Illinois EPA Issues Construction Permit to Comply with General Assembly’s Toughest-in-Nation Restrictions

EPA Continues to Provide Technical Assistance to Lawmakers as They Strengthen Legislation

SPRINGFIELD — Following legislation passed by the General Assembly to impose the nation’s strongest controls on ethylene oxide emissions, the Illinois EPA has issued a construction permit to Sterigenics U.S., LLC. The permit is the first step in a lengthy process and allows the company to begin construction necessary to ensure the facility complies with a strict new state emissions law that requires demonstrating 100 percent capture of all ethylene oxide emissions.

“The Illinois EPA is committed to protecting the health and safety of Illinois communities to the strongest extent possible under state and federal laws,” said Illinois EPA Director John Kim. “This construction permit is a direct result of legislation passed by the General Assembly and will allow Sterigenics to attempt to bring the facility in line with the nation’s strongest emissions control law. This is the first step in a lengthy process, and only following strict testing and monitoring requirements would the facility be permitted to operate. As we move forward, the Illinois EPA will continue to provide technical guidance to legislators as they draft further legislation to strengthen their initial law.”

The construction permit allows Sterigenics to make significant emissions control changes only to the Willowbrook I facility and ensures the company will not operate prior to installing these new controls and demonstrating the ability to meet the new limits established in the permit. Required improvements include installing a permanent total enclosure, capturing all ethylene oxide emissions from Willowbrook I, and installing additional air pollution controls to reduce emissions by 99.9 percent or to 0.2 parts per million. In addition, the permit goes beyond the requirements of the Matt Haller Act by limiting annual ethylene oxide emissions from the facility to just 85 pounds. In conjunction with the permit, Illinois EPA is also issuing, pursuant to the Act, a certification that the facility’s emission control system uses technology that produces the greatest reduction in ethylene oxide emissions currently available.

This permit action by the Illinois EPA follows action by the Pritzker Administration to seal the Sterigenics facility. After passage of the Matt Haller Act by the General Assembly, the State of Illinois and DuPage County State’s Attorney reached a consent order to ensure the toughest requirements of the new Act, as well as additional controls, would be applicable to Sterigenics’ operations in Willowbrook.
Sterigenics is prohibited from using ethylene oxide at Willowbrook I until the facility complies with the new law, the consent order, and the construction permit. This means that before resuming operations, Sterigenics must:

- Submit a stack test protocol for emissions testing for Illinois EPA’s review and approval including written notification of the expected date of the testing, description of the specific procedures to be utilized during stack testing (including how the entire batch sterilization process shall be tested, who will be performing the sampling and analysis, the specific conditions under which testing will be performed and why those conditions are representative, the specific determinations of emissions and operations intended to be made, the specific test methods to be used, and any changes from standard methodology to accommodate specific testing circumstances), a proposed schedule that provides for stack testing within 14 days after any restart of operations, and the submission of the results of such testing (including a summary of the results, a description of the test methods and conditions, and all relevant data and calculations);
- Submit an ambient air monitoring plan for Illinois EPA’s review and approval. This plan must include a description of the process that will be used to collect and analyze air samples, the schedule for implementing the air monitoring plan, and details to demonstrate how the company will comply with the requirement that the results of such testing shall be provided to the Illinois EPA no later than 30 days after the samples have been collected;
- Submit a plan to continuously collect emissions information for the Illinois EPA’s review and approval;
- Complete installation of permanent total enclosure system;
- Demonstrate that the permanent total enclosure system captures 100% of all ethylene oxide emissions;
- Perform stack testing and submit results for Illinois EPA review. These results must demonstrate to IEPA that the company has reduced the emission of ethylene oxide from the exhaust point by at least 99.9% or 0.2ppm;
- Complete installation of continuous emissions monitoring system;
- Submit a construction completion report for Illinois EPA’s approval; and
- Be able to provide certification to the Illinois EPA by the supplier of a product to be sterilized that sterilization by ethylene oxide is the only available method.

Prior to permit approval, the Illinois EPA took written comments on the draft permit for 30 days and held a public meeting on August 1, 2019 to afford concerned citizens an opportunity to provide oral comments. After careful review and consideration of over 500 comments, the Illinois EPA made numerous changes to the draft permit. The Agency concurrently issued a responsiveness summary to lay out its responses to the many comments received – this extensive document may be found on the Illinois EPA’s Ethylene Oxide webpage. A copy of the final construction permit, responsiveness summary, memorandum on technology certification and memorandum supporting modeling are available on the Illinois EPA’s website at https://www2.illinois.gov/epa/topics/community-relations/sites/ethylene-oxide/Pages/default.aspx

###