



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Rupesh Patel
Air Program Manager
Pima County Department of Environmental Quality
33 N. Stone Ave, Suite 700
Tucson, AZ 85701

Via email

Re: Comments on Proposed Pima County Department of Environmental Quality Class II Air Quality Permit for Becton, Dickinson and Company Facility in Tucson, Arizona

Dear Rupesh Patel:

This letter is regarding the Pima County Department of Environmental Quality's (PDEQ) proposed Class II air quality permit for the Becton, Dickinson and Company ("BD") facility (Permit Number 6257). The proposed permit would allow BD to construct and operate a medical equipment sterilization facility that uses ethylene oxide at 7345 E. Valencia Road, Tucson, Arizona. The U.S. Environmental Protection Agency (EPA), Region 9 has reviewed the proposed permit package. Our comments on the proposed action are included in the attachment to this letter.

The EPA is committed to advancing environmental justice and incorporating equity considerations into all aspects of our work. This commitment includes improving our assessment and consideration of the impacts of permits on communities already overburdened by pollution. The proposed project would be located on the southeast side of Tucson, an area that contains communities that are disproportionately low-income, people of color, people with limited English proficiency, people who have not completed secondary education, and is near a Superfund site (Tucson International Airport site).

The EPA acknowledges and appreciates the work the PDEQ has already undertaken on this permitting action, including the development of an environmental justice analysis and enhanced public outreach efforts. As part of its public outreach efforts, the PDEQ provided an extended public comment period, sent public notices to 18,000 businesses and households, made the permit record available online, issued press releases to local media, held a virtual information session, held an in-person information session, and held a virtual public hearing. The PDEQ also made English-Spanish translation services available at outreach events.

Thank you again for the opportunity to work with you on this permit action to address our shared environmental priorities, advance equity and reduce potential environmental and health impacts on communities.

If you have any questions regarding the EPA's comments, you may contact me at (415) 317-3744 or Lisa Beckham, our Arizona air permitting oversight contact, at (415) 972-3811 or beckham.lisa@epa.gov.

Sincerely,

Matthew J. Lakin
Acting Air and Radiation Division Director

Enclosures

Cc (via email):

Mayor Regina Romero, City of Tucson
Supervisor Rex Scott, Pima County Board of Supervisors
Supervisor Matt Heinz, Pima County Board of Supervisors
Supervisor Sharon Bronson, Pima County Board of Supervisors
Supervisor Steve Christy, Pima County Board of Supervisors
Supervisor Adelita Grijalva, Pima County Board of Supervisors
Jan Leshar, Acting Pima County Administrator

**BD – Ethylene Oxide Sterilization Facility
Proposed Class II Air Quality Permit
EPA Comments**

The EPA has reviewed the proposed Class II air quality permit package for the proposed BD facility, including the proposed permit, technical support document, and permit application materials made available by the PDEQ during the public comment period, and has the following comments and recommendations:

1. Monitoring of Ethylene Oxide Emissions

- a. During the public participation process, the PDEQ has heard concerns from the community about community access to information confirming that the actual emissions from the facility once built will be as low as the projections from BD that form the basis for the permit limits. It has also been suggested by community members that requiring ambient monitors around the facility would help provide this assurance.

In this circumstance, we do not believe ambient air monitoring is the best way to ensure the facility is held accountable for potential excess emissions. With ambient monitoring, it can be difficult to distinguish between pollution from the facility and pollution from other sources. When we know which pollutants are emitted from a particular source, we can use modeling to determine the impacts on the nearby community. For this reason, the use of continuous emissions monitoring systems (CEMS), which instead measure emissions at the source, is preferred.

Currently, Attachment 4 of the proposed permit provides an option for ethylene oxide emissions to be monitored using CEMS to demonstrate compliance with the limits in 40 CFR part 63, subpart O. Given the proposed facility's location near workers and residences, we strongly encourage the PDEQ to require CEMS in any final Class II air permit for the facility as the compliance demonstration method for ethylene oxide emissions. CEMS is an available technology for this industry and is already in use at, for example, Medline Industries in Waukegan, IL. Additionally, the draft permits for Sterigenics in Atlanta, GA and Baxter in Mountain Home, AR include the use of CEMS. Links to this information are provided below.

- <https://www2.illinois.gov/epa/topics/community-relations/sites/ethylene-oxide/Documents/Medline%20Industries%2019020013%20FINAL.pdf>
- <https://epd.georgia.gov/draft-sterigenics-air-quality-permit>
- <https://www.adeq.state.ar.us/downloads/WebDatabases/PermitsOnline/AirDrafts/0544-AR-17.pdf>

Additionally, ethylene oxide monitoring data for the facility should be made easily accessible to the public in a format that shows, at a minimum, current emission rates, current monthly emissions, and the 12-month rolling total of emissions.

- b. In Condition 46.d, the proposed permit states that the O&M plan must identify periodic measurements and parameters to be collected and monitored by the building management system verifying proper collection of fugitive ethylene oxide emissions from areas downstream of any

natural draft openings and outer areas. To ensure enforceability, please confirm that the permit requires ongoing monitoring and recordkeeping of these measurements and parameters or revise the permit to include them.

2. Environmental Justice Analysis

We commend the PDEQ for preparing an environmental justice analysis (“EJ Analysis”) for its proposed permit action, and we understand that the PDEQ is aware that the communities in the southeast side of Tucson have environmental justice concerns. We recommend that the PDEQ make updates to its EJ Analysis and provide a revised analysis to the public. We believe an updated analysis will better inform the community and local policymakers regarding the impacts of this project. We recommend that the PDEQ make these updates to the EJ Analysis prior to any final permit decision:

- a. NESHAP section: State that the EPA intends to update the currently applicable standards for commercial ethylene oxide sterilizers. The latest information regarding the EPA’s actions is available here: <https://www.epa.gov/hazardous-air-pollutants-ethylene-oxide/ethylene-oxide-updates>.
- b. Demographics section:
 - i. Please explain the basis for consideration of the 50 square mile area that was evaluated. We recommend using other features of EJSCREEN (beyond the Standard Report feature) to include maps of demographical and environmental indicators, such as people of color, linguistic isolation, low-income population, and Superfund site proximity for the southeast side of Tucson.
 - ii. Add an analysis of the populations most likely to receive the highest impacts from the project based on the modeled impacts (e.g., 1- and 3- mile radius from the facility location).
 - iii. Include the EJSCREEN reports as attachments to the EJ Analysis.
 - iv. We also recommend adding additional information to evaluate environmental burdens of the local communities. This is a feature available in EJSCREEN.
 - v. You may contact the EPA Region 9 Environmental Justice Coordinator, Alan Bacock, with any questions regarding EJSCREEN. He is available at (415) 947-4195 or Bacock.Alan@epa.gov.
- c. Impact of the Project’s Emissions:
 - i. Provide more information on the main pollutant of concern from the project, ethylene oxide, including that exposure over many years of elevated levels of ethylene oxide increases cancer risk. You can also point to health information on the EPA’s website: <https://www.epa.gov/hazardous-air-pollutants-ethylene-oxide/frequent-questions-health-information-about-ethylene-oxide>.
 - ii. Provide the summary results of the residential impacts in a table.
 - iii. Consider non-residential impacts to nearby workplaces that are in closer proximity than the residential areas evaluated, and which are expected to have higher maximum impacts. Identify the responsible government agencies for enforcement of workplace protections (i.e., OSHA and ADOSH). The EPA explained its approach for the consideration of non-residential impacts in the “Risk Assessment Report for the Sterigenics Facility in Willowbrook, Illinois.” See the final paragraph of Section 2.3 on page 16 of the report

available here: <https://www.epa.gov/il/risk-assessment-report-sterigenics-facility-willowbrook-il>.

- d. Additionally, it may be appropriate to address concerns raised by the community that are otherwise outside the scope of the air permit decision but that may provide relevant information regarding the regulation and impacts of the facility in the EJ analysis. This could include identification of requirements under section 112(r) of the Clean Air Act, the Emergency Planning and Community Right to Know Act or the Comprehensive Environmental Response, Compensation, and Liability Act.