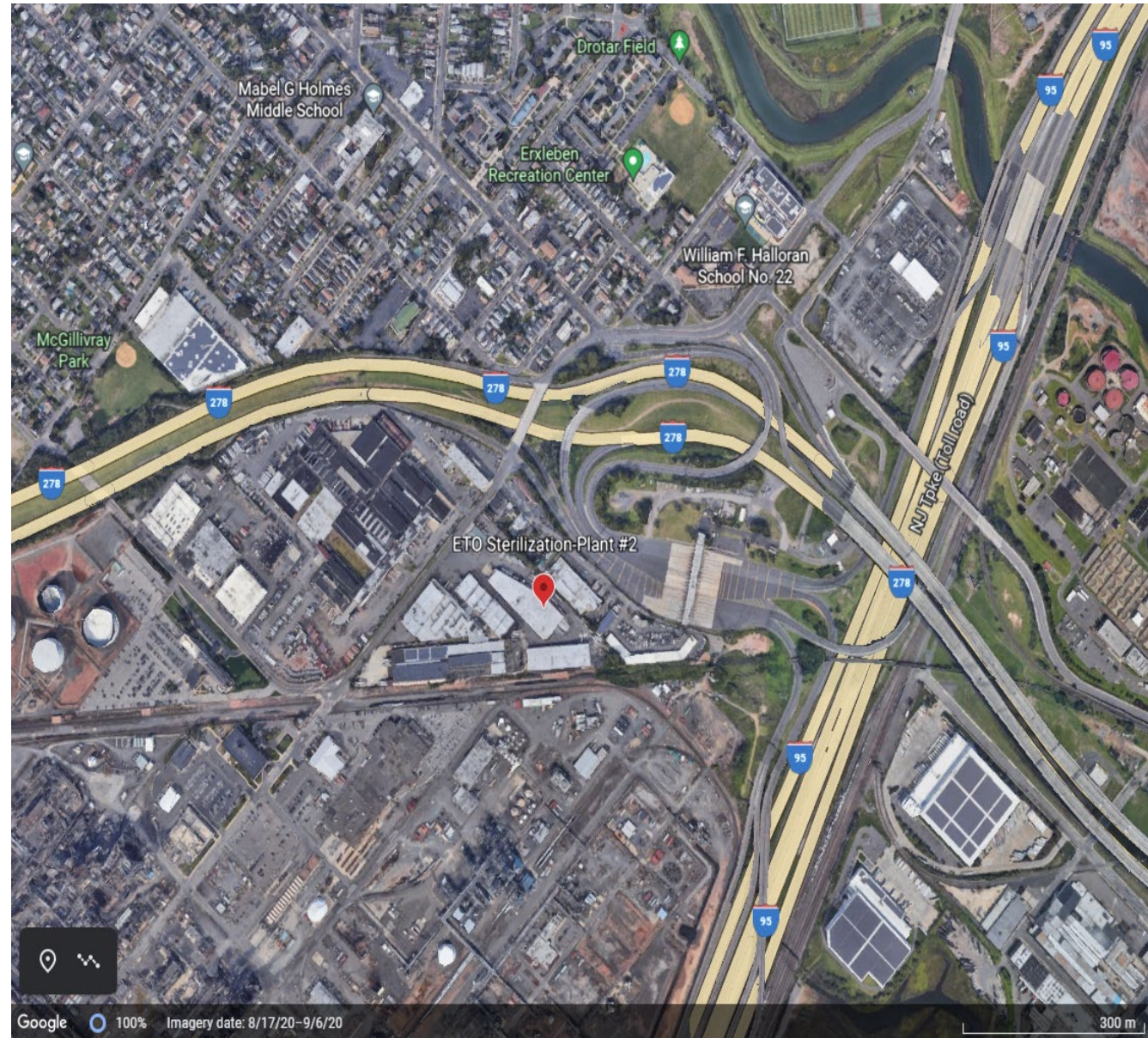


Virtual Community Meeting on Ethylene Oxide and Risks in the Communities of Linden and Elizabeth, New Jersey to begin shortly.



Getting Started:

- How to participate on Zoom
- How to participate via phone line



To un/mute

To view participants

To participate in Spanish

To turn video on/off

To open chat box

To view closed captioning

Shereen Kandil (she/her)

Unmute Start Video Security Participants Polls Chat Share Screen Record Live Transcript Interpretation Reactions More

End



**Please give us a call if you
are having technical
difficulties**

212-637-3574

Ethylene Oxide and Risks in the Communities of Linden and Elizabeth, New Jersey



Why we are here tonight

- 1 Pollution is increasing health risks in some American communities.
- 2 We are working to reduce this risk.
- 3 We want to hear from you.



Website:

<https://www.epa.gov/eto>

Email:

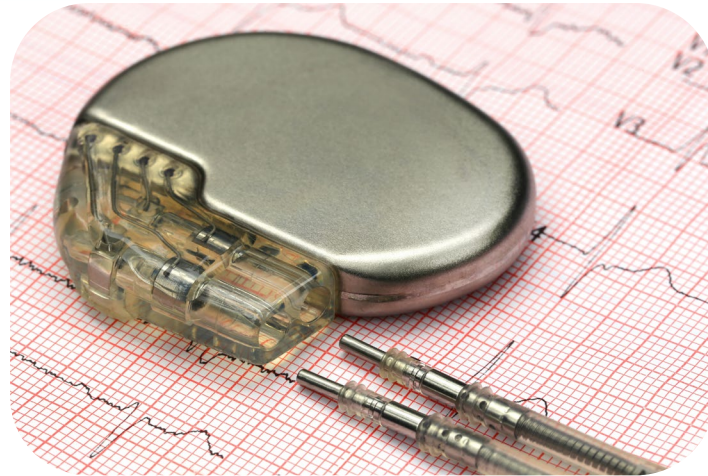
eto@epa.gov

www.epa.gov/hazardous-air-pollutants-ethylene-oxide/forms/linden-new-jersey-eto-sterilization-plant-2

What is Ethylene Oxide?

- **Gas**
- **Colorless**
- **Flammable**
- **Odorless**

*(in concentrations
we find in communities)*

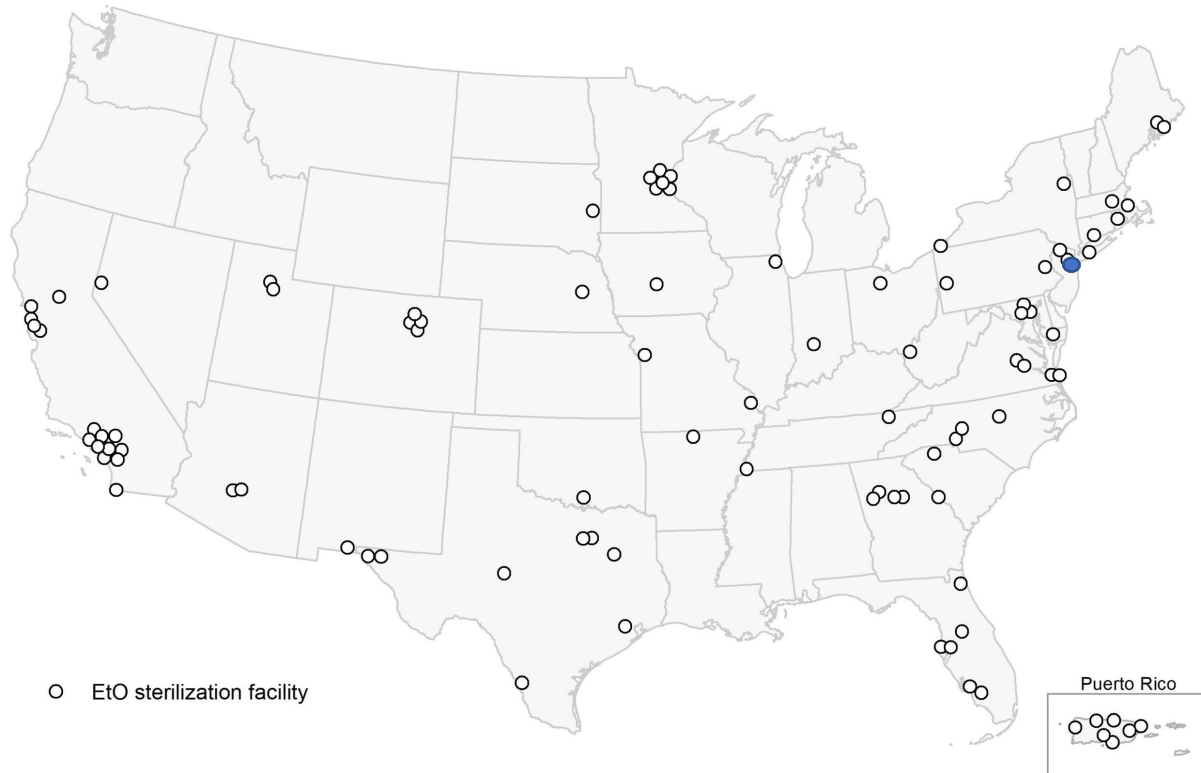


EtO Uses

- Used to Make Other Products
- Sterilizes



National Context for Sterilizers



- Approximately **100** commercial sterilizers in the United States
- Cosmed-ETO Sterilization-Plant #2 is **one of 23** with the **highest risk**
- More information on all facilities at <https://www.epa.gov/eto>

Current knowledge suggests the following risks are not a concern

No indication of risk:

- From soil or water
- Acute or emergency health impacts
- From consumer use of products made with or sterilized with EtO



Over your lifetime

Breathing in EtO over
many years may cause
breast cancer and
lymphoid cancer.



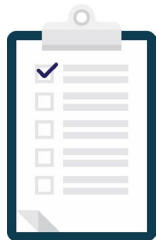
Special Considerations about Risk



Workers may be exposed at higher levels.



Children and babies may be at higher risk.



This risk assessment and the rule it supports are focused on community risk, not worker risk.

Reducing EtO coming out of the facility is the best way to reduce risk.



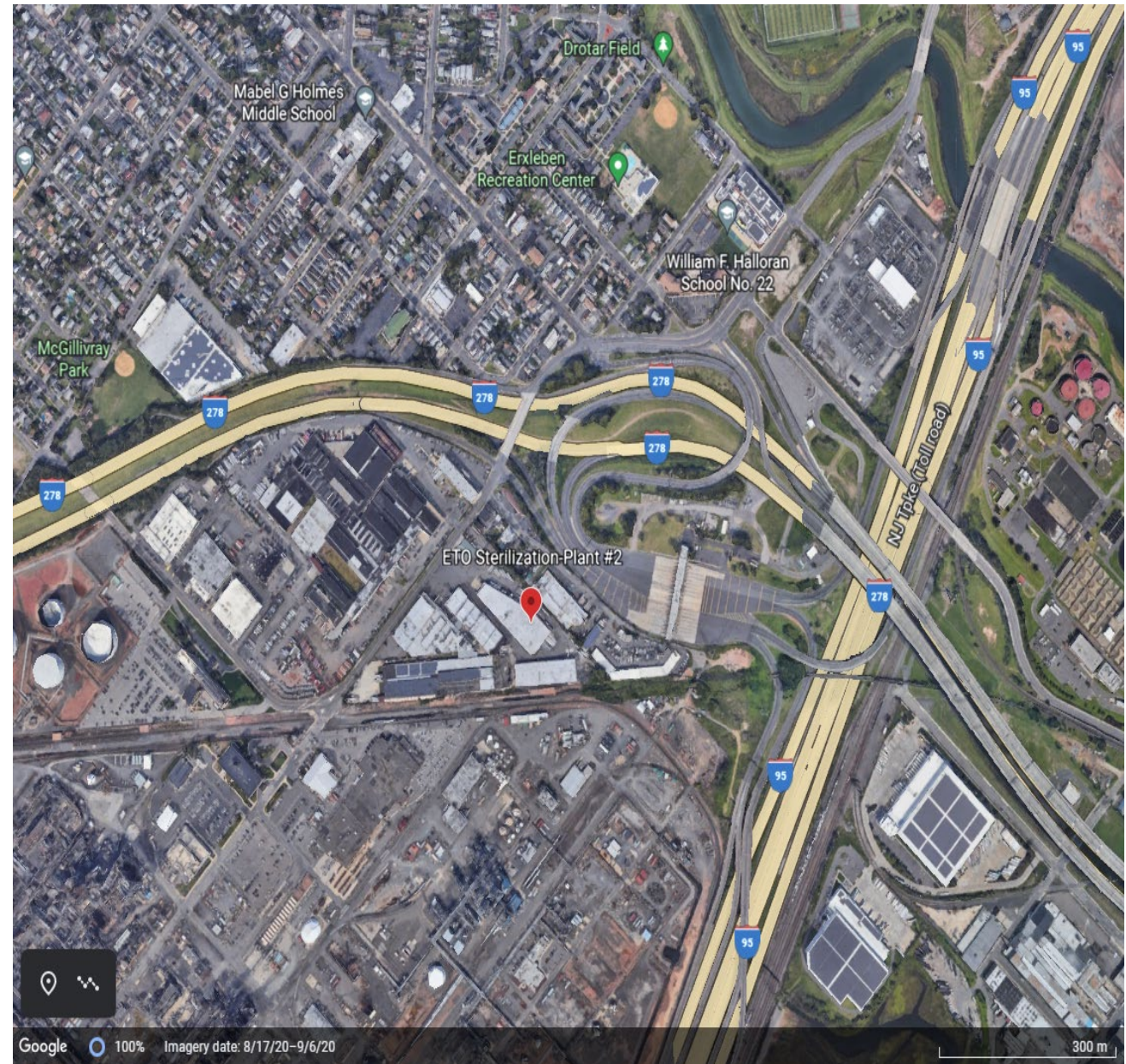
Details about this analysis

- EtO Uses
- Facility Processes
- Facility Equipment
- Community Details
- Weather

Analysis

**Mapped
Location of
Modeled Risk
Caused by EtO
from a Facility**

Location of Cosmed-ETO Sterilization-Plant #2



Cosmed-ETO Sterilization-Plant #2 Linden, New Jersey

Lifetime cancer risk - breathe air containing EtO at the level estimated at that location for 24 hours a day, every day for 70 years.

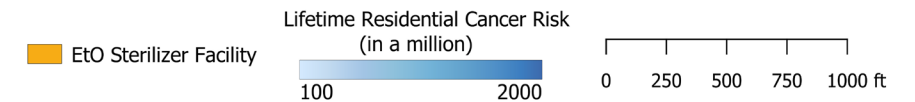
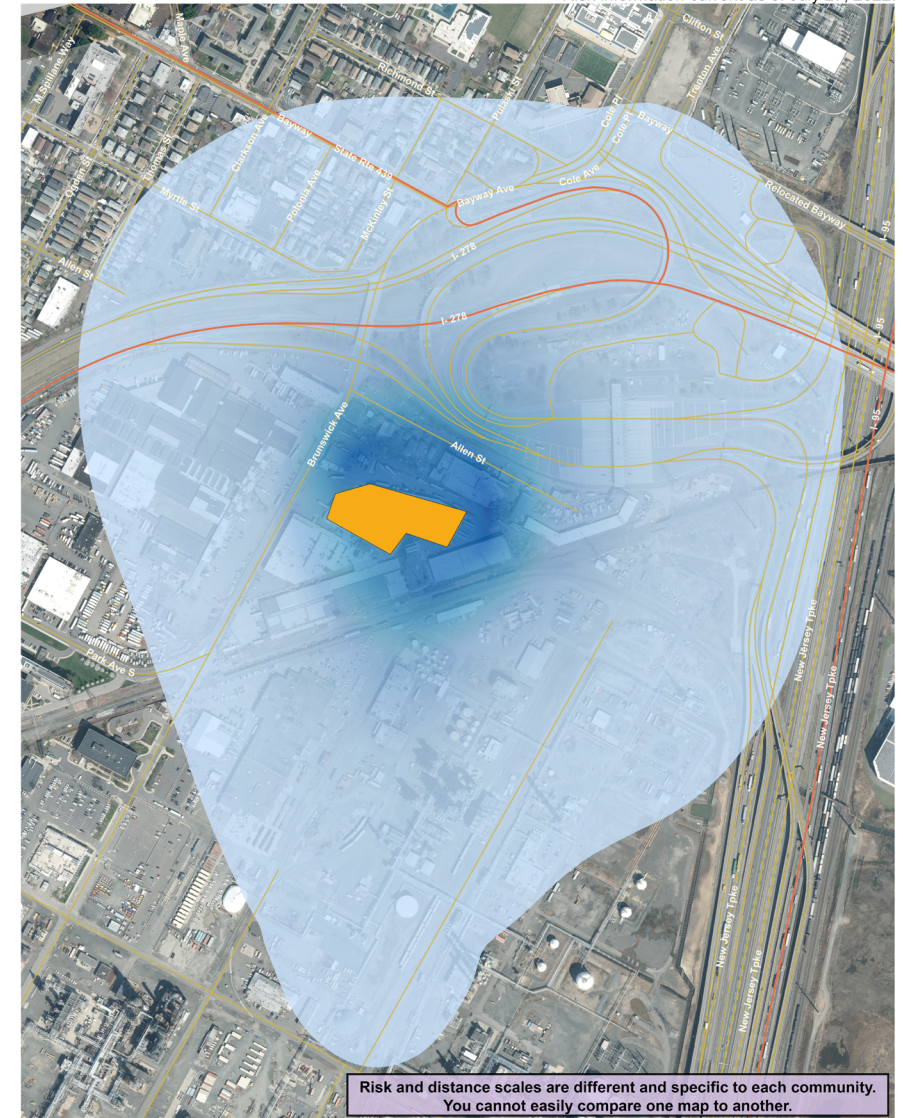
Maximum Risk Level:

2,000/Million, or 2/1,000 :

This estimated risk is in addition to cancer risk from other causes.

Blue: Estimated lifetime cancer risks of 100 in a million (1 in 10,000) or greater.

For more information and to view this map online: <https://www.epa.gov/eto/>



This map shows EPA's estimates of lifetime cancer risks from ETO near ETO Sterilization - Plant #2 in Linden, NJ. As you can see from the map risk decreases with distance from the facility. The area in blue shows estimated lifetime cancer risks of 100 in a million or greater from breathing air containing ETO emitted from the facility (or the same as 1 additional cancer case in 10,000 people). 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 would be expected to develop cancer from that exposure.

The area in dark blue on the map shows that ETO exposure could contribute to a maximum increased risk level of 20 cancer cases if 10,000 people were exposed for 70 years (or 2,000 in 1 million). EPA cannot predict whether an individual person will develop cancer.

Cosmed-ETO Sterilization-Plant #2 Operations

- Started operations in 1986.
- Sterilizes agricultural commodities such as spices and nuts.
- Used 21.9 tons of EtO in 2020.
- Controls emissions with a two-stage scrubbing control system
- Ethylene oxide sterilization process is regulated and approved by the US Food and Drug Administration (FDA).
- Subject to 40 CFR Part 63 Subpart O – Ethylene Oxide Emissions Standards for Sterilization Facilities.



Recent Steps Taken to Learn about Risk and Reduce It:

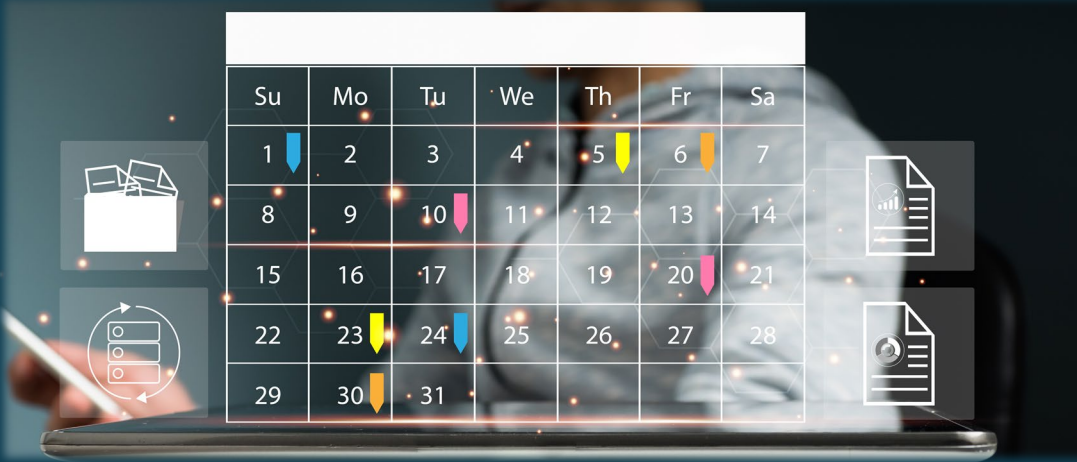
- July 2022: Complete analysis showing where, and in which specific communities, risk is highest for people who live nearby.
- Continue to seek more reductions of EtO coming out of facilities.

Previous work:

- 2016: Learned EtO is more dangerous when breathed in than previously known.
- 2018: Initial analysis showed that EtO might be causing elevated risk near certain types of facilities.
- 2020-2022: Collected and verified data and completed analysis to understand more exactly where there is elevated risk and why.

Timeline

- New regulation to be proposed this year.
- The public comment period will last 60 days.
- Final rule is expected in 2023.
- Once the rule is final, facilities typically will have 3 years to comply with new requirements.
- Additional resources on the comment process are available here:
<https://www.epa.gov/eto/comment>




Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Timeline (continued)

Additional actions this year on EtO:

- New risk information for workers at EtO facilities and people who work or attend school nearby
- Proposed changes to EtO allowed use inside facilities expected in 2022
- Public comment period.
- Once changes in allowed use are final, it typically takes several years for changes to take effect
- Learn more about EPA's review of EtO use as a pesticide: <https://www.epa.gov/ingredients-used-pesticide-products/ethylene-oxide-eto>

Next Steps

- 
- Regulation updates proposed by end of the year.
 - EPA continuing to work with Cosmed-ETO Sterilization-Plant #2 and its partners to reduce EtO emissions from facility.
 - Submit questions to EPA via eto@epa.gov or Brian Marmo at Marmo.Brian@epa.gov or 212-637-4352

Additional Resources

ATSDR EtO FAQs

Link:

<https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=733&toxid=133>

EtO Email Address for CDC:

eto@cdc.gov

New Jersey Department of Health Environmental and Occupational Health
Surveillance Program

Email: EOHSP@doh.nj.gov

How to Ask Questions

- Raise virtual hand
- Type question in chat

