

O.Reg. 206/24 – Air Pollution – Discharge of Benzene from INEOS Styrolution Hourly (Oct 12, 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 Oct 12th, 2025 (MECP Reference #1-PMNK82).

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 Hourly Exceedances on Oct 12, 2025:

| Time Period | Measured Benzene Concentration (Rolling Hourly Average - μg/m³) | Wind Direction | Wind Speed (km/hr) |
|-------------|---|----------------|-----------------------|
| 19:30 | 102.56 | SSE | 3.68 |
| 20:30 | 150.89 | SSE | 7.07 |
| 21:30 | 149.29 | SSE | 5.92 |

Analysis of the Contravention:

On October 12th, 2025, at 19:30, the site received an exceedance alert from eGC#3. Other eGC's had shown intermittent values as well, indicating that the value from eGC#3 was likely valid; and this was later confirmed by our third party contractor. Operations and monitoring technicians checked the area for potential sources of elevated benzene emissions. There were no odours, adjacent vac boxes did not show elevated values around connections, and MT303 area showed no readings. Upon further investigation, a 3rd party line that had been recently air gapped (valve removed) showed ~1ppm benzene at the opening (see Figure 1). The pipe opening was quickly wrapped and the eGC readings quickly diminished.

On Oct 13th, 2025, personnel sealed the 3rd party's open line with a solid flange. In subsequent days, the 3rd party visited the site and determined a small amount of material (including potential benzene) could be stagnant downstream.

On Oct 16th, the 3rd party came back to site to evacuate/clear the contents of the line as a precaution and reapplied the faceplate.

Root cause for the exceedance was determined to be emissions from an open 3rd party line that had not been adequately cleared and isolated by the 3rd party. After positively isolating this source, eGC#3 showed readings near background levels.

| Corrective Action: | Implementation Date: | |
|--|----------------------------|--|
| Temporarily wrapped 3 rd party pipe source to reduce emissions. | Completed October 12, 2025 | |
| Install physical isolation (blind flange). | Completed October 13, 2025 | |
| Third party to further evacuate/clear any material and positively isolate (new blind flange) | Completed October 16, 2025 | |
| Site Monitoring Tech to check other periphery air gapped lines for benzene emissions | Due October 31, 2025 | |



Figure 1: Aerial View of eGC3 and the proximity of the Source