



Ethylene Oxide Emissions Information for Residents

October 2022 Fact Sheet

Introduction

The U.S. Environmental Protection Agency is reaching out to residents surrounding commercial sterilizers that release high levels of a chemical called ethylene oxide (EtO) into the air causing elevated cancer risk, including DeRoyal Industries located at 1135 Hwy 33 South in New Tazewell.

EtO is a colorless, odorless gas that is often used for sterilization purposes. Inhaling EtO at elevated levels over a lifetime can increase a person's risk of getting cancer. However, short-term exposures to the concentrations found in residential communities should not cause acute (non-cancer) health issues, like nausea, dizziness, or breathing problems.

EPA has determined that portions of New Tazewell neighborhoods in the vicinity of DeRoyal Industries have an estimated lifetime cancer risk at or above 100 in a million. A lifetime cancer risk of 100 in a million means that, if 1 million people were exposed to this level of EtO in the air 24 hours a day for 70 years, 100 people may develop cancer from continuous exposure. The risk gradually increases as you get closer to the facility, reaching an estimated maximum of 3,000 in a million in areas closest to DeRoyal Industries.

EPA will soon propose a new rule to limit EtO emissions from commercial sterilizers and will seek public input on the rule. In the meantime, the agency is working with DeRoyal Industries and other sterilizers across the country on ways they can voluntarily control emissions to reduce risk.

EPA is sharing this information because communities have a right to know about emissions that could affect their health and well-being. EPA will host two open houses and community meetings in New Tazewell on **October 25, 2022**, to provide residents an opportunity to learn more and get their questions answered. Residents can choose to participate in the community meetings in-person or virtually. Please follow the instructions in the blue box above to register.

Public Meetings

October 25, 2022

Walters State Community College
1325 Claiborne St, Tazewell, TN 37879

Open House: 10:00 am - 11:00 am (in-person only)

Community Meeting: 11:15 am - 12:45 pm

Call-in No: (669) 216-1590

Webinar ID: 1615247813

Open House: 6:00 pm - 7:00 pm (in-person only)

Community Meeting: 7:15 pm - 8:45 pm

Call-in No: (833) 435-1820

Webinar ID: 1612906416

Attend in-person or
register for the virtual meeting here:
www.epa.gov/eto/new-tazewell

What is EtO?

EtO is a colorless, odorless gas, that is used at commercial sterilizers like DeRoyal Industries to sterilize devices that cannot be sterilized using steam or radiation, such as some medical and dental equipment. According to the Food and Drug Administration, approximately 50 percent of sterile medical devices are treated with EtO – about 20 billion devices each year. EtO is also used to sterilize some food products such as spices, certain dried herbs, dried vegetables, sesame seeds and walnuts.

EPA's Overall Action Plan

- Review Clean Air Act regulations to further reduce EtO emissions from industrial facilities, particularly rules to control air toxic emissions from commercial sterilizers and facilities that manufacture chemicals.
- Work with state and local air pollution control agencies to reduce EtO emissions.
- Expand environmental reporting requirements for sterilization facilities.
- Reevaluate how EtO is used within sterilization facilities with the goal of reducing risks to workers who handle EtO and those who are exposed in other ways.
- Provide financial resources and technical support for local monitoring activities.

Background

EPA has regulated EtO emissions for 30 years, however in 2016, new scientific information revealed that EtO is more toxic than previously understood. This prompted EPA to conduct nationwide analyses and intensive data collection, which has revealed that certain communities near commercial sterilizers could have elevated cancer risks due to lifetime exposures to EtO. Please visit www.epa.gov/eto for additional information, including a link to view EPA's National Public Webinar (August 10, 2022), location-specific maps, information about individual commercial sterilizers, and health risks for residents and workers.

Contact Information:

If you or someone you know would like to be added to EPA's distribution list to receive future updates, please contact Region4EtO@epa.gov or 1-800-241-1754.