

O.Reg. 206/24 – Air Pollution – Discharge of Benzene from INEOS Styrolution Hourly (August 28, 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 August 28, 2025 (MECP Reference #1-PFLZ6P).

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 August 28, 2025:

Time Period	Measured Benzene Concentration (Rolling Hourly Average - μg/m³)	Wind Direction	Wind Speed (km/hr)
12:00	124.72	W	9.25

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 remains shutdown with process units and most piping decontaminated and minimal activities occurring which could produce benzene emissions. The alert at eGC#3 was a single, 10-minute spike at 11:30 that caused an exceedance of the hourly rolling 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 August 28, 2025, a third party contractor was on site to remove waste material from inside of a vacuum box located on the road, adjacent to tank MT307C, due west from eGC#3. As per INOES' procedure, onsite handheld monitoring was being carried out every 30 minutes. Prior to receiving the email alert from eGC#3, an elevated value was measured using a handheld tiger select monitor that warranted Operations to immediately stop all work. During the investigation and given the wind direction and proximity to eGC#3, it was determined that, although a vacuum truck equipped with an attached carbon scrubber trailer was being used to control emissions during this activity, carbon breakthrough still occurred which caused the single spike at eGC#3, which in turn caused the rolling hourly average exceedance. INEOS personnel will continue monitoring at increased intervals for benzene emissions using the robust site monitoring program when third party work is being performed.



Figure 1: Aerial view of eGC#3 and the proximity of Vacuum Truck and Scrubber Trailer (including wind direction)

eGC#3 Emission Graph 10-Minute August 28, 2025

800

600

400

200

08:00 AM 10:00 AM 12:00 PM 02:00 PM

■ Benzene Conc. (ug/m3)[eGC3 | INEOS]

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