O.Reg. 206/24 – Air Pollution – Discharge of Benzene from INEOS Styrolution
Hourly (July 9, 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/m^3 over any hour that occurred on July 9, 2025 (MECP Reference #1-0SJVD7).

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 July 9, 2025:

Time Period	Measured Benzene Concentration (Rolling Hourly Average - µg/m^3)	Wind Direction	Wind Speed (km/hr)
10:10	98.93	SSW	5.38

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 09:40 that caused an exceedance of the hourly rolling average threshold of 90µg/m^3 (see Figure 2). Our third-party consultant confirmed that the unit calibrations passed and that the reading appeared valid.

On July 9, 2025, at 10:25, the site received an exceedance alert from eGC#3. At that time, another company was on site to carry out maintenance work on their pig trap and piping system that run through INEOS Styrolution's property. INEOS Operations immediately stopped all work when the alert was received and checked various other sources around eGC#3 as potential benzene source contributors and no other benzene emissions, equipment leaks, or equipment malfunctions were identified. Given the wind direction and proximity to eGC#3, it is believed that, although a vacuum truck equipped with a carbon scrubber system was being used to control emissions during this activity, sufficient emissions occurred causing the hourly exceedance.

To prevent re-occurrence of this type of emissions event, INEOS Styrolution will require third parties to implement the site procedure to monitor for vacuum trucks for carbon breakthrough every 30 minutes when vacuum trucks are utilized to handle benzene containing materials or liquids. Additionally, INEOS personnel will conduct routine monitoring for benzene emissions using the robust site monitoring programs when third party work is being performed.

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

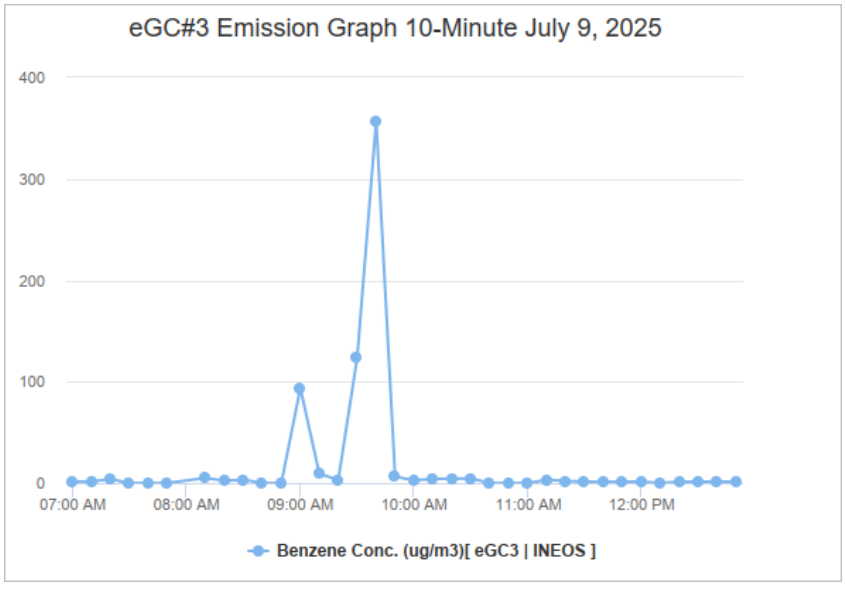

Figure 2: eGC#3 10-minute benzene emission graph capturing the elevated reading that skewed the hourly-average