South Coast AQMD Seeks Order to Reduce Ethylene Oxide Emissions from a Sterilization Facility in Vernon, Protect Public Health

DIAMOND BAR – Today, the South Coast Air Quality Management District (South Coast AQMD) filed a petition for an order against Sterigenics US, LLC., a medical sterilization facility in Vernon, Calif., for emitting elevated levels of Ethylene Oxide (EtO), posing a significant risk to the public. Today’s action is a result of an ongoing investigation into the facilities that use EtO as part of their operations.

Sterigenics conducts sterilization of medical equipment using EtO and is located in two buildings between 49th St. and 50th St. on Gifford Ave in an industrial area in Vernon. The nearest residential area is about 500 feet away, and the nearest school is about 1700 feet away.

As part of its investigation, South Coast AQMD found that the average level of EtO between April 22, 2022 and July 2, 2022 was 21.5 parts per billion (ppb). Using health risk assessments established by the State of California, EtO levels at 3.18 ppb pose a significant cancer risk of 100 in a million to off-site workers, endangering public health. Based on the levels collected at or near the Vernon facility, cancer risk for off-site workers is calculated to be more than 600 in a million, assuming long-term exposure. Air monitoring data so far shows levels at the residential area and schools remain within typical background levels.

“Exposure to EtO over a number of years increases the risk of certain cancers, and facilities must ensure that their operations don’t negatively impact public health,” said Wayne Nastri, South Coast AQMD’s Executive Officer. “The intent of this order is to reduce emissions as quickly and effectively as possible.”

As part of today’s filed petition, South Coast AQMD will seek actions to reduce emissions including interim measures to minimize EtO emissions, more robust air monitoring, and installation of new equipment that will capture EtO emissions from operations. In addition, the agency seeks to work with the facility on Permanent Total Enclosures (PTEs) that will prevent emissions from escaping the buildings and vent EtO emissions to enhanced pollution controls. Until PTEs are installed, South Coast AQMD is
also pursuing immediate temporary enclosures using physical barriers and other methods to route emissions to the existing air pollution control equipment.

The agency’s Rule 402 and California’s Health & Safety Code § 41700 prohibit the emission of air contaminants that will endanger the health or safety of the public.

In June 2022, South Coast AQMD also designated Sterigenics as a Potentially High-Risk Level Facility, requiring them to reduce toxic emissions from operations as well as provide reports on potential health risks. As part of this, Sterigenics is required to submit an Early Action Reduction Plan within 90 days, listing steps that can be taken immediately to reduce health risks. The agency has also begun rulemaking efforts that will result in stricter requirements to minimize EtO emissions from sterilization facilities throughout the Basin.

South Coast AQMD filed its petition for an administrative order, known as an Order for Abatement, with the independent South Coast AQMD Hearing Board. An Order for Abatement would require Sterigenics to either stop certain operations or take corrective actions within a specified schedule as recommended by the South Coast AQMD and approved the Hearing Board with the overall goal to reduce the health risk. A hearing has tentatively been scheduled for August 9, 2022 at 9:00 a.m.

EtO is a flammable, colorless gas used to sterilize medical equipment and make products, including antifreeze, textiles, solvents, detergents, and adhesives. Short-term exposure to EtO may cause headaches, weakness, nausea, vomiting, diarrhea, difficulty breathing, eye and skin burns, and reproductive effects. Long-term exposure to EtO over a number of years increases the risk of certain cancers including lymphoid cancer and, for females, breast cancer.

For a copy of the petition as well as more information on South Coast AQMD’s investigation at the Sterigenics facility in Vernon, please visit: www.aqmd.gov/sterigenics.

For more information on South Coast AQMD’s investigation into facilities that use EtO, please visit: www.aqmd.gov/eto.

South Coast AQMD is the regulatory agency responsible for improving air quality for large areas of Los Angeles, Orange, Riverside and San Bernardino counties, including the Coachella Valley. For news, air quality alerts, event updates and more, please visit us at www.aqmd.gov, download our award-winning app, or follow us on Facebook, Twitter and Instagram.

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