

Sterigenics' Operations in Atlanta Have Not Elevated EO in Air Levels

Recent enhancements further reduced Sterigenics' EO emissions beyond already safe levels

Negative Pressure System:

Captures all EO in the air inside the facility from the sterilization process

Double Scrub Process:

To achieve an even higher EO control rate

Optimized Discharge Point:

Seals off facility from the outside to create a central discharge point of double-scrubbed air

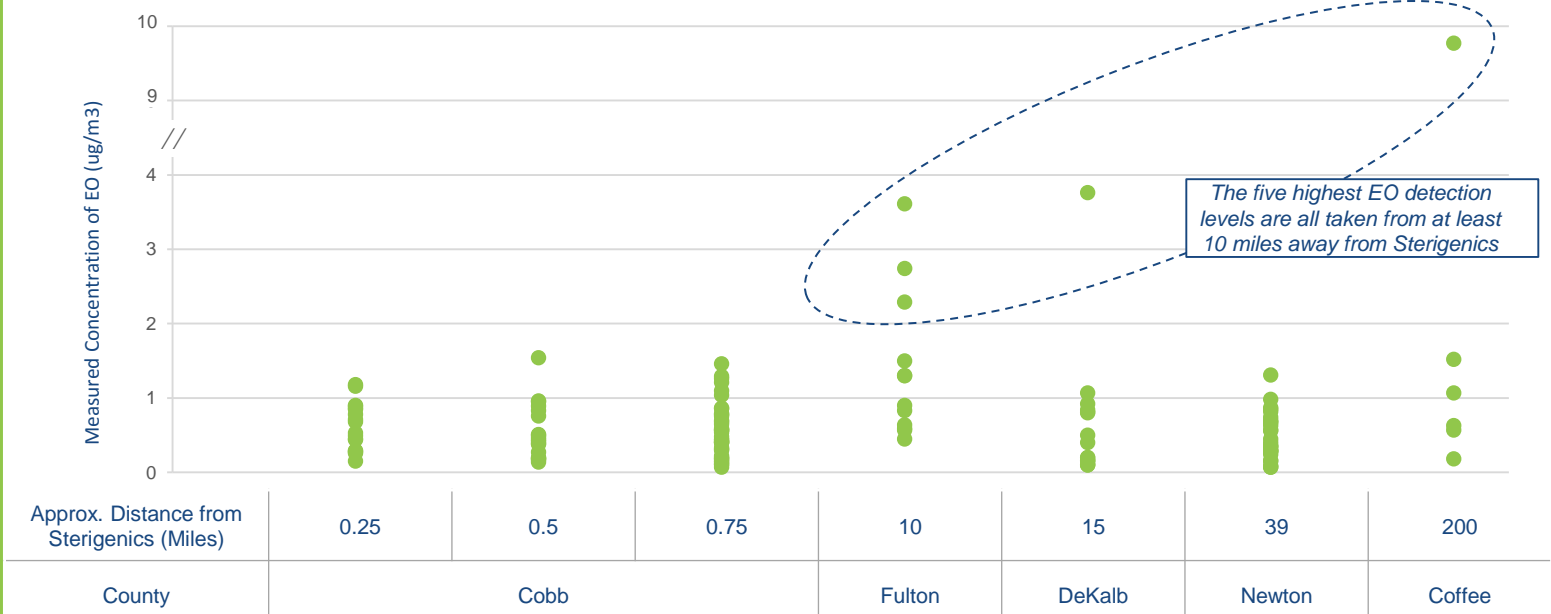
Enhancements create the most advanced sterilization facility in the world in terms of emission control

- » Third party tests supervised by Georgia EPD on June 25 **verified the effectiveness of our negative pressure system and confirmed a total EO removal efficiency of over 99.99%**
- » **Negative pressure system to capture fugitive emissions “working as designed”** per testing done under the supervision of the Georgia EPD on March 24

Ambient EO air concentrations are not higher because Sterigenics resumed operations

Georgia EPD EO Readings by Distance from Sterigenics¹

(Each point represents a single test result taken since Sterigenics began operating on April 8)



Georgia EPD data “averaged monthly for each site, indicates a slight upward trend of ethylene oxide at all sites since March 2020, including background sites. For these reasons, we urge caution in drawing definitive conclusions about the impact of Sterigenics resuming operations...” – Georgia EPD as quoted in Georgia Health News on September 21, 2020

¹ Graph includes all samples taken by Georgia EPD between April 8 and July 20, 2020 from testing sites whose approximate locations were indicated by the Georgia EPD (in the form of an approximate distance or point on the map)

Ambient air sampling does not measure EO from Sterigenics' facility

- » There are many natural sources and other sources of EO in the environment that affect ambient air readings
 - US EPA ambient air testing has identified **background levels of EO of ~ 0.3 ug/m³** across the country, including in areas away from operations that use or produce EO
 - Other sources of EO include **vehicle exhaust, natural gas combustion, home furnaces, gas grills, cosmetics and householder cleaners**
- » Readings are impacted by a variety of factors including weather conditions and wind direction, which must be analyzed separately and EO is difficult to detect at low levels

GHD's¹ preliminary ambient readings after Sterigenics resumed operations are not in line with the EPD's findings at similar locations on the same days

EO Levels (ug/m³) Detected at GHD and Georgia EPD Testing Sites Approximately One Mile from the Sterigenics Facility

July 8, 2020		
	GHD	EPD
Individual Sampling Results	2.1	0.18
	2.4	0.33
	1.3	0.44
	1.8	0.44
	2.7	
Mean	2.06	0.35

July 14, 2020		
	GHD	EPD
Individual Sampling Results	4.8	0.40
	3.4	0.15
	2.5	0.86
	5.6	0.27
Mean	4.08	0.42

- » Samples taken on the same day while Sterigenics was operating show GHD results are **nearly 500% to 900% higher** than Georgia EPD results, on average
- » Vast discrepancies between testing sources were also prevalent while Sterigenics was not operating

GHD confirmed that its results do not reflect elevated levels of EO attributable to Sterigenics

"One of the purposes of the study is to look and see if there is any apparent pattern around the Sterigenics facility itself to indicate that there are elevated levels of ethylene oxide specifically attributable to the Sterigenics facility, and we did not find that in this nine day period of sampling." –Dyron Hamlin, Principal, GHD

¹ GHD Group is the third-party engineering services firm retained by the Smyrna Air Quality Oversight Committee to conduct ambient air monitoring.

