



Saint-Gobain Fact Sheet **RTO Emergency Bypass**

FAQ

What is the purpose of an emergency bypass? Why was the mechanism installed?

- An emergency bypass is a critical safety device for a Regenerative Thermal Oxidizer (RTO). The safety valve activates during an unexpected, sudden RTO shutdown (such as a power disruption) to make sure that an unexpected shutdown does not create conditions in the plant that could endanger the safety of our employees.

When would the emergency bypass need to be used?

- The emergency bypass would need to be used when there is a sudden RTO shutdown during production, in order to keep our employees safe. Coating operations cannot be automatically stopped in sync with the RTO shutdown without risk of fire or other dangerous situations. In the event of a sudden RTO shutdown, the emergency bypass valve is opened while equipment within the plant is brought to a safe, controlled stop.

How is the equipment in the plant connected to the RTO?

- The equipment in the plant is linked with the RTO via a programmable electronic control system and coating operations cannot be started if the emergency bypass safety valve is open. For coating equipment within the plant to be started, the emergency bypass safety valve has to be closed and the RTO has to be operating at the temperature specified in the permit.

Would the equipment ever be turned back on while the RTO is not operational?

- No, coating equipment in the plant would not and could not be restarted after a complete shutdown event until the RTO was again operating at the required temperature and the emergency bypass safety valve is closed.

Are PFOA and PFOS emissions from the plant in compliance?

- Yes, recent emission testing of the RTO proves that the RTO is working effectively to greatly reduce emissions of PFOA and PFOS. Results show that with the RTO in place, annual PFOA and PFOS emissions from the plant are estimated to be 32 and 950 times lower than limits set in our most recent air permit, at 0.014lbs per year and 0.00060lbs per year, respectively.

The emergency bypass has been characterized by some in the community as a “secret tailpipe.” Did Saint-Gobain hide the emergency bypass?

- No, the emergency bypass has been included in engineering drawings that were sent to external stakeholders from inception, and that has been acknowledged by members of the



community in the last few days. These actions taken by DES at this time are to ensure that the emergency bypass is explicitly described in the permit, and we are taking all necessary steps to make sure that happens.

Provide an overview of Saint-Gobain's work with NHDES relative to the RTO implementation.

What are the key highlights and milestones?

- Saint-Gobain has been working cooperatively with NHDES on the RTO since the moment this issue began. On February 11, 2020, the NHDES Air Resources Division issued a Temporary Permit to Saint-Gobain to install an RTO at the Merrimack facility. On August 5, 2021, NHDES issued a renewal of the air permit, which is in effect until August 2022.

The RTO, which came online in July and is fully operational, is the first-of-its-kind project in the United States to treat PFAS in these conditions -- involving a highly complex design and build process. The unit is approximately 30 feet wide, 70 feet long, and six stories tall. It operates at temperatures over 1,832-degrees Fahrenheit, while typical RTOs operate at 1,400 to 1,500-degrees Fahrenheit.

After the unit became operational, we completed performance testing within 60 days of start-up to ensure it was operating safely and effectively and that the outlet emissions comply with the relevant permit and state standards. Results show that with the RTO in place, annual PFOA and PFOS emissions from the plant are estimated to be 32 and 950 times lower than limits in our most recent air permit, at 0.014lbs per year and 0.00060lbs per year, respectively. These tests are in addition to Saint-Gobain's continued investigative and remedial work within the Merrimack community.

What else should the public know about Saint-Gobain's work in the Merrimack community?

- As an employer with more than 200 employees -- many of whom live in and around the Merrimack community, we are committed to their jobs, their wellbeing, and the surrounding community. Our employees are understandably upset and disappointed when they see news stories rife with inaccuracies and mischaracterizations, especially when these false narratives are perpetuated on social media.

The products made here play a crucial role in protecting our military and first responders and enable the creation of some of the most iconic landmarks in the world. These same employees worry about their wellbeing and future in Merrimack when they see disheartening and misleading stories.

What are Saint-Gobain's actions to-date on the remediation of this issue?

- Upon learning about the presence of PFOA in Merrimack, we have taken a variety of actions all of which reinforce our commitment to the community and our desire to



address the current situation. In addition to the completion of the RTO, which is the first of its kind, we have done the following:

- Since proactively reporting to the state in 2016, we have distributed more than 300,000 gallons of bottled water to residents and are continuing to do so for residents whose water tests above the state's MCLs
- In 2018, we agreed to fund the design, construction, and installation of a Granular Activated Carbon filtration system on MVD wells 4 and 5, both of which are operational. All remaining MVD wells are located several miles from our Merrimack facility and outside the outer boundary established in our consent decree with the state.
- We have installed approximately 15 miles of water lines, connecting 540 homes to municipal water between Merrimack, Litchfield, and Bedford
- Back in 2018, we began work to install a pretreatment system, which is removing PFAS from the plant's wastewater
- We have funded point-of-use treatment systems for more than 50 properties
- Installed point-of-entry treatment systems – or POETs – to four additional properties in Bedford, where it's not feasible to extend the municipal water lines. POETs effectively filter water to non-detect levels of PFOA
- Overall, a total of 19,500 model runs, 300 air-model simulations and approximately 360 hours of computation time have been conducted. We have submitted over 27 work plans and reports have been submitted for a total of nearly 36,000 pages.