

**O.Reg. 206/24 – Air Pollution – Discharge of Benzene from INEOS Styrolution
Hourly (April 25, 2025)**

Ontario Regulation 206/24: Air Pollution – Discharge of Benzene from INEOS Styrolution (“O.Reg. 206/24”) requires a report to be submitted to the District Manager of the Ministry of the Environment, Conservation and Parks’ (“MECP”) Sarnia District Office, the Chief of the Aamjiwnaang First Nation (“AFN”), and the Ministry’s Spills Action Centre within 14 days after an exceedance notification. This report describes the benzene concentration measured at eGC#3 above 90 µg/m³ over any hour that occurred on April 25, 2025 (MECP Reference #1-05YHT).

This report contains the information requested in the regulation to the best of our abilities, with the understanding that eGC emission contributors cannot be considered with 100% certainty, as it is difficult to find exact source of emissions from such low concentrations. However, INEOS Styrolution has made every effort reasonable to attempt to identify any potential processes, events and/or sources from onsite activities during this period that may have contributed to the final value. The attached table summarizes these findings.

Summary of the Hourly Exceedance on April 25, 2025:

Time Period	Measured Benzene Concentration (Rolling Hourly Average - µg/m ³)	Wind Direction	Wind Speed (km/hr)
13:00	142.28	SSW	21.85

Analysis of the Contravention:

eGC#3 is located on the east side of Styrene II (see Figure 1) next to the hazardous waste laydown area. During this period, the site continues to be shutdown/idled with limited activity that would produce benzene emissions. The alert at eGC#3 was a single, 10-minute spike at 12:20 that caused an exceedance of the hourly average threshold of 90µg/m³ (see Figure 2). Our third-party consultant confirmed that the unit calibrations passed and that the reading appeared valid.

On April 25, 2025, at 12:30 the site received an exceedance alert from eGC#3. At that time, operations were skimming oil from frac tank #4 using a vacuum truck, which was venting to a carbon scrubber control system. Operations immediately stopped all work, and the vacuum trucks were shut down. Operations checked various other sources around eGC#3 for potential sources of elevated benzene emissions and no leaks or equipment malfunctions were identified. Given the wind direction and location of the vacuum truck activity, breakthrough on the carbon scrubbing system of the vacuum truck is believed to be the cause of benzene emissions and eGC exceedance.

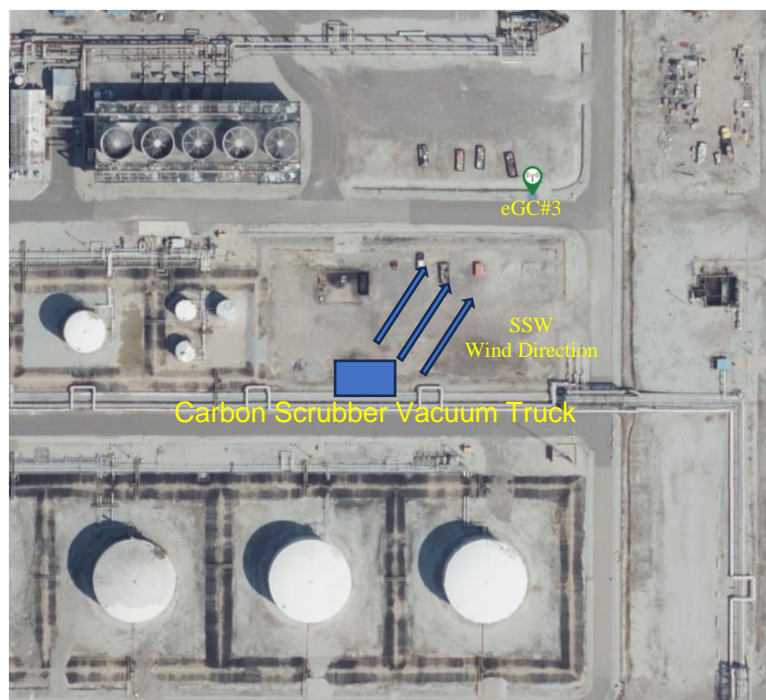


Figure 1: Aerial view of eGC#3 and the proximity of the carbon scrubber vacuum truck (including wind direction)

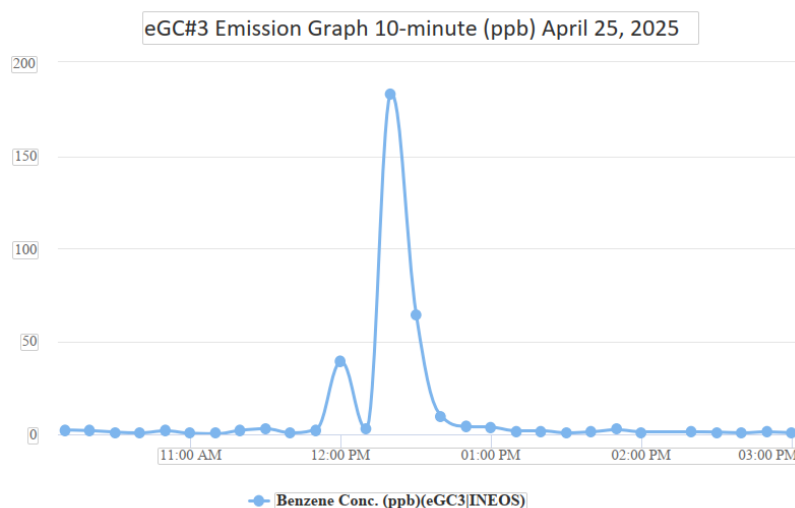


Figure 2: eGC#3 10-minute benzene emission graph capturing the elevated reading that skewed the hourly-average

To prevent re-occurrence of this type of emissions event, INEOS Styrolution plans to enhance the vacuum truck carbon breakthrough monitoring program at the site. When vacuum trucks are utilized to handle benzene containing materials or liquids near the hazardous waste laydown area, Operations and monitoring technicians will conduct carbon scrubber vent monitoring every 30 minutes to ensure carbon breakthrough does not occur. Continuous area air quality monitoring and routine operator walkthroughs/surveys will continue as well.