reductions (>99%) in APFO concentrations in the raw materials, which ultimately reduced PFOA emissions as measured during the 2007 stack test and confirmed in 2016 and 2018. Results of the 2018 stack test conducted at SGPP and reported by Barr Engineering showed that at least one fraction of the sample trains had detection of PFAS compounds, including but not limited to PFOA, PFOS, perfluorohexane sulfonic acid (PFHxS), and perfluorononanoic acid (PFNA), which are all compounds for which an AGQS was established in 2019.

While NHDES recognizes the facility has reduced PFOA emissions since 2006, NHDES also understands that the reformulations have resulted in the utilization of replacement PFAS compounds in the raw materials. As NHDES stated in the February 11, 2020 Findings of Fact and Director's Decision for the issuance of TP-0256, NHDES believes that current PFAS compounds in the raw materials may be transforming in the process exhaust due to decarboxylation through a process called "thermolysis".

The thermolysis process involves a simple hydrolysis reaction using water to cut the anionic carboxyl group from the surfactant under moderate temperatures. Once the decarboxylation occurs, a free radical would be created, which could then reattach to other free radicals in the exhaust gas, making unique PFAS compounds identified only through non-targeted analysis, such as what was done by EPA Office of Research and Development (EPA ORD)[5]. Under current conditions, where no add-on controls are being utilized, these replacement PFAS compounds could be acting as precursors that are converting back to regulated PFCs in the environment. Based on the available information, there are currently PFCs as well as possible precursor compounds being emitted from the uncontrolled stacks. RSA 125-C:10-e requires a device that emits to the air any PFCs or precursors that contribute to an exceedance of an AGQS as a result of the deposition of any such PFCs or precursors from the air to apply best available control technology.

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4 EPA. Assessing and Managing Chemicals under TSCA. *Fact Sheet: 2010/2015 PFOA Stewardship Program.* Available at: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/fact-sheet-20102015-pfoa-stewardship-program#what.

5 EPA, Office of Research and Development. (June, 2019). *PFAS Environmental Contamination Associated with Manufacturing Sites in New Hampshire. Laboratory Data Report #6: Non-Targeted PFAS Measurements in MM5 Sample Trains.* Available at: http://www4.des.state.nh.us/OneStopPub/Air/330110016506202019TypeCR.pdf.

(2) Granting a variance would not create a danger to public health, welfare, or safety

SGPP's statement

In the variance petition, SGPP states that the quantities of PFC emissions from the facility...total less than one pound in emissions per year. RSA 125-C:10-e, II provides: "Operation of the source may continue through the permitting, construction. and installation time period." The statute envisions that the "permitting, construction, and installation time period" will last in excess of 18 months. The State Legislature has thus made the determination that operation of a source, such as the Facility here, pending the construction and implementation of "best available control technology" – in this case, the RTO – over an 18-month plus period is consistent with the public health, welfare, and safety. See RSA 125-C:1 (declaring policy and purpose of statute is, in part, to "promote the public health, welfare, and safety"). Allowing the source to continue to operate over an additional 12-month period pending the construction and installation of an RTO that complies with the terms of the Permit, as they may (or may not) be amended on appeal is entirely consistent with the statute and the Legislature's determination that such operation is consistent with the promoting the public health, welfare, and safety. This is particularly true where any additional emissions of PFOA and PFOS will be in the already minute pre-control quantities."

Public Comments received

Comment 1: A variance would continue to endanger the public health, welfare and safety. The reduced limits recently passed into law, make it even more critical to stop the pollution that is emitted from SGPP's stacks. Failure to do so would result in continuing to contaminate Merrimack's drinking water, groundwater, and soils. Any further delays cannot be tolerated.

Comment 2: Many states, including NH, are beginning to regulate PFAS individually by reviewing health science and determining safe exposure levels for each PFAS chemical individually. However, as is the case in Merrimack, communities with PFAS contamination are exposed to a multitude of these chemicals, all of which have shown alterations to various health systems...Our residents have been steadily exposed to PFAS chemicals in various forms in our community as air deposits continue to spread. All recommendations for chronically exposed communities state that exposure needs to end in order for health disruptions to not occur. Toxicological studies of both legacy and replacement PFAS compounds such as the PFOA replacement, GenX, are showing the newer chemicals in the PFAS class are harmful at much lower exposure levels and as we have an active manufacturer in town who primarily utilizes PTFE in their industrial processes, we are disproportionately burdened with not only risks to health but costs incurred to our community. Granting this variance would perpetuate the danger to public health, welfare and safety.

Comment 3: Every day they are allowed to operate without air emission treatment is a day the residents of Merrimack and other towns are subject to pollution. The continued lack of air filtration results in Saint-Gobain emissions not only in the air but falling to the ground. Evidence of these continued air emissions impacts can be found in the Merrimack Village District Community Exposure Assessment Summary Report by the Department of Health and Human Services, dated September 2017 (https://www.dhhs.nh.gov/dphs/pfcs/documents/mvd-pfc-09252017.pdf). That report found greater PFOA blood impacts to residents in closer proximity to Saint-Gobain. The recent passing of the new lower PFAS drinking water Maximum Contaminant Levels (MCLs) and their signing into law by the Governor means that all of MVD's wells are now essentially at or over the PFOA MCL of 12 ppt. While Saint-Gobain denies responsibility for impacting ANY MVD wells, their continued PFAS air emissions near MVD's public water supply wells can only have negative impacts.

Comment 4: I am deeply disturbed that a company who presents itself as a "good corporate neighbor," knowing that [thermal oxidation] is capable of removing the fluorochemicals from their air emissions, and that the state of NH ruled in 2019 that the emissions coming from their stacks exceeded the state's health-based and science-based drinking water standards, is trying to obtain a variance to continue polluting New Hampshire's natural resources.

Comment 5: I, respectfully, suggest that SGPP's request does not meet the criteria for variance to be issued. Because granting the variance would delay, indeed, the installation of equipment intended to protect public health, it stands to reason that to do so could imperil the health, safety and wellbeing of the residents of Merrimack and surrounding communities. Based on current scientific data, including the work of the NH Department of Environmental Services, the New Hampshire General Court passed and Governor Sununu signed legislation to establish maximum contaminant levels (mcl) for PFAS to protect public health and safety. The prompt installation of a Regenerative Thermal Oxidizer by SGPP at their Merrimack, NH facility is imperative to ensure that further risk to the people of our community is minimized.

Comment 6: The ATSDR has stated that PFAS exposure could equate to a much higher risk of Covid-19 cases. As per this statement, it makes ZERO sense to extend their timeline due to the continued harm they have caused and continue to cause, and they are once again jeopardizing the health and wellbeing of our town and residents. Just this past week, yet another disturbing health study was released in the Lancet regarding the effects of PFAS on the endocrine system, which is as increasingly harmful and getting as much attention as is immune suppression, adding to the plethora of health studies showing harm. It is also yet another reason many states are setting such low MCL levels for drinking water. Given this and the vast accumulating science, there should be NO excuse in delaying any PFAS exposures whatsoever, most especially to developing babies and children, particularly at critical developmental points. There is NO debate that air emissions caused our water pollution, and with the air results, we know our families are breathing it as well as drinking it. To allow them any further delays is literally giving them permission to continue poisoning our families. Even our own NHDES has stated the direct impact of the air pollution from Saint Gobain is in fact the cause of our water contamination.

Comment 7: The best available scientific evidence has shown that PFAS, a group of man-made toxic chemicals that bio-accumulate in our bodies, can lead to adverse human health effects for exposed populations, and do not break down in our environment. At the Southern NH PFOA Investigation: Public Hearing in Merrimack, NH on 3/23/16, NH DHHS, State Epidemiologist, Dr. Benjamin Chan shared health impacts slides which indicated that (1) the C8 (PFOA) Health Project (2005-2006) Science Panel concluded that a probable link existed between PFOA exposure and the following conditions: high cholesterol, thyroid disease, pregnancy-induced hypertension, ulcerative colitis, and kidney and testicular cancer; (2) the August 2015 ATSDR Perfluoroalkyl Toxicological Profile cites an association with lower birth weights, and increases in blood cholesterol, blood uric acid levels, and some liver function tests; and (3) the ATSDR also noted that "some increases in prostate, kidney and testicular cancers have been seen in individuals exposed to high levels" of PFC's. Science based drinking water PFAS Maximum Contaminant Level's (MCL's) have been instituted and continually reduced as more peer-reviewed science becomes available indicating increased risk to human health at lower exposure…The September 2016 MVD Community Exposure Assessment Summary Report completed (2017) by NH Department of Health & Human Services (DHHS), indicated that MVD customers had 2-3 times the concentration of PFOA in their blood as compared to national averages, with blood serum levels increasing with proximity to the SGPP site. Even with this knowledge, SGPP continues to discharge PFAS from its facility and seeks to be allowed to continue to do so despite the known risks to the environment, public and private wells, and public health.

Comment 8: First we started with the water, but NHDES and DHHS explained it got into our water via the air. Since we have known about this issue since 2016, they have continued their emissions and the residents of Merrimack and Litchfield are mostly the ones that get to breathe this air. We have incurred expenses to try and protect ourselves from contaminated water. It is much harder for the town to filter the air. It has to be stopped at the source. Another article shows "There are, however, a few studies that demonstrate that PFASs have some impact on the respiratory system. In a study conducted by Timmermann et al. (2017), PFASs exposure and asthma in children were found to have a lower vaccine antibody response to the MMR vaccination. Children with an increased serum concentration of PFAS had higher odds of history of asthma in unvaccinated children compared to those who were vaccinated. Another study conducted by Qin et al. (2017) found an association between PFAS exposure and impaired lung function in children. The lungs are one of the main tissues in which PFASs accumulate (Pérez et al., 2013)." https://corescholar.libraries.wright.edu/cgi/viewcontent.cgi?article=1235&context=mph

Comment 9: RSA 125-C:10-e states: "Within 12 months of permit issuance, the applicant shall complete construction and installation of controls consistent with the permit." Thus, the 12-month timeline is the maximum time available by law. SGPP is required to meet this timeline because of the threat SGPP air emissions pose to human health and the environment.

Comment 10: I live at Society Hill nearby the plant and the air quality here is poor, it is noticeable that the air generated by the plant is an issue.

Comment 11: The smell and the soot from St G filters into our homes. We try to open our windows on a hot day and the smell of St G pollution filters in.

Comment 12: We built our home in Bedford in 1999 and have raised three children in this home, breathing in and consuming this contamination (Contaminated well water above 70ppt) from this plant unknowingly for many years. It is my understanding that this company stopped using this chemical YEARS ago, and yet it is such a pervasive chemical it is still being found in samples taken from the smoke stacks. They have had years to provide additional emissions controls to this plant. They should not be allowed further extensions. Given the dangerous nature of some of these chemicals, it is even MORE important that we be breathing clean air during a respiratory pandemic.

Comment 13: I live just across the field from St. Gobain. I strongly request that the NHDES does not grant an extension to this company that has been pumping horrific toxins into the air in which I raised my children, and indeed which we must breathe every day.

Comment 14: My husband was employed there from 2013-2018. Honestly whatever chemicals they have there in the plant as well as blowing out into the Merrimack community are extremely toxic. I could not even go into the offices/plant to visit my husband because of the horrific odor. My husband got used to it obviously after working there for as long as he did, but these smells are not right and are not normal. I'm not even sure how the folks living in the new apartments which are neighbors to Saint Gobain are coping with the horrific air quality due to their plant.

NHDES Response

In a letter from NHDES to SGPP dated September 26, 2018, NHDES determined that devices operated at SGPP have and continue to emit to the air PFCs and precursors that have caused and continue to contribute to an exceedance of AGQS as a result of deposition of the PFCs and precursors from the air. At that time, the NH AGQS were 70 parts per trillion (ppt) for PFOA, 70 ppt for PFOS and 70 ppt for PFOA and PFOS combined. The letter further stated that the devices located at SGPP are subject to the application of best available control technology as required by RSA 125-C:10-e *Requirements for Air Emissions of Perfluorinated Compounds Impacting Soil and Water*. This determination was based on an

extensive investigation from 2016 – 2018 into air emissions from SGPP and the resulting presence of PFAS (including PFOA and PFOS) in multiple environmental media surrounding the facility, including but not limited to stack emissions, solid residue/char, raw materials, gray soot on window sills at a neighboring condominium complex, and wipe samples of the rooftop.

In 2019, NHDES adopted rules that established health-based drinking water standards [maximum contaminant levels (MCLs)] and AGQS for four PFAS that include: 12 ppt for PFOA, 15 ppt for PFOS, 18 ppt for PFHxS, and 11 ppt for PFNA. The effective date upon which the rules became enforceable standards was September 30, 2019. However, effective December 31, 2019, the Merrimack County Superior Court issued a preliminary injunction barring enforcement of these rules. On July 23, 2020, the Governor signed into law NH House Bill 1264 which established the state MCLs listed above into law. On September 4, 2020, the Merrimack Superior Court vacated the preliminary injunction, thus returning the rules adopted September 30, 2019 to full effect. Pursuant to RSA 485-C:6, where state maximum contaminant levels have been adopted under RSA 485:3, I(b), ambient groundwater quality standards shall be equivalent to such standards.

As reported by NH DHHS in the Merrimack Village District Community Exposure Assessment Summary Report, MVD customers had 2-3 times the concentration of PFOA in their blood as compared to national averages, with statistically higher levels of PFOA concentrations in blood serum if they lived within a 1.5-mile radius of the facility. This study was conducted over 10 years after PFOA air emissions had been reduced through reformulation at the facility.

In RSA 125-C:10-e, the NH General Court provided a time frame for existing sources subject to the statute to permit, construct and install control equipment provided that the facility met all the criteria laid out in the statute, including but not limited to the facility submitting a permit application within 6 months of NHDES issuing a determination, that the control equipment proposed to be installed met the requirements of BACT, and that the facility constructed, installed, and operated the control device within 12 months of permit issuance. RSA 21-O:14 *Administrative Appeals* defines a "department permitting decision" as a final action on an application. NHDES took final action on the application for installation of BACT at SGPP on February 11, 2020 when it issued the air permit TP-0256. RSA 125-C:10-e does not envision an extended timeframe for construction and installation of control equipment while the permit appeal process is exhausted.

(3) The source of air pollution has social and economic value to the area in which it is located

SGPP's statement

In the variance petition, SGPP states that as a provider of hundreds of jobs, payer of hundreds of thousands of dollars annually in property taxes, and provider of community support in a multitude of ways, Saint-Gobain is an important and consistent Merrimack community partner and supporter. Saint-Gobain employs approximately 200 people at its Facility in Merrimack. According to the Town's webpage, this places Saint-Gobain as one of the Town's 10 largest employers. These jobs are the means by which residents of Merrimack and other area towns to provide for themselves and their families. Salaries and wages Saint-Gobain pays to employees at the Facility also support the local economy, as employees inevitably use their earnings to patronize area businesses and support local organizations. Saint-Gobain pays approximately $235,000 annually in property taxes, which support local schools and local governmental programs.

While always an active community partner, during the COVID-19 pandemic, Saint-Gobain has provided additional support to the local community, making at least the following donations:

- *10,000 pairs of nitrile gloves to Elliott and CMC hospitals;*
- *400 KN-95 respirators to Elliott Hospital;*
- *300 3D printed mask extenders per week for use by Child Advocacy Centers;*
- *Approximately 200 coverall suits to Elliott Hospital and United Way; and*
- *$30,000 being distributed to area charities.*

Further, in response to the COVID-l9 crisis, Saint-Gobain quickly developed a process to produce level 1 medical gowns at the Facility. Saint-Gobain quickly ramped up production and has been producing approximately 100 to 250 gowns per week, which the company is donating to hospitals. The response of Saint-Gobain's Merrimack Facility to COVID-19 is not limited to the local area. Saint-Gobain has donated ONESUIT suits-these are protective suits made of Lycra-grade material for hazmat and first responders-to New York City and Philadelphia.

Public Comments received

Comment 1: You do know that this is the 3rd location for this company and that they have polluted the drinking water in all 3 locations. SGPP may think it has economic value to Merrimack and the surrounding towns but we would prefer they just pack up and leave. SGPP will try to convince you that they "helped" the communities by donating PPE supplies during the COVID-19 pandemic and some organizations did accept them. Truthfully, they should have donated more based on the continued pollution of our environment and drinking water. There is no social or economic value when people have to buy bottled water for their families because the drinking water is polluted. People on public water supplied by the Merrimack Village District voted last year to pay nearly $20 million in order to put filtration on the wells supplying our water, the citizens are paying for this filtration. Every week these same citizens go to their favorite store and pay out of their pockets to buy anywhere from 10 to 30 gallons to supply their families with drinking water for the week. For those citizens with private wells, SGPP is providing some of them, but not all, with bottled water. The homes not getting bottled water supplied by SGPP also go to the store to buy their water. So the economic hardship is not on SGPP, but on the people of Merrimack and the surrounding towns who have this additional expense because of the pollution caused by SGPP.

Comment 2: This project will cost approximately $4.63 million dollars from start to finish according to Saint Gobain. How about they pay the almost $20 million we are spending to clean our drinking water because of them and the additional money it will cost to maintain filters over a lifetime?

Comment 3: I noted that there are ongoing projects over the next several years to treat contaminated well water in Merrimack and allow them to go back online. If this is due partially or fully from contamination from this facility, I do not understand why these investments, as well as costs to purchase water from other towns short term, are not partially or fully funded by St. Gobain. We have seen a dramatic increase in our water bills, and we seem to have had the most severe water restrictions in New Hampshire recently.

Comment 4: The costs and impacts to NH citizens who've been impacted by SGPP are numerous. In 2018, I was part of a concerned citizens group that collected petition signatures asking SGPP to filter the drinking water for our school children and staff. SGPP refused. In 2019, MVD customers approved warrant articles totaling $14.5 million that will provide for the design and construction of water treatment systems to reduce PFAS on MVD wells #'s 2,3,7 and 8, which, though they have not been assigned the responsibility of SGPP, are contaminated as well. Many residents have chosen not to grow

vegetables in their gardens. Many bear ongoing costs of bottled drinking water and in-home filtration systems. With the necessary closure of two public wells, the MVD has had to purchase water from Pennichuck Water Works at increased cost. Citizens have been mandated to comply with water restrictions to protect supply for drinking water and emergency needs. MVD customers will bear the financial burden of a $1.8 million underfunded settlement agreement and filtration related maintenance of Wells #4 and #5 - beginning at year 5 post filtration treatment completion, in perpetuity. Citizens feel taken advantage of and frustrated that not only has SGPP not taken full financial responsibility for the costs to address the PFAS contamination it created; it has also been allowed to continue to pollute our air, water and soil. SGPP is passing on the associated costs to citizens. SGPP's assets far exceed those of the Town of Merrimack and its citizens- the very citizens whose lives and health have been impacted by SGPP's manufacturing processes. Every day that the State of New Hampshire allows SGPP to delay compliance, is another day it is allowed to take advantage of NH citizens. Though SGPP may claim that it provides social and economic value to Merrimack, it is substantially less than negative impacts and costs to the communities it has contaminated. The costs to innocent citizens who have no responsibility for the PFAS contamination they are forced to live with and are impacted by, are incalculable.

Comment 5: On September 30, 2019 we received a Fed Ex letter stating that our well water had tested above the recently revised NHDES MCL/AGQS of 12ppt for PFAS. We were advised that our water should not be used for drinking or cooking. We have since been receiving water deliveries from Monadnock Mountain Springs. I have researched installing a charcoal-based water purification system in our home and asked that Saint Gobain help us defray the cost by either paying for the system or at the very least, contributing to the cost. My requests have been met with silence. Their obvious refusal to pay for a system makes no sense as they are currently paying for repeated water deliveries to us, which cumulatively will cost more than the price of a water purification system. Do they really believe that by being one of the largest environmental polluters in the state that their presence has "social and economic value to the area?" This just underscores their total disregard for the health and safety of area residents in the interest of their own profitability. Where is the "social" value?

Comment 6: As previously discussed, there is NO social or economic value to allow SGPP's toxic pollution to continue to contaminate Merrimack's drinking water, our homes, and our bodies. The local water district is already spending over $20 million dollars to install filtering systems for these chemicals. Any additional delays will only increase the cost burden to the Town and its citizens to address the ongoing enormous impact of this pollution.

Comment 7: We need to stop the cycle of pollution or our home will be worth nothing. We are already bearing economic hardship due to filtering our water both in the town and in our homes.

NHDES Response

NHDES recognizes the social and economic value SGPP provides to the area in which it is located including but not limited to providing jobs, paying annual property taxes, and providing community support as an active community partner, including SGPP's response during the COVID-19 pandemic. However, the continued release of uncontrolled PFCs and precursors from SGPP results in an economic impact on the area in which it is located, including but not limited to the cost of filtration upgrades and continued maintenance of public wells in the deposition area to meet the NH AGQS, cost to homeowners who have installed water filtration systems and purchased bottled water, increased cost of purchasing water from Pennichuck Water Works and water restrictions due to public wells being shut down.

(4) Enforcement of the requirement for which the variance is sought would produce serious economic hardship on the petitioner without equal or greater benefits to the public

SGPP's statement

In the variance petition, SGPP states that the projected cost of the RTO project (which includes the cost of the RTO unit itself and installation costs) is $4.63 million. The cost of the RTO unit itself is approximately $2.3 million. It is typical for the total cost of a capital improvement to be in the range of 1.2 to 2.0 times the cost of equipment. The $4.63 million figure does not include well in excess of $ 100,000 that Saint-Gobain has already paid to a contractor to design the RTO to the Permit specifications. The scope of the RTO project is extensive. In addition to construction of the RTO unit itself, the project requires significant changes at the Facility, including mechanical ductwork necessary to capture emissions at 14 different points and direct them to the RTO, in addition to transformers, electrical work, significant modifications to natural gas supply infrastructure, concrete foundations, structural elements, and fiber optics, among many other components. The project also entails significant coordination among the various utilities, contractors and vendors and the various bidding, contracting and scheduling processes. Since January 2020, two Saint-Gobain employees have been spending a combined total of approximately 50 hours per week solely on the RTO project, and they would continue to do so until installation. Beginning in September 2020, two additional employees would start spending an additional combined total of approximately 60 hours per week solely on the RTO project through installation. All told, Saint-Gobain anticipates these four employees alone would spend well over 4,000 hours on this project-and that does not include other Saint-Gobain employees who are or will be involved on a less than full-time basis. Nor does it include the myriad contractors that Saint-Gobain will need to hire to complete the preparation and installation work described above (electricians, mechanical, materials, etc.).

Enforcement of the February 11, 2021 deadline prescribed by 125-C:10-e, II would not provide for an equal or greater benefit to the public. It would not benefit the public for Saint-Gobain to unnecessarily expend millions of dollars to build an RTO in accordance with a Permit that is on appeal if its requirements could be amended, requiring the RTO to be scrapped, redesigned, and rebuilt. Indeed, the public would not realize any benefit if Saint-Gobain nearly completes construction of the RTO in accordance with the Permit, only to have the Permit amended on appeal, thus requiring Saint-Gobain to remove the newly built infrastructure and start from scratch.[6]

Public Comments received

Comment 1: The Town is appalled by SGPP's assertion that the public has a greater interest in SGPP making millions of dollars by polluting the air, groundwater and bodies of its citizens than it does in installing the RTO and controlling pollution as required by law.

Comment 2: I noted in the variance request that there was quite a lot of description of the cost, complexity, and staffing required to complete the plant and get it started. This may have an impression on those that may not be knowledgeable about these types of projects and may solicit some sympathy for a difficult situation. However, tight deadlines, complicated project design including modification to existing facilities, extensive coordination with the engineers, plant personnel, suppliers and management are elements of essentially any industrial process systems and cannot be given as a significant rationale for delay. Similarly, having two people full time on such a project is not at all unusual. Regarding additional personnel assigned in September 2020, I fully expect this to be just part of the project as the project moves along through design, engineering, construction, and start up phases. This is not a

[6] See further discussion from Saint-Gobain on impact of NH Air Resources Council Appeal Docket No. 20-05 ARC in later section entitled *Potential Impact of Town of Merrimack's Appeal on RTO Design.*

disruption; it is just part of the project (this is a distracting in a discussion of delays). These additional people must have the qualifications and responsibilities to positively impact the project design and schedule.

Further, the cost of the plant was cited as $4.63 million. Not being familiar with the Merrimack facility, it is not clear to me if this is a significant or a major investment. Since inclusion of the cost is presumably to solicit further consideration for a variance, it is not clear to me why this is a valid point. The project is underway and must have been agreed so the cost is history. As a financial perspective, town residents may consider this a very high investment and commitment; however, I think we should also consider the financial situation of St. Gobain. In 2019, according to their website, St. Gobain had global sales of $50 billion and an operating income of about $3.5 billion; in this context, $[4].63 million is insignificant.

Comment 3: As established by its history of operations in Hoosick Falls, NY, and Bennington, VT, SGPP is well aware that its air emissions cause groundwater contamination. They are well aware of the scientific studies that document health risks from PFAS contaminated water. The soil in and around their facility and in towns downwind is contaminated to the point where neighboring residents are told not to disturb soil in their yards. If you delay the deadline for the Air Permit, the soil load will increase, allowing more PFAS to leach into groundwater, adding to the health risks already faced by our communities.

Allow me to tell you what will not be delayed by your decision: couples will continue to begin their families, babies will be born and nursed, and children will play in yards, ball fields, and playgrounds. Our communities don't have a choice to delay our lives and the risks we are exposed to by SGPP's air emissions.

NHDES set Maximum Contaminant Levels to be protective of human health. The NH General Court and Governor passed this into law. We did not delay this legislation because of inconveniences. Please do not delay SGPP's installation of a Regenerative Thermal Oxidizer. SGPP is a global, multi-billion-dollar conglomerate with access to immense resources to meet its obligations.

Comment 4: They have already contaminated two town wells that had to be shut down. I'm on Social Security and buying water to drink all the time is expensive. St Gobain is a multimillion dollar company that is only stalling. They can well afford to do this work. I live 1/4-mile north of this plant. Not only have the contaminated our water, but also our air.

Comment 5: I have been a Merrimack resident for 17 years. I have had to shell out thousands of dollars a year to provide safe drinking water for my family since we learned our water is contaminated. When is Saint-Gobain going to be held accountable to rectify the problem that they have caused? When are they going to be held financially responsible for keeping citizens of towns they contaminate safe from the harm they have caused? Enough is enough.

Comment 6: As PFAS chemicals are not readily eliminated from the human body and accumulate over time, any further prolonged exposure will assuredly result in increasing PFAS levels in all residents in the area. And in some people, people who have been exposed for long periods of time already, those levels are at risk of increasing to known harmful levels if they aren't there already. It is, thus, incredibly important to eliminate the source of exposure without further delay. If Saint-Gobain had taken the need to mitigate this hazard seriously, surely, they could have found a way to maintain the committed deadline even in the face of COVID-19; their seeking a 1-year delay tells me they have not taken it seriously. This is no mom-and-pop shop; this is a multinational company with the resources to do this. This is not about the company's shareholders; this is about the health and lives of people in the community where the company has chosen to put their business. They now need to do right by the community.

Comment 7: Saint-Gobain is a well-capitalized French company with $41.8 billion in revenue (2018). If they wanted to procure filtration, they could. Why would NHDES acquiesce to their request so that they can make billions without mitigating the pollution they are creating in the State of NH and for NH citizens that is a byproduct of their own processes?

Comment 8: My family and I have suffered not only inconvenience and monetary issues because of the PFAS contamination from Saint-Gobain but MANY irreversible health issues because of them. We were never given the opportunity to ask for an "extension to have it happen later", or even for someone to pay for filtration systems for our homes and we could pay them back later. Saint Gobain has a lot more money in their bank account than I do and they've know about this for a long, long time. So please, let's put the people of Merrimack first and have Saint Gobain pay and take responsibility instead of allowing them to continue to hurt the residents of Merrimack NH.

Comment 9: Living 1.3 Miles from the facility that is poisoning our community I feel it's imperative we make them adhere to the deadlines in place. I am fingertips from the 1-mile radius that was considered most heavily. I would love to have my soil and water tested and can't afford to. Would love a filtration system for my water, can't afford it. People in one-mile radius were communicated with, compensated and tested. I'm .3 Miles over that. I'm...in open airflow across the big open field and road channel to my home. I feel very concerned for our health, safety and welfare, however have not been able to afford any of the things to try to protect us. Including clean safe water. THEREFORE, I implore that they be held to complete all installations of equipment to eliminate the future expulsion on this poison with no further extensions.

NHDES Response

Granting a variance would extend the period of time in which uncontrolled PFCs and precursors would be allowed to be emitted from the facility, which in turn would extend the period of time in which the public would be burdened with the costs associated with water filtration measures not covered by SGPP.

SGPP Bases of Variance Petition:

(1) Potential Impact of Town of Merrimack's Appeal on RTO Design

SGPP's statement

In the variance petition and supporting documents, SGPP states that this RTO will technologically be the first of its kind designed specifically to treat an air steam with such low PFC concentrations associated with fabric coating operations. The RTO has been specifically designed to comply with the specifications set forth in the Permit – a three-chamber RTO with an active combustion chamber designed to maintain a minimum temperature of 1832 degrees Fahrenheit, a minimum gas residence time of 1 second, a flow rate of 70,000 SCFM and additional heat recovery options, which is intended to control emissions of two PFCs that (combined) the Facility, pre-control, emits at a rate of 0.79 pounds per year. An extensive amount of work has already occurred in this regard, including months spent working on the RTO unit design, engineering and planning structural changes to the Facility, and research and preparation for procurement and bidding.

The Town, however, has appealed the Permit to the Air Resource Council ("ARC"). That appeal was received by the ARC on March 10, 2020, was accepted by the ARC during its April 13,2020 meeting, and is currently pending. The minutes of the April 13, 2020 ARC meeting reflect that, due to COVID-19, it could be three months before a hearing date is set. As of today, a Hearing Officer has not been assigned to the appeal and no prehearing conference has been scheduled. A hearing likely will not occur for a number of months, and the appeal will not be completed until many months after the end of May/early

June 2020 timeframe, thus extending the real uncertainty for the RTO project until some unknown date in the future when the case may be decided or otherwise resolved.[7]

This timeline highlights the difficulties inherent with the 12-month deadline for constructing and installing best available control technology ("BACT," in this case the RTO) under RSA 125-C:10-e, II. The 12-month period does not reasonably account for appeals of a permit, such as the Town's, which will take months to resolve and ultimately could require the complete redesign of a BACT. It puts a permittee in the position of being forced to move forward with a BACT project in order to meet the 12-month deadline while risking that all such work is economically wasteful depending on the outcome of the appeal.

The Town is challenging the emissions limits for PFCs set forth in the Permit and requests the ARC to amend the Permit to apply the emissions limits for PFCs set forth in the Permit Application Review Summary. In the Permit, the maximum annual controlled PFC limits are 0.45 lbs/yr PFOA and 0.57 lbs/yr PFOS. In the Permit Summary, the maximum annual emissions limits were indicated as 0.075 lbs/yr PFOA and 0.048 lbs/yr PFOS. Current emissions for PFOS are already lower than the emissions limit. The Town also requests that the ARC require Saint-Gobain to install a hydrogen fluoride (HF) scrubber.

The mere fact of the appeal and the relief it seeks cast real uncertainty on the RTO project. Now Saint-Gobain cannot be sure that a final permit will contain limits and conditions that are technically achievable and feasible and that can be complied with for this first of its kind RTO project. In addition, should the appeal result in changes to the project, the RTO or the Permit, as requested by the Town, then Saint-Gobain, depending on the scope and timing of the changes, will need to change the entire RTO design and engineering, bidding and procurement processes, etc., likely resulting in significant lost time and monies spent, with no ability today to even know if the changes will be technically achievable and feasible. This would create inefficiencies in the use of resources, unnecessary possible duplication of significant man hours and effort, and make it impossible to meet the Deadline. Saint-Gobain would not simply be able to "flip a switch" or make a few minor modifications to its current RTO project. There would need to be a drastic redesign which could change aspects of the RTO unit itself, which in turn would set off a domino effect impacting the other equipment needed to install and operate the RTO. For example, if the RTO needed to operate at a higher temperature for a longer period of time, it could mean bigger fans are needed in the unit, which in turn could necessitate a larger transformer, increase the amount of concrete and change the load-bearing design for the required foundation and other structural elements, trigger the need to re-engineer all of the necessary electrical connections, and so on, again with no basis today to conclude that the changes to RTO project, if any, will be technically achievable and feasible. In short, the likely millions of dollars Saint-Gobain will have spent on the RTO project as currently designed, and related personnel resources, effort and most importantly crucial time, will have been lost, and it will be impossible to meet the Deadline.

RSA 125-C requires that Saint-Gobain "construct and install" the RTO "consistent with the permit" within 12 months of its issuance. Yet, Saint-Gobain will not know what is ultimately "consistent with the permit" until the appeal has been resolved. It is impossible to design, build, and install a moving target. The appeal will not be resolved until after the point at which Saint-Gobain must commit to a design to have any realistic chance of meeting the Deadline. This puts Saint-Gobain in a classic catch-22 scenario.

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7 In SGPP's July 24, 2020 letter, SGPP stated that "since SGPP's Petition for Variance was submitted on June 4, 2020, the NH Air Resources Council determined that the adjudicative hearing on the Town of Merrimack's Appeal of the Air Permit will commence on December 14, 2020. The parties expect that the hearing will last at least three to four days, and due to the Council's schedule and the holidays, the hearing will likely continue into early 2021."

It is wholly unreasonable as a matter of law for Saint-Gobain to be forced into moving forward at risk as to the RTO project, where it must decide whether to continue on the current project path while the appeal is pending knowing that it could result in project changes and the loss of extraordinary time and expense, in which case it will be impossible to meet the Deadline, or wait until the appeal is resolved so that it knows the specifications to which the RTO needs to be designed before making multi-million dollar investments, in that case also likely missing the Deadline.

The serious and significant economic hardship that Saint-Gobain faces could be practically remedied by granting a variance extending the February 11, 2021 deadline under RSA 125-C:10-e, II for one year, until February 11,2022, or for one year from the date of the final, non-appealable order disposing of the Town of Merrimack's appeal of the Permit, whichever is earlier. That would allow the additional necessary time needed for the Town's appeal to be resolved such that the current real project uncertainty can be eliminated before committing to an RTO design, thus avoiding the potential serious aforementioned economic and related hardships.

Public Comments received

Comment 1: SGPP wrongly claims that the RTO will "technologically be the first of its kind." RTO is a common air emissions control technology implemented to control combustible organic emissions. While it is true that RTO designs are all custom to the emissions generated by the relevant facility's processes, SGPP's point appears to be that there are few, if any, facilities installing RTO to control PFCs emission. This point may be true, but it's without relevance. PFCs are organic compounds meaning that their molecular structure includes carbon. These types of bonds are not unique to the technology of pyrolysis and/or combustion. The relative presence of the organic (whether high or low concentration) is also not unique to RTO combustion when dealing with PFCs or any other organic.

SGPP offers no details around why these modifications could result from the Town's appeal of its Temp[orary] Permit and provides examples that are irrelevant. For example, the exhaust flow rate is not under question. Neither is the combustion temperature or the residence time. In fact, as noted above, even a dramatic increase in the total PFCs due to a more rigorous quantification of Gen-X and other PFAS omitted from the analysis of SGPP's Temp[orary] Permit potential to emit calculations, would not affect the overall mass or thermal loading and would not, therefore, result in a design modification. The incremental load to the RTO would be negligible.

NHDES Response

NHDES recognizes the uncertainty that the Town of Merrimack's appeal of the air permit creates in the final design of the RTO. However, in this case, the possibility that the challenge to the permit may be successful in some way that may materially alter the design of controls does not overcome the impact to the public, including health impacts, that would be caused by granting the variance request.

(2) COVID-19 Pandemic Impact on Supply Chain and Project Schedule

SGPP's statement

In the variance petition, SGPP states that the drastic measures state and local governments, not to mention the federal government, have taken as a result of the COVID- 19 pandemic are all too well known. There are stay-at-home orders of some type in effect for large swaths of the country, including New Hampshire, schools have been closed, and non-essential businesses shuttered. In many places, gatherings are limited to no more than 10 people. Even when people are together outside their homes, social distancing guidelines provide that we stay 6 feet apart from one and another. NHDES should recognize that the unique and extraordinary circumstances of COVID-19, which are completely out of Saint-Gobain's control, warrant an extension of the February 11, 2021 deadline.

COVID-19 also has affected lead times up and down supply chains, including those related for the various components needed for the construction and installation of the RTO. For instance, one piece of equipment that is needed for the RTO project is a 13.8kV-480V, 1200-amp transformer. The transformer feeds the RTO, and Saint-Gobain will not be able to start or operate the RTO until the transformer is installed. Prior to COVID-l9, the manufacture and ship time, i.e., lead time, for this type of transformer was 20 weeks. Now with COVID-19, the contractor has informed Saint-Gobain that the lead time already has increased to 32 weeks-an increase of approximately 3 months. While the manufacturer of the transformer is considered an essential business, due to social distancing it is only able to work at half-staff. As it stands today, in light of this delay and the current planned schedule, the transformer would not be delivered until very close to or during February 2021, when the RTO must be installed. This alone directly impedes Saint-Gobain's ability to meet the Deadline to install the RTO. There is nothing that Saint-Gobain can do to expedite or shorten the manufacturer's lead time. It is a result of measures the manufacturer has taken to protect its workers' health and help stop the spread of the pandemic.

Lead times for other components may well be affected due to COVID-19. For example, there is significant duct work that needs to be installed to pull emissions and direct them towards the RTO for treatment. The metals and other materials required for the duct work are specialty materials, many of which Saint-Gobain must procure from overseas, including China. It is entirely reasonable to believe that there could be supply chain disruptions which affect Saint-Gobain's ability to timely procure such materials.

The vendor Saint-Gobain is using to construct the RTO itself also has expressed concerns with lead times of its own suppliers. The lead time for the "burner train," which according to the vendor is always one of the longer lead-time components, is becoming even longer. Saint-Gobain's vendor has to rely on others to manufacture this component and cannot assemble the RTO until it has the component.

Moreover, Saint-Gobain necessarily has its own COVID-related requirements that may impact the timing of the installation of the RTO. One such requirement is a travel restriction. Anyone who takes public transportation of any kind (planes, trains, buses, etc.) has to self-quarantine and cannot go on site or enter the Facility for two weeks. Saint-Gobain's management recently stated that these measures would continue in place for the foreseeable future. This presents significant hurdles for the RTO project as anyone who may need to be onsite during this project and does not live in the Merrimack area and does not use private transportation to get to the Facility will have to self-quarantine for two weeks before being able to access the Facility and physically work on the RTO installation, assuming restrictions are still in place. A number of contractors on the RTO project, including a key employee of the contractor that is overseeing the design and installation of the RTO unit, live and work out of state and would need to fly to New Hampshire for the installation. These individuals would need to schedule trips to New Hampshire incorporating a 2-week quarantine period with appropriate accommodations. Once these individuals start to work on the installation, they would not, as a practical matter, be able to leave lest they subject themselves to another 2-week quarantine.

The physical installation of the RTO presents additional COVID-related problems. The conveyancing system to the RTO involves tight spaces which will need to be navigated by multiple workers at the same time. Social distancing under these circumstances would be extremely challenging as a logistical matter for these workers, but to promote the public health, safety, and welfare and to adhere to Saint-Gobain's and state's requirements, appropriate social distancing, provisions for personal protective equipment, and other controls will need to be followed to ensure the work can be safely completed in the midst of the on-going COVID-19 pandemic. Following these important rules and guidelines will slow down the installation process significantly. Moreover, it is not in the public interest to force the travel and close contact required to complete installation of the RTO, because it risks spread of the disease in both the local community and the communities from which the employees and contractors come.

In the supporting documents, SGPP submitted a 33-week timeline after the receipt of a purchase order to complete the manufacturing and installation of the RTO and stated that this project timeline is up from a pre-pandemic schedule of 24-26 weeks. In addition, SGPP provided a more detailed account of the modifications made to date related to the RTO design, conveyance system changes, utility upgrades, necessary structural support and foundation designs. SGPP also provided information on peripheral changes needed to be conducted at the Facility to prepare the site for installation of the RTO. Finally, SGPP provided documentation from the subcontractor that will support the procurement and installation of the new transformer and electrical service to support the RTO (32-40 weeks from order; up from 20 weeks) and subcontractor that will be installing a main trunk of ductwork and structural ductwork supports on the roof that will connect the existing site process equipment exhaust (24 weeks; up from 20 weeks).

Public Comments received

Comment 1: As background, I spent my entire career engaged in industrial machinery supply as well as industrial process systems supply to major industries (since 1976). This included, at times, technology for pollution abatement and treatment systems. I am intimately familiar with process design considerations as well as project management practices to deal with issues that arise during the course of a project including mitigating supply chain issues.

The issue which alerted me to the issue very recently was the notice in an MVD press release on more severe water use restrictions which cited that a delay in the plant startup was due to unavailability of 'special electrical equipment from Mexico'. This was blamed on the global pandemic and a Mexican suppliers' inability to supply in time. I will speculate that this 'special equipment' is not from Mexico because there is a global leader in electrical component supply in Mexico, but rather that this supplier was likely a low cost supplier. I take this supply issue as an example of how it may not have had the proper focus regarding plant schedule or the priority of project budget over the timetable and commitments to Merrimack. With this as background, I am concerned that there are more examples of excuses that may have not been disclosed nor published which I noted in the Variance Request.

Supply chain disruptions are very normal in any industrial process system project, and a key responsibility of a Project Manager is to mitigate the effects of these disruptions, normally while pressure is put to resolve the issue within the project budget. With the urgency of starting up this treatment plant, and the legally committed dates for achieving new emissions standards, I believe the project manager should have been authorized to resolve the delivery issues at the cost require to maintain or minimize the impact on the schedule. In my experience, this would include the following actions:

- *Extensive communication with (and under normal circumstances, visiting the supplier) to support the supplier in their internal or external efforts to stop or reverse the delay,*
- *Immediate investigation of alternate supply source, likely at increased cost for short delivery and special expediting. I fully suspect that there will be a claim that this would not be an option because of the global pandemic; however,*
    - *Most of China remained open for business and there are numerous companies in China that supply electrical components globally,*
    - *Sweden never shut down their economy and they have some of the finest pollution control process systems suppliers as well as electrical companies in the world,*
    - *These options should have been fully investigated and may well have at least minimized the delay to the project.*

- *Canvass the secondary market for used equipment. Equipment of all types, including electrical equipment of all types are available at low cost from secondary equipment suppliers that resell devices removed from facilities that have been shut down,*
- *As the equipment was described as "special", it suggests some special engineering was done for features desired. It may be possible that substitute equipment may be an option that would have sufficiency functionality to get the plant started up on time, perhaps with somewhat less functionality, until it could be replaced with the new "special" equipment to be received at a later date.*
- *A key focus on the above options would be to validate that the substitute equipment will meet minimum required standards for quality and safety. With the proper direction to the team from leadership, this would likely be not major issue, e.g., some compromise must be allowed and there cannot be a "must duplicate" at all cost directive which would make the effort academic.*

All of the above actions, and perhaps more, should have been pursued. In consideration of possible granting any variance, it may be worth a formal investigation of what actions were truly taken and what authorization may have been given to focus on delivery for the benefit of the schedule versus maintaining the project budget.

Comment 2: SGPP asserts that the coronavirus is another cause for delay. SGPP fails to acknowledge that the New Hampshire Division of Public Health Services, Bureau of Infectious Diseases recommends the use of face coverings/masks when social distancing is not possible. The use of face coverings/masks, which was not mentioned at all in the SGPP Delay Request, could allow construction to proceed at a normal pace much like other construction projects in the state.

Comment 3: SGPP also claims that the COVID-19 pandemic has affected their ability to complete work by the end date on the permit. Just so you know, since the beginning of the COVID-19 pandemic in late January, SGPP has continued to operate at full force working on a government contract obtained in 2019. Only office staff was made to work at home. The operations staff are considered to be essential workers and operations continued as usual with staff wearing masks. Just like other industries, SGPP needs to work with their suppliers to ensure the project is completed on time. If entire companies can switch over their operations in a matter of weeks to make ventilators, one would think that SGPP can get an RTO installed within a year. Also, on April 29, 2020, SGPP was awarded a government contract for PROTECTIVE FABRIC SHELTER (PFS) KITS funded by the Joint Munitions Command of the Army. This contract goes out to 2024. So again, SGPP has been conducting business as usual and bringing in new contracts during the pandemic.

Comment 4: The company I work for has not delayed shipment of electronics to our customers due to COVID-19; we are managing to our commitments. I expect Saint-Gobain to do the same. The COVID-19 pandemic should not be used as an excuse to prolong installation of an already long overdue remedy.

Comment 5: The other reason cited as justification for a variance, the Coronavirus Pandemic, is frankly insulting given that Saint Gobain has not struggled with the impact of COVID that many NH owned businesses have endured, did not even temporarily close, and is in no danger of going out of business. As a highly profitable and immense global presence, they have far reaching contacts and resources for suppliers as well as consultants.

Comment 6: The excuse most recently communicated from Saint Gobain regarding delays caused by the Covid-19 pandemic is baseless and further demonstrates they are grasping at straws to cover for their lack of taking responsibility. Proper PPE is readily available for adequate/necessary employee or

contractor protection during any and all installations and monitoring. We agree that employees and contractors should be protected and Saint Gobain should undertake that responsibility.

Comment 7: Reports are starting to come out linking chronic PFAS exposure to increased risk for COVID. (https://www.northcarolinahealthnews.org/2020/07/13/research-suggests-link-between-pfas-contamination-and-the-coronavirus/) Cleaning up PFAS has literally become a matter of life and death in our town.

NHDES Response

NHDES recognizes the effect that the COVID-19 pandemic has had and may continue to have on material delays in the supply chain and vendors' and subcontractors' ability to meet project schedules. However, the fact that COVID-19 has the possibility to cause delays or hardships does not overcome the impacts, including health impacts, to the public at this time.

Findings

NHDES has based its decision with respect to the petition for a variance for SGPP on the following findings of fact:

1. In addition to the findings below, NHDES hereby incorporates into its findings the responses to comments provided herein.
2. SGPP filed a written petition for a variance in accordance with the requirements of RSA 125-C:16, *Variances* and Env-A 200, *Procedural Rules*.
3. SGPP submitted additional information as requested by NHDES in accordance with the requirements of RSA 541-A:29 *Agency Action on Applications, Petitions and Requests.*
4. NHDES conducted a comprehensive review of the variance petition and supporting documents submitted by SGPP. In addition, NHDES carefully considered public comments submitted either in writing during the public comment period or in oral testimony during the public hearing.
5. Based on RSA 125-C:16, *Variances* and pursuant to Env-A 202.07, *Decision*, the department shall grant a variance if the department determines that:
    i. The petitioner has taken reasonable steps to eliminate or prevent air pollution;
    ii. Granting a variance would not create a danger to public health, welfare, or safety;
    iii. The source of air pollution has social and economic value to the area in which it is located; and
    iv. Enforcement of the requirement for which the variance is sought would produce serious economic hardship on the petitioner without equal or greater benefits to the public.
6. Pursuant to RSA 125-C:16, *Variances*, no variance shall be granted to any person applying therefor who is causing air pollution which creates a danger to public health, welfare or safety.
7. RSA 125-C:1 states that the public policy of the state of New Hampshire and the purpose of Chapter RSA 125-C is, in part, to promote the public health, welfare, and safety.
8. In RSA 125-C:10-e, the NH General Court provided a time frame for existing sources subject to the statute to permit, construct and install control equipment provided that the facility met all the criteria laid out in the statute.
9. RSA 125-C:10-e does not envision an extended timeframe for construction and installation of control equipment while the permit appeal process is exhausted.

10. Higher levels of PFOA concentrations in blood serum samples show elevated levels of PFOA compared with other MVD customers if they lived within a 1.5-mile radius of the facility.

11. Devices currently in operation at SGPP have emitted PFCs and precursors through the stacks to the ambient air which has caused an exceedance of AGQS as a result of deposition of the PFCs and precursors from the air.

12. Based on 2016 and 2018 stack tests conducted at the facility, devices currently in operation at SGPP are emitting PFCs at a level which is contributing to an exceedance of AGQS as a result of deposition of the PFCs from the air.

13. Devices currently in operation at SGPP are possibly emitting precursors.

14. RSA 125-C:10-e requires a device that emits to the air any PFCs or precursors that contribute to an exceedance of an AGQS as a result of the deposition of any such PFCs or precursors from the air to apply best available control technology.

15. On July 23, 2020, the Governor signed into law NH House Bill 1264 which established health-based drinking water standards (MCLs) for four PFAS compounds.

16. Pursuant to RSA 485-C:6, where state maximum contaminant levels have been adopted under RSA 485:3, I(b), ambient groundwater quality standards shall be equivalent to such standards.

17. The current emission of PFCs and precursors continue to contribute to an exceedance of AGQS.

18. Therefore, granting a variance would create a danger to public health.

19. Based on its review and consideration of all the available information, NHDES has determined that in accordance with Env-A 202.07(d), the petitioner has not met the criteria listed in Env-A 202.07(b)(1) through (4) as outlined below:

    i. With regard to Env-A 202.07(b)(1), NHDES has determined that SGPP has taken reasonable steps to reduce emission of PFOA since 2006. However, those steps have not eliminated or prevented air pollution of other PFAS compounds, including PFCs and precursors to PFCs regulated by RSA 125-C:10-e.

    ii. With regard to Env-A 202.07(b)(2), NHDES has determined that granting a variance would create a danger to public health, welfare, or safety as outlined above.

    iii. With regard to Env-A 202.07(b)(3), NHDES has determined that SGPP has social and economic value of SGPP to the area in which it is located.

    iv. With regard to Env-A 202.07(b)(4), NHDES has determined that the enforcement of the requirement for which the variance is sought does not produce serious economic hardship greater than or equal to the benefits to the public.

Director's Decision

After consideration of the variance petition and supporting documents submitted by SGPP and all public comments, and in accordance with Env-A 202.07, *Decision*, in the matter of the variance petition submitted by SGPP, the Director of the NHDES, Air Resources Division hereby **denies the petition for a variance**.

Any person aggrieved by this decision may appeal to the NH Air Resources Council ("Council") by filing an appeal that meets the requirements specified in RSA 21-O:14 and the rules adopted by the Council, Env-AC 200. The appeal must be filed **directly with the Council within 30 days** of the date of this decision and must set forth fully **every ground** upon which it is claimed that the decision complained of is unlawful or unreasonable. Only those grounds set forth in the notice of appeal can be considered by the Council.

Information about the Council, including a link to the Council's rules, is available at http://nhec.nh.gov/ (or more directly at http://nhec.nh.gov/air/index.htm). Copies of the rules also are available from the NHDES Public Information Center at (603) 271-2975.

If no petition is filed within the 30-day period, this decision will become final.

Craig A. Wright
Director, Air Resources Division

September 10, 2020
Date

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Steve Malizia, Town Administrator, Town of Hudson
Public Hearing Attendees
Public Commenters