

**O.Reg. 206/24 – Air Pollution – Discharge of Benzene from INEOS Styrolution
Hourly Exceedance and 24-hour Benzene Exceedances (March 11, 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 a one-hour period that occurred on March 11, 2025 (MECP Reference #1-KFG800).

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 an 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 Hourly Exceedances on March 11, 2025:

Time Period	Measured Benzene Concentration (Rolling Hourly Average - µg/m ³)	Wind Direction	Wind Speed (km/hr)
08:10	201.94	SSW	9.79

Summary of 24-hour Exceedance on February 24, 2025 (for preceding 24-hours):

Time Period	Measured Benzene Concentration (Rolling 24-hour Average - µg/m ³)	Wind Direction	Wind Speed (km/hr)
08:10	11.17	SSW	9.72

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 08:00 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 March 11, 2025, at 08:10 the site received an exceedance alert from eGC#3. Operations and monitoring technicians immediately checked various sources around eGC#3 (MT303, frac tanks, blower system, PP306 pumps) for potential sources of elevated benzene emissions and no measurable readings were detected and no leaks or equipment malfunctions were identified. At that time there was no work on-going at the frac tanks and no evidence linking the frac tanks to the alerts. The only activity in the area that could be plausible to this exceedance is the frac tank cleaning crews were setting up in the hazardous waste laydown area where the heavy cleaning equipment engines started or were idling to commence frac tank cleaning for that day and the truck emissions were blown directly towards eGC#3 due to the south/southwest wind.

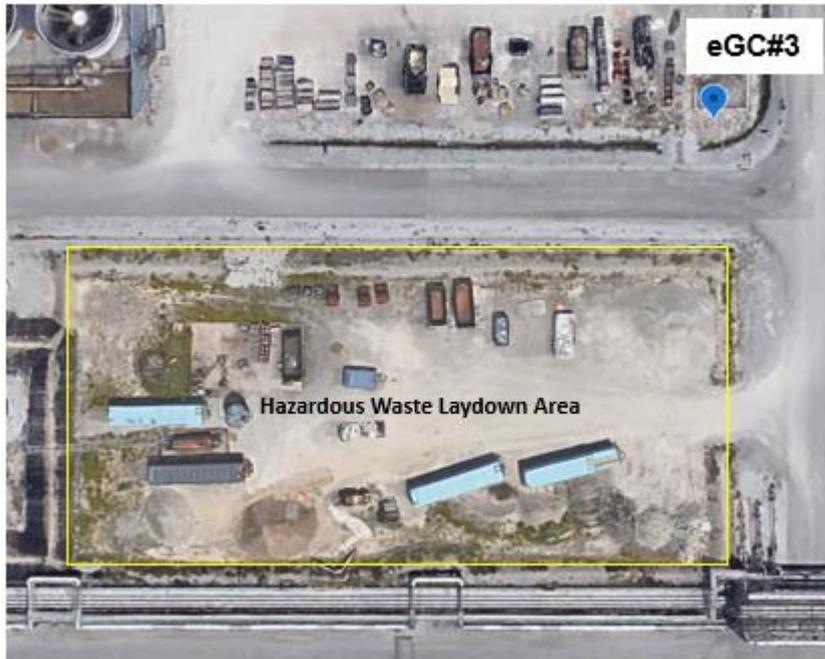


Figure 1: Map of eGC#3 and the Hazardous Waste Laydown Area

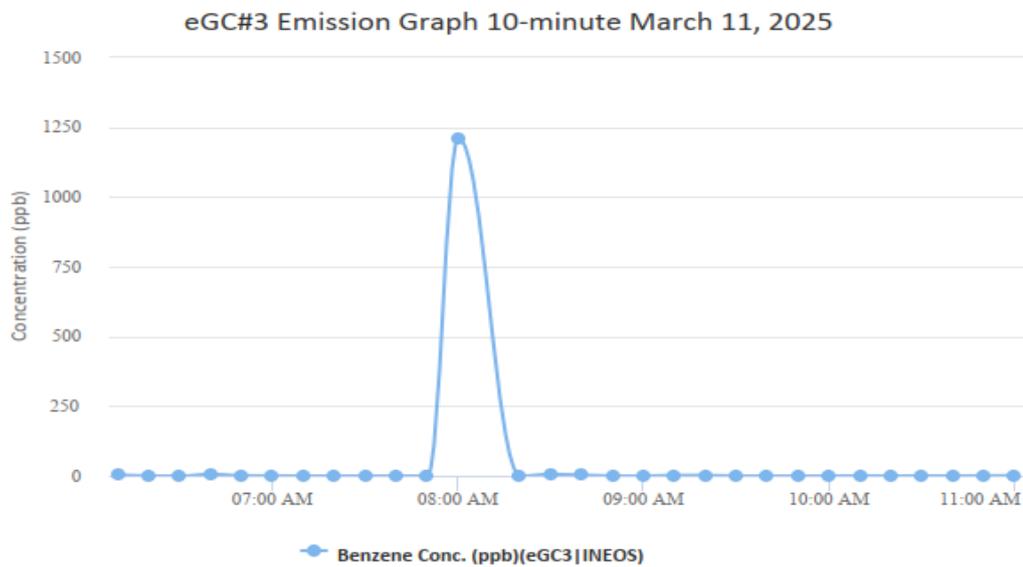


Figure 2: A ten-minute benzene emission graph for eGC#3 capturing the elevated reading which skewed the hourly-average.

It is to be noted that the root cause of the exceedance cannot be confirmed with certainty; however, could be attributed to the emissions from the exhaust of idling heavy equipment in the hazardous waste laydown area.

In conclusion, operations and monitoring technicians will continue conducting routine walkthroughs of the unit inspecting for any potential leak sources twice daily.