



## **EO Fact Sheet & FAQs**

The U.S. Environmental Protection Agency (EPA) recently updated its National Air Toxics Assessment (NATA) map, which is a screening tool to identify emissions that may warrant further study, including ethylene oxide (EO). In response, Vantage Specialty Chemicals began working with local, state and federal authorities and moved to further address any concerns about EO emissions, including conducting air monitoring at the perimeter of our property and evaluating potential approaches to further reduce our EO emissions.

We are committed to ensuring the health and safety of our employees, the neighboring communities and the local environment near our production facilities. We take this matter very seriously, not only because we have been a longstanding corporate resident of Gurnee, but because many of us also call this community our home for ourselves and our families.

It's important to note that our reported EO emissions for years before 2017 were based on EPA-approved modeling that used conservative default emission values. This method substantially overestimated fugitive emissions. In 2017, we implemented an EPA testing protocol to report emissions based on actual measurements, which is more accurate and demonstrated that emissions were far lower than reported in previous years.

As we continue to cooperate with authorities, we intend to be an active partner and trusted community member as this process proceeds, which is why we've developed the following FAQ document that we will update as often as possible to continue to provide information as it becomes available.

### **Q. What is ethylene oxide and what are its uses?**

A. EO is a gas that has two main commercial uses: 1) To make other chemicals that produce a range of common consumer household products, and 2) To sterilize devices, such as specialty medical and dental equipment. At Vantage, we use EO to make other ingredients for use in a variety of industries including food and baking ingredients, personal care and beauty products, textile manufacturing, lubricants and many more.

**Q: What are you doing to limit emissions of EO currently and are you considering doing more?**

A: During the manufacturing process, any unused EO is captured and sent to specifically designed emissions control equipment where the EO is destroyed and removed from the air. We are cooperating with regulatory agencies to provide information about our operations and emissions controls. While we currently comply with all relevant state and local regulations and permits, we are evaluating ways to further reduce our EO emissions. We are also planning to implement an air monitoring program at the perimeter of our site.

**Q: What are the testing and emission controls currently in place at Vantage?**

A: The Gurnee site uses emission control equipment specifically designed to destroy EO and minimize any emissions that could be released. The site employs on-site alarms for EO detection to warn of a potential release or malfunction, and we use a third-party monitoring service to test fugitives emissions on a routine basis which meets the strictest of EPA requirements.

**Q: What information have you shared publicly about your facility's emissions?**

A: Our emissions data, which we regularly report to regulators, is publicly available online through the [EPA's website](#). We are actively cooperating with regulatory agencies to provide information about our operations and controls, and we want to be an active partner and trusted community member, which is why we are committed to addressing any questions communities and area organizations may have about the safety of our operations and what steps we're taking to further reduce our EO emissions.

**Q: Has Vantage tested or will the company be testing the air surrounding the Gurnee facility since the new EPA map was released?**

A: We are working with the EPA, preparing to conduct "fence line" testing in the area around our property line, and are evaluating ways to further reduce our EO emissions.

**Q: When will those results be available for review?**

A: Vantage will provide updated information on timelines and additional data as it becomes available.

**Q. Why have the ethylene oxide results in the EPA's National Air Toxics Assessment (NATA) changed from the previous NATA?**

A: The EPA updated its cancer risk calculations to reflect a new, more conservative estimation of risks associated with EO. As a result of this update, the latest NATA issued in 2018 estimates elevated risks driven by ethylene oxide from sources that the EPA previously in 2015 had deemed acceptable. This does not mean there is more EO in the air. The assessment reflects the EPA's evolving views about the risk from long-term exposure to EO.