## TRIP REPORT

**August 27, 2019**

**SITE NAME AND LOCATION:** Sterigenics, 2971 Olympic Industrial Dr. SE, Suite 116, Atlanta, Georgia 30339

**COUNTY:** Cobb

**TRIP BY:** James Cooley/Director of District Operations

**ACCOMPANIED BY:** Jerry Campbell/EPD/ERT Manager, Daryl Mosby/Sterigenics/General Manager, Elbert Sabb/Sterigenics/Operations Manger

**DATE AND TIME OF INVESTIGATION:** 8/27/2019, 6:00pm

**REFERENCE:** Potential Unreported Release of Ethylene Oxide (EO) on July 31, 2019

**COMMENTS:** On 8-27-2019 EPD was informed of an email sent by a Sterigenics employee regarding a release on 7-31-2019.EPD conducted a site visit to investigate the facility the same day. Upon arrival at the facility, Jerry Campbell and I met with Daryl Mosby and Elbert Sabb. We explained to them why we were there and that we would require access to the facility, records and information regarding the 7-31-2019 release. Before we were able to go into the operations area of the facility where the incident occurred, we watched a brief safety video and filled out required paperwork. Following this, Mr. Mosby and Mr. Sabb escorted us to the area where the incident occurred. The facility was not in operation during our investigation because they were doing welding work in preparation to add new emission controls. All EO containers were disconnected, sealed and stored in the designated storage area.

As Mr. Mosby and Mr. Sabb explained and as observed during the site visit, during sterilization drums of EO are connected through hoses to the sterilization chamber. When we arrived at the area where the incident occurred, Mr. Mosby and Mr. Sabb walked us through the incident and explained the process of changing drums. The weight of each drum is continuously monitored while the drum is hooked into the sterilization system. Once a drum reaches a certain weight, there is not enough gas left in the drum to pressurize the system. This almost always occurs when there is a little less than 10 lbs of EO left in the spent drum. Once a drum is spent an employee will shut off the valve, unhook the drum and plug the port. They will then hook up a new drum and leave the spent drum in the operations area to be picked up later. They utilize gas chromatography (GC) and lower explosive level sensors (LEL) to continuously monitor for potential leaks of EO in the facility. In this incident, the valve on the spent drum was not completely shut off and the port was not plugged. When the LEL/GC indicated a potential leak, the operations area was evacuated. Staff then suited up in their personal protective equipment (PPE) and used a photoionization detector (PID) to determine that there was a leak and that the improperly secured spent drum was the source. They then sealed the leaking drum. The drum was later weighed using a scale adjacent to the one it was removed from. They utilized this scale because it was the next one available due to a drum change. They determined that the drum that had not been fully closed had released 5.6 lbs of EO.

After we investigated the area where the incident occurred, we looked at the area where they house the GC and computer equipment. They explained to us how the LEL, GC, scales and IT equipment are integrated. They showed us how they know when to change drums. They also explained how the alarms work and their evacuation process. We then went to the storage area where they explained to us that the drums are stored there until another company, who recovers the rest of the EO from the spent drums, picks them up.

Once we finished looking at the operational areas of the facility we met back in the conference room. Mr. Mosby provided us with documentation on the final weight of the leaking drum when it was removed from service, the weight of the drum where it was weighed after the release and documentation on how they determined the release to be 5.6 lbs of EO. Upon request, he also provided us with an incident report for the 7-31-2019 evacuation and a list of all evacuations going back to 1-1-2018. We also requested some additional information, including a copy of the complete email that prompted EPD’s investigation and a timeline of events that occurred regarding the release on 7-31-2019. This occurred at around 9:00 pm. Mr. Mosby informed us that his corporate office was closed and that he would need to talk with them before providing this information. At this point we concluded our investigation for the evening.

**RECOMMENDATIONS AND FOLLOW-UP REQUIRED:** I will follow up with Mr. Mosby and Kathleen Hoffman, Senior Vice President – Global Environmental, Health & Safety and Technical Services, regarding the requested information and any additional information necessary to complete the investigation.

**PHOTOGRAPHS TAKEN:** For safety purposes, no electronic devices are allowed in the operations areas; therefore, no photos were taken.