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Statement from the Georgia Environmental Protection Division Regarding Ethylene Oxide

The Georgia Environmental Protection Division (EPD) is working closely with two suburban Atlanta companies that have agreed to implement additional voluntary improvements in their control of ethylene oxide gas.

Sterigenics in Smyrna and Beckton Dickinson (BD) in Covington use the gas to sterilize medical equipment such as surgical equipment and catheters. The facilities are located in areas where the U.S. Environmental Protection Agency (EPA) identified potentially greater cancer risks. The chemical of concern was ethylene oxide.

The information was included in the 2014 National Air Toxics Assessment (NATA), which was completed and released by EPA in August 2018. The new findings are not due to new sources or increased amount of ethylene oxide being released into the atmosphere. Rather, it is because in late 2016, EPA determined that the risk of long-term exposure to ethylene oxide is greater than previously thought and updated the risk calculations. The NATA is designed to help identify which areas require further study given our evolving knowledge about air toxics.

Since the 2014 NATA was released, EPD has been working to better assess and address risk concerns. Using current emissions data, EPD has performed modeling to estimate ethylene oxide concentrations in the areas around both facilities. The EPA evaluation of Georgia's recent modeling analyses indicates that risk from ethylene oxide concentrations in residential areas does not exceed 100-in-1 million (1 in 10,000). The EPA uses that number in regulations as a general guide for determining the maximum acceptable lifetime cancer risk.

The risk estimates from NATA are for chronic exposure to air toxics over many decades. Though NATA does not estimate short-term (acute) or immediate risks, EPA did note that the ethylene oxide levels in these areas were not likely high enough to cause immediate harm to health.

Both Sterigenics and BD are in compliance with current federal requirements for control of ethylene oxide emissions. Both facilities conduct periodic testing, which is monitored by EPD. Also, both facilities are currently emitting significantly less ethylene oxide than assumed in the 2014 NATA. EPA has announced that they intend to review the federal regulations to determine if additional controls are required.

We expect EPA to propose additional controls this summer based on the 2014 NATA findings. Until regulatory requirements can keep up with the evolving science, EPD will continue to work with both facilities on voluntary measures to further reduce ethylene oxide.

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