

Ethylene Oxide: Technical Reviews and Outreach to Potentially Affected Communities
Status Report – Third Quarter 2021 Update
July – September 2021

Shell Technology Center, Houston, TX

As EPA pursues its mission to protect public health and the environment, addressing ethylene oxide (EtO) remains a major priority for the Agency. EPA's National Air Toxics Assessment (NATA), released in August 2018, identified a number of areas of the country where risks of cancer were potentially elevated because of ethylene oxide emissions. NATA estimated these risks based on EtO emissions from 2014, which were the most recently available at the time.

Because NATA is a screening-level analysis, additional work is needed to better understand emissions in areas NATA identifies as potentially having elevated risk, and to identify opportunities for early reductions at individual facilities, while EPA reviews its regulations for industries. EPA is supporting its state air agency partners in that work.

In January 2021, EPA posted the first status report describing the technical analysis and outreach work conducted for Shell Technology Center in Houston, TX. Since then, updates have been posted for the first and second quarters of 2021. This document summarizes additional work conducted in the third quarter of 2021.

Technical review updates:

- EPA has completed additional, more refined technical and risk assessments. The EtO technical assessment report for the Shell Technology Center can be found at the following website: <https://www.epa.gov/caa-permitting/site-specific-information-ethylene-oxide-eto-shell-technology-center-houston-houston>. The results of an updated air toxics risk assessment for the Shell Technology Center are available at this website: <https://www.epa.gov/system/files/documents/2021-07/region-6-risk-assessment-of-ethylene-oxide-emitting-facilities-in-texas-and-louisian-jul-8-2021.pdf>.

Outreach updates:

On August 26, 2021, EPA conducted a virtual EtO community outreach event for community members who live near the Shell Technology Center. During the virtual meeting, EPA staff and facility representatives provided information and answered questions about ethylene oxide, how it is managed by the facility and the associated potential risks in the communities near the facility. A video and transcript of the event are under review and will be posted to the following website: <https://www.epa.gov/caa-permitting/site-specific-information-ethylene-oxide-eto-shell-technology-center-houston-houston>.

Written responses to questions from the meeting will be posted on the website above when they become available.