

REPORT

August 2026 Ambient Air Monitoring Report

Rain Carbon Canada Inc.

Submitted by:

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September 2026

Distribution List

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1.0 INTRODUCTION

Rain Carbon Canada Inc. (Rain Carbon) is required to prepare monthly written summary reports of benzo(a)pyrene [B(a)P] and benzene ambient monitoring measurements for the coal tar and petroleum material processing plant located at 725 Strathearne Avenue N., Hamilton, Ontario (the Facility). This is the ninety second monthly report submitted as part of the Rain Carbon ambient monitoring program and summarizes the measurements taken in August 2026.

The ambient air monitoring measurements for August 2026 follows the December 12, 2019, Monitoring Plan for B(a)P and Benzene (the Plan) approved by the Ontario Ministry of the Environment, Conservation and Parks (MECP) on December 20, 2019. A copy of the Plan has been provided in Appendix A.

Rain Carbon operates the fence line monitors for benzene and B(a)P at the East, North, South, New West, and Old West environmental monitoring stations. Rain Carbon also conducts monitoring for benzene and B(a)P monitoring off site at the HAMN station 29164.

This report includes the following information for measurements taken in August 2026:

- Identification of each location at which a measurement was taken.
- For each location, the concentration of each measurement taken.
- The date and time each measurement was taken.

2.0 AMBIENT MONITORING STATIONS

The monitoring program consists of setting up two types of sampling systems at five locations at the Facility. The two sampling systems included the polyurethane foam (PUF) polyaromatic hydrocarbon (PAH) sampling system for B(a)P and the SUMMA volatile organic carbon (VOC) canister sampling system for benzene. Samples were collected over a 24-hour period. The monitoring stations are listed below, and their locations are shown in Figure 1.

Table 1: Rain Carbon Ambient Air Quality Monitoring Stations

Station Location	Height Above Grade (m)
North - Tank 91	4.1
East - South of Tank-36	3.4
South - Berm	3.2
New West – West Fence line at Railcar Track 2 Spot 10.	4.0
Old West - Tank-77 Platform	13.0
Hamilton Area Monitoring Network (HAMN) Station 29164	4.0

The South berm monitor is placed just over two metres above grade by the berm located on the south side of the Facility as shown in Figure 2. The Old West monitor at Tank 77 is placed on the upper platform located on the west side of the Facility as shown in Figure 3. The platform is approximately 13 metres above grade. As shown in Figure 4, the North monitor is located at the north fence line, north of Tank 91, and placed 4.1 metres above grade and at least 2 metres away from any structure. The East monitor is at the east fence line, south of Tank 36, with an inlet height of 3.4 metres above grade. The New West monitor is located at the west fence line on a new dedicated stand-alone platform at approximately 4 metres above grade.

Air quality data acquisition and instrument performance were conducted by Rain Carbon Canada Inc. personnel, and the laboratory analysis was conducted by Bureau Veritas Laboratories, which is ISO1702 compliant and accredited. The following supporting documents are provided:

- Laboratory Analysis in Appendix B;
- Chain of custody forms in Appendix C;
- Laboratory Certificates of Analysis in Appendix D; and
- Field notes in Appendix E.

September 2026



Figure 1: Monitor and Source Locations



Figure 2: Monitor Location on the South Side of the Facility

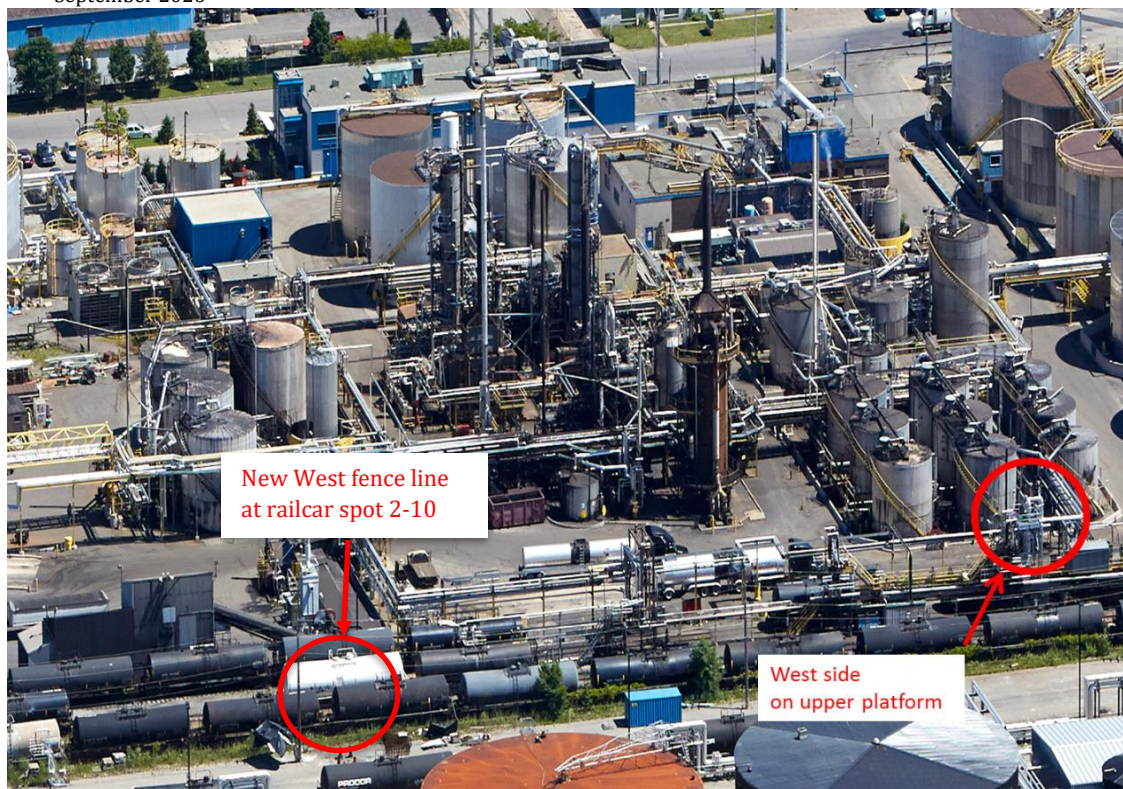


Figure 3: Monitor Locations on the West Side of the Facility



Figure 4: Monitor Locations on the North Side and East Side of the Facility

3.0 SUMMARY OF MONITORING EQUIPMENT CONDITIONS

The laboratory Certificate of Analysis for each monitoring event includes information on the volume of the sample collected for the PUF (B(a)P) monitoring system, and the residual vacuum pressures for the SUMMA canisters (benzene) monitoring equipment. For the PUF system, the MECP has flow requirements of 8 CFM +/- 10% which is equivalent to total volumes between 293.6 m³ and 358.8 m³ over 24 hours. The summa canister pressures on receipt and PUF filter total volumes are presented below in Tables 2 and 3.

For the August 2026 B(a)P monitoring results, all the recorded PUF volumes were inside the MECP specified range of between 293.6 m³ and 358.8 m³ over 24 hours.

For the August 2026 benzene monitoring results, all the summa canister pressures on receipt were within the MECP acceptable pressure of receipt range of between -1.6 to -13.4 inches Hg except for:

Table 2: Summa Canister Pressures on Receipt (inches Hg)

Monitoring Event Date	Benzene SUMMA Canister Pressure on Receipt (inches Hg)					HAMN STN 29164
	East	North	Old West	South	New West	
August 12	-5.09	-4.48*	-11.40*	-8.55	-8.14	-8.35
August 24	-4.07*	-4.68*	-4.89*	-7.94	-5.90	-8.14

*Sample is acceptable as within the MECP acceptable pressure of receipt of between -1.6 to -13.4 inches Hg but outside the MECP recommended pressure on receipt range of - 5 to -10 inches Hg.

**Sample invalid as the pressure of the receipt is outside the MECP acceptable pressure of receipt range of between - 1.6 to -13.4 inches Hg.

Table 3: PUF Filter Total Volumes

Monitoring Event Date	+B(a)P PUF Total Volume [m ³]					HAMN STN 29164
	East	North	Old West	South	New West	
August 6	312.8	300.1	303.8	295.1	296.0	315.5
August 12	302.4	299.8	296.1	298.3	305.6	315.5
August 18	310.3	301.7	307.6	303.9	296.4	306.4
August 24	307.2	308.5	316.9	304.5	306.9	308.9
August 30	309.0	304.9	304.6	297.5	297.0	Result pending

4.0 SUMMARY OF BENZENE MEASUREMENTS

Table 4: Summary of August 2026 Benzene Measurements

Monitoring Event Date	Measured Concentration [$\mu\text{g}/\text{m}^3$]					HAMN STN 29164
	East	North	Old West	South	New West	
August 12	6.93	4.28*	2.96*	2.45	2.26	1.60
August 24	12.6*	0.874*	0.345*	0.475	0.748	0.698

*Sample is acceptable as within the MECP acceptable pressure of receipt of between -1.6 to -13.4 inches Hg but outside the MECP recommended pressure on receipt range of - 5 to -10 inches Hg.

**Sample invalid as the pressure of the receipt is outside the MECP acceptable pressure of receipt range of between - 1.6 to -13.4 inches Hg.

Two sets of benzene measurements at each monitor were taken in August 2026. The measurements range from $0.345\mu\text{g}/\text{m}^3$ to **$12.6\mu\text{g}/\text{m}^3$ benzene**, with the highest value being detected at the east monitor during the **Monday August 24, 2026, MECP monitoring event**.

All the benzene concentrations measured during the August 2026 MECP monitoring events were below the 24-hour Upper Risk Threshold (URT) of $100\mu\text{g}/\text{m}^3$ benzene.

5.0 SUMMARY OF B(a)P MEASUREMENTS.

Table 5: Summary of August 2026 B(a)P Measurements.

Monitoring Event Date	Measured Concentration [$\mu\text{g}/\text{m}^3$]					HAMN STN 29164
	East	North	Old West	South	New West	
August 6	0.00132	0.00168	0.00083	0.00038	0.00043	< 0.00032
August 12	0.00140	0.00096	0.00107	< 0.00034	0.00034	0.00085
August 18	0.00146	0.00165	0.00070	0.00074	0.00090	0.00138
August 24	0.00252	0.00166	0.00083	0.00066	0.00159	0.00101
August 30	< 0.00032	< 0.00081	< 0.00055	< 0.00034	< 0.00059	Result pending

*Above the 0.00430 $\mu\text{g}/\text{m}^3$ B(a)P Measured Level Threshold (MLT) and the 0.0050 $\mu\text{g}/\text{m}^3$ B(a)P 24-hr Upper Risk Threshold (URT).

Five sets of B(a)P measurements were taken in August 2026. The B(a)P measurements ranged from < 0.00032 $\mu\text{g}/\text{m}^3$ to **0.00252 $\mu\text{g}/\text{m}^3$ B(a)P**, with the highest value being detected at the **east monitor** during the **Monday August 24, 2026, monitoring event**. All the B(a)P measurements are summarized in Table 5 above, and copies of the laboratory analysis reports are provided in Appendix B.

Regarding the **August 30, 2026, MECF monitoring day B(a)P measurement results**, BVL reported that the QC blank showed a contamination above the detection limit. An archive clean up was performed on the blank and samples and the results were similar.

To confirm these interferences, the QC blank was analyzed with another instrument (GC/triple quad), and the blank result was clean but since this is not yet a validated method BVL cannot report it from this technology. Therefore, BVL reported the samples from the original analysis with less than the observed detection limit for each sample.

All the B(a)P concentrations measured during the five August 2026 B(a)P MECF monitoring events were below the 0.0043 $\mu\text{g}/\text{m}^3$ Measured Level Threshold (MLT) and below the 24-hr Upper Risk Threshold (URT) of 0.0050 $\mu\text{g}/\text{m}^3$ B(a)P.

6.0 NON-CONTINUOUS MONITORING CONCLUSIONS

All the recorded PUF volumes were inside the MECP specified range of between 293.6 m³ and 358.8 m³ over 24 hours.

All the B(a)P concentrations measured during the five August 2026 B(a)P MECP monitoring events were below the 0.0043 µg/m³ Measured Level Threshold (MLT) and below the 24-hr Upper Risk Threshold (URT) of 0.0050 µg/m³ B(a)P.

Regarding the **August 30, 2026, MECP monitoring day B(a)P measurement results**, BVL reported that the QC blank showed a contamination above the detection limit. An archive clean up was performed on the blank and samples and the results were similar.

To confirm these interferences, the QC blank was analyzed with another instrument (GC/triple quad), and the blank result was clean but since this is not yet a validated method BVL cannot report it from this technology. Therefore, BVL reported the samples from the original analysis with less than the observed detection limit for each sample.

All the summa canister pressures on receipt were within the MECP acceptable pressure of receipt range of between -1.6 to -13.4 inches Hg.

All the benzene concentrations measured during the two August 2026 benzene MECP monitoring events were below the 24hour Upper Risk Threshold (URT) of 100 µg/m³ benzene.

7.0 BENZENE AIR QUALITY MONITORING PROGRAM - Continuous Benzene Monitoring System.

7.1 Sampling Systems and Methodology

Four (4) continuous mini-GC benzene monitors have been installed at the east, north, new west and south monitor site locations and one (1) continuous mini-GC benzene monitor at the offsite HAMN STN 29164 location.

Rain Carbon Canada Inc. worked with Onterris (formerly Montrose) and others to install the five continuous mini-GC benzene monitoring equipment at each of the monitoring locations.

7.2 Calibration

Continuous mini-GC benzene monitor calibrations are carried out by Onterris in accordance with MECP standard operating procedures stating that operators must perform an external performance check and calibration on continuous and non-continuous air monitoring and sampling equipment with a certified calibration unit.

This requires that the calibration materials/gases and measurement devices, such as flow meters and pressure gauges, must be certified for accuracy against a reference or transfer standard traceable to a primary reference standard of the United States National Institute of Standards and Technology (NIST) or another equivalent international standards institute.

This is to ensure consistency across the province and reproducibility. Calibration devices must also undergo an annual certification assessment. Each continuous mini-GC benzene monitor is calibrated by Onterris once per month.

7.3 Continuous benzene monitor locations.

The **continuous mini-GC benzene monitor** locations were selected based on input from the MECP, and with the experience gained through implementing the site benzene and B(a)P non-continuous monitoring program, Rain Carbon Canada Inc. relocated the East and South Monitoring Stations to site property line locations from the fence line locations. The North and New West Monitor locations were already located at the property line, so no relocation was necessary.

The descriptions of the continuous benzene monitoring station locations are summarized in Table 4.2 below. The monitoring station locations are shown in Table 7.3 below.

Table 7.3: Continuous Benzene Monitoring Station Locations.

Continuous Benzene Monitoring Station.	Location
North Continuous Benzene Monitor	The monitor is located at the north property line, north of Tank 91, at least 2 metres from the property line fence and overhead product transfer lines. The wind speed and direction station tower is 4.5 metres above grade.
Relocated East Continuous Benzene Monitor	New location at the east side of the facility on the property line of the employee parking lot adjacent to Strathearn Avenue. The wind speed and direction station tower has a height of 7.6 metres above grade.
New West Continuous Benzene Monitor	The west side of the facility between the west property line and the rail track 2 and north of the railcar track 2 spot 10. The wind speed and direction station tower has a height of 4.5 metres above grade.
Relocated South Continuous Benzene Monitor	New location at the south side of the facility adjacent to the south property line fence and south of south area tank farm. The wind speed and direction station tower has a height of 4.5 metres above grade.
HAMN STN 29164 Continuous Benzene Monitor	Positioned at the north section of the HAMN STN 29164 at Windermere Park. The met station tower has a height of 10 metres above grade.

Rain Carbon Canada Inc have now installed and operated since May 2026 the above four continuous benzene monitors, in accordance with the Operations Manual for Air Quality Monitoring in Ontario and at locations and using methods approved by the MECP District Manager, on each of the **North, Relocated East, Relocated South and New West property line locations** of Rain Carbon Canada Inc. to measure the concentration of benzene in the air once every 10 minutes.

For the month of August 2026, we determined and recorded the concentration of benzene, at each of the four continuous benzene monitors, at the specified averaging periods below:

- i. once every hour, calculations to determine the concentration of benzene averaged over the previous one-hour period.
- ii. once every hour, calculations to determine the concentration of benzene averaged over the previous 24-hour period.
- iii. once every day, calculations to determine the concentration of benzene averaged over the previous 365-day period.

Each continuous benzene monitor at each monitoring station is programmed to alert Rain Canada Inc. and MECP of any exceedance of benzene of the following thresholds immediately:

**(1) 90 micrograms per cubic metre benzene
averaged over any 1-hour period;**

**(2) 30 micrograms per cubic metre benzene
averaged over any 24-hour period.**

7.4 RAIN CARBON CANADA INC. PROPERTY LINE MONITORING – BENZENE ACTION LEVELS

1. If a concentration of benzene that is calculated exceeds any of the following concentrations, Rain Canada Inc. will as soon as practicable notify the MECP District Manager and an MECP provincial officer.

- a. **90 micrograms per cubic metre averaged over any 1-hour period;**
- b. **30 micrograms per cubic metre averaged over any 24-hour period.**

2. The notification required above shall include the following information:

- a) the date and time that the averaging period in respect of the contravention began and ended.
 - b) an indication of which parameter is contravened.
 - c) the location of the measured concentration.
 - d) the concentration of benzene over the relevant averaging period of the exceedance
 - e) description of the operating conditions at the Facility during the relevant e. averaging period f) of the exceedance.
 - g) a description of the meteorological conditions at the Facility during the relevant averaging
 - h) period of the exceedance, including temperature, wind direction and wind speed.
-

3. If the calculated concentration in subparagraph (b) of Condition 7(2) results in two or more contraventions of subparagraph (a) or (b) of Condition 8(1), after providing notice under Condition 8(2), Rain Carbon Canada Inc. shall notify the MECP District Manager and a provincial officer in writing as soon as practicable,

- a.** after each subsequent contravention calculated in of Condition 8(1); or
- b.** after there are no more subsequent contraventions calculated in Condition 8(1).

4. Rain Carbon Canada Inc shall immediately after notification is given under Condition 8(1), investigate the cause of the benzene discharge and shall implement measures to reduce the discharge as soon as it is possible.

5. No later than 14 days after giving notice under Condition 8 (1), Rain Carbon Canada Inc shall submit to the MECP District Manager and a MECP provincial officer a report that includes the following information for all notifications in this period:

- a.** an identification and detailed analysis of the suspected cause of the contravention.
- b.** an identification of the measures that have been or are implemented to correct the cause of the contravention and prevent or reduce the risk of a similar discharge happening again, including,
 - i.** if any of the measures have already been implemented, the implementation dates; **ii.** the expected implementation dates of measures that are implemented in the future; and **iii.** based on the analysis mentioned in subparagraph (a) of 8(5), an explanation of why the identified measures are effective in correcting the cause of the contravention and preventing or reducing the risk of a similar discharge happening again.

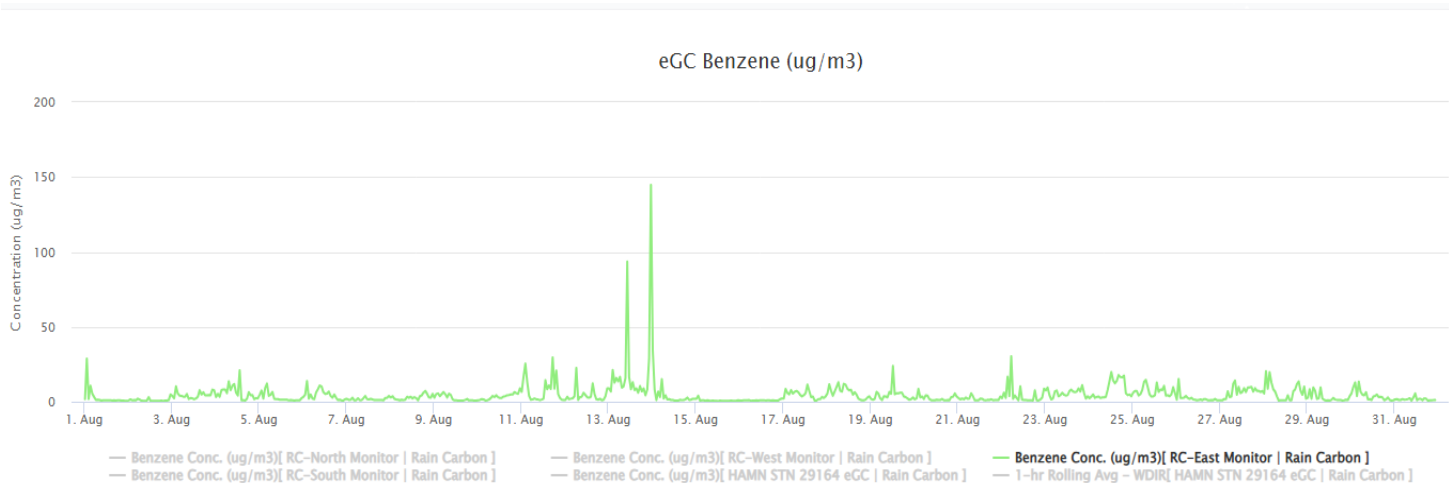
6. Rain Carbon Canada Inc. shall take all reasonable actions to ensure that the measures identified under subparagraph (b) of Condition 8(5) are implemented by the dates identified under that subparagraph.

7. Each month, until all the measures identified under subparagraph (b) of Condition 8(5) are implemented, Rain Carbon Canada Inc. shall update the information in the report and shall submit the updated report to the District Manager and a provincial officer.

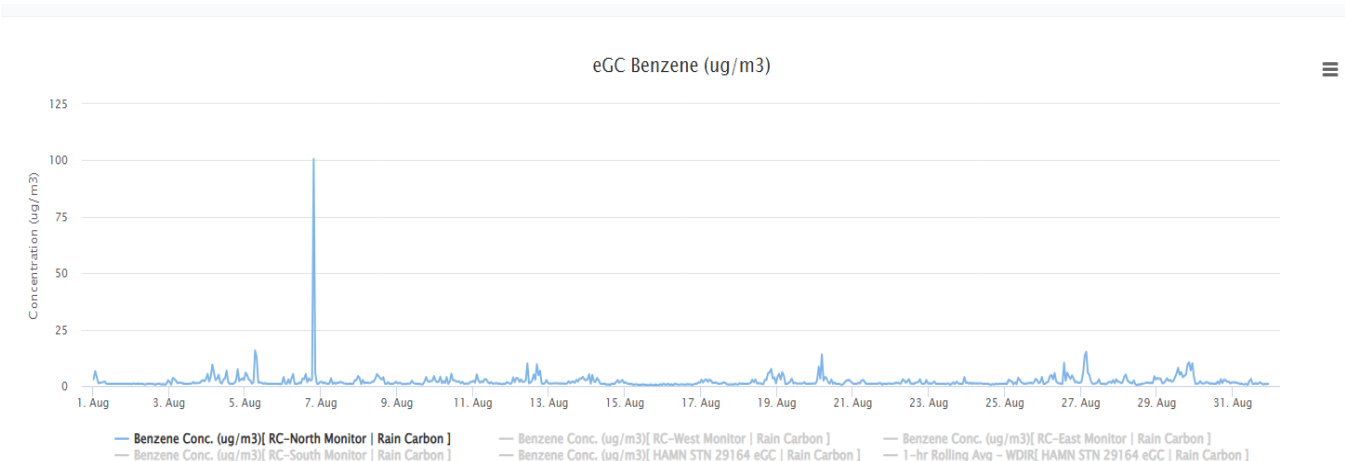
Table 7.4 : August 2026 Site Continuous Benzene Monitoring Notifications to the MECP.

Date	Time	Continuous Benzene Monitor	MECP Notification and likely source if confirmed.	Benzene measurement $\mu\text{g}/\text{m}^3$ benzene	Wind speed km/hour	Wind direction degrees
August 14, 2026	2 am	East	Notification to MECP of an exceedance to the 1-hour Benzene Concentration ($90 \mu\text{g}/\text{m}^3$) at the East Monitor. Upon receiving the 50% threshold exceedance alert, the Shift Supervisor conducted a perimeter inspection; however, no obvious source of benzene emissions could be identified at that time. Subsequently, a change in wind direction resulted in benzene concentrations decreasing below the alert threshold. At approximately 7:30 a.m., during a routine inspection, the maintenance crew identified a mechanical leak from Pump P-105. The leak was promptly isolated and stopped. The small quantity of material released was contained within the pump's secondary containment system and has since been cleaned up.	149.45	4.34	253.52

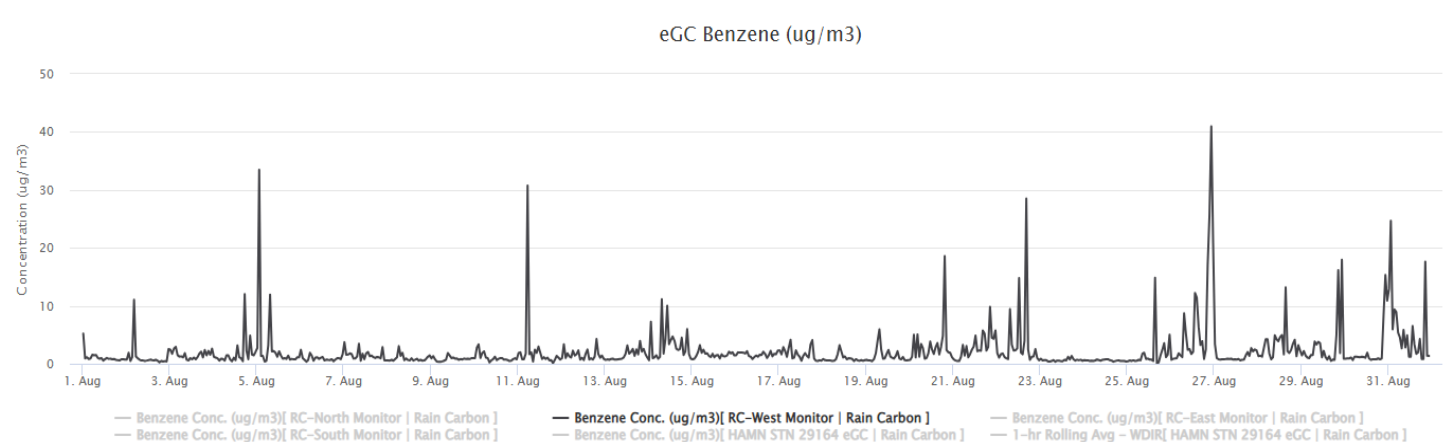
East Continuous Benzene monitor AUGUST 2026: 1 HOUR AVERAGE MEASUREMENTS



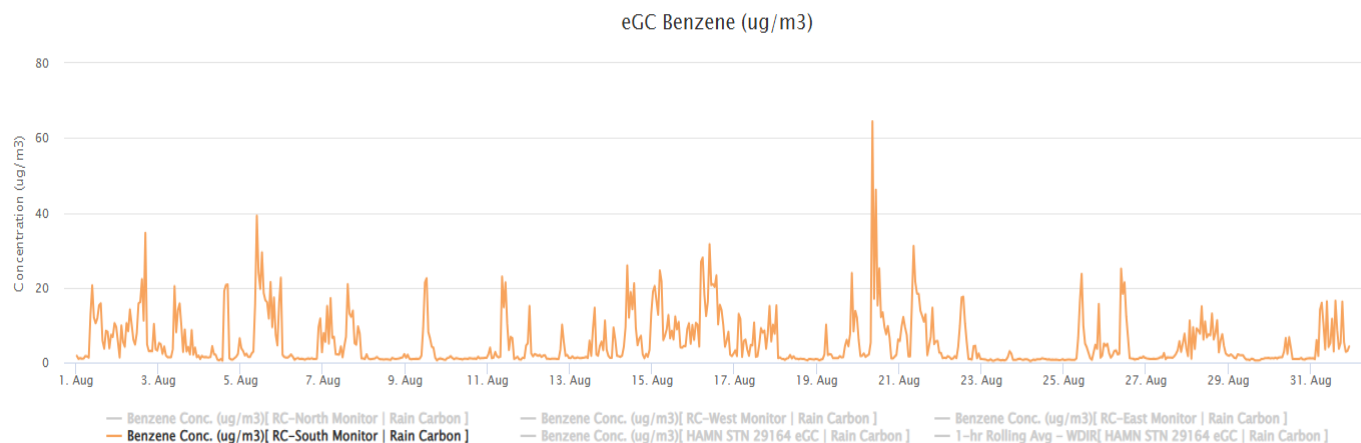
North Continuous Benzene monitor AUGUST 2026: 1 HOUR AVERAGE MEASUREMENTS



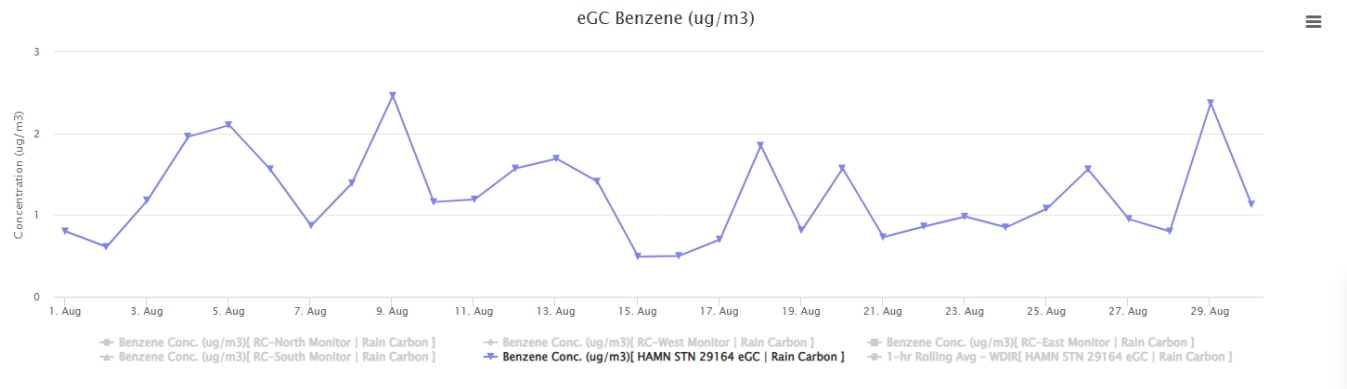
New west Continuous Benzene monitor AUGUST 2026: 1 HOUR AVERAGE MEASUREMENTS



South Continuous Benzene monitor AUGUST 2026: 1 HOUR AVERAGE MEASUREMENTS



HAMN STN 29164 Continuous Benzene monitor AUGUST 2026: 24hour AVERAGE MEASUREMENTS



8. BENZENE AIR QUALITY MONITORING PROGRAM – Passive Benzene Monitoring System.

8.1 Sampling Systems and Methodology

Rain Carbon Canada Inc. have installed six passive benzene monitoring stations at the east, new west, southeast, southwest, northeast and northwest passive benzene monitor site locations.

Rain Carbon Canada Inc. has worked with Agat Laboratories and others to install the six passive benzene monitoring equipment at each of the above monitoring locations.

The passive benzene samplers sample for benzene at a sampling rate controlled by diffusion either through a static air layer or by permeation through a membrane. The passive benzene samplers are generally simple in structure and do not require electric power to operate. The passive benzene samplers are installed in specially designed rain shelters at a height of approximately 3 metres above grade at each of the six-site passive benzene monitor sampling locations. The passive benzene sampler rain shelters also help prevent interference from animals, human beings or the surroundings.

The passive benzene samplers sample at each location for a period of 14 days and after exposure, the samplers are analyzed for benzene content by Agat Laboratories Inc. At the conclusion of each 14-day sampling period, the passive benzene sampler is replaced by a new passive benzene sampler for the next 14 -day sampling period at each of the six-site passive benzene monitor sampling locations.

Rain Carbon Canada Inc. has installed and now operate six passive benzene sampler monitors in accordance with the Operations Manual for Air Quality Monitoring in Ontario, that continuously sample benzene in the air, at locations along the property line approved by the MECP District Manager, for every two-week period.

Agat Laboratories Inc. will analyze the samples collected in every two-week period to determine the concentration of benzene in micrograms per cubic metre.

For each two-week sample, Rain Carbon Canada Inc. will record the following at a minimum:

- a. the dates of the two-week sampling period used to continuously accumulate benzene in the air,
- b. the date the sample was analysed,
- c. the concentration of benzene in micrograms per cubic metre, and
- d. the monitor location from which the sample was taken.

Beginning twelve (12) months from the date of operation that the passive benzene monitors begin to sample benzene accumulated in the air, Rain Carbon Canada Inc. will record the rolling annual average concentration of Benzene at each monitor, for the most recent 12-month period, and the dates of the 12-month period to which the rolling annual average concentration corresponds.

8.2 Passive Benzene Monitor Locations

The Rain Carbon Canada Inc. **passive benzene monitors locations** have been selected based on input from the MECP and through the experience gained through implementing the site benzene and B(a)P non-continuous monitoring program.

The descriptions of the passive benzene monitoring station locations are summarized in Table 6.2 below. The monitoring station locations are shown in Table 6.2

Table 8.1: Passive Benzene Monitoring Station Locations.

Passive Benzene Monitoring Station.	Location
Northwest Passive Benzene Monitor	Positioned on new platform at the northwest corner of the site approximately 5 metres from the rail tracks.
Northeast Passive Benzene Monitor	Positioned on new platform at the northeast corner of the site approximately 20 metres from Tank 69.
Relocated East Passive Benzene Monitor	New location at the east side of the facility on the property line of the employee parking lot adjacent to Strathearn Avenue.
New West Passive Benzene Monitor	The west side of the facility between the west property line and the rail track 2 and north of the railcar track 2 spot 10.
Southwest Passive Benzene Monitor	Positioned on new platform at the southwest corner of the site approximately 5 metres from Tank PH #3.
Southeast Passive Benzene Monitor	Positioned on new platform on the east property line to the east of Tank 7 at approximately 20 metres from Tank 7.

Table 8.2: August 2026 Site Benzene Monitoring Station Results

Passive Benzene Monitoring Station.	Sample 14-day range July 30 to August 13, 2026, reported August 26, 2026 µg/m³ benzene	Sample 14-day range August 13 to 27, 2026 reported September 20, 2026 µg/m³ benzene
Northwest Passive Benzene Monitor	1.22	3.41
Northeast Passive Benzene Monitor	3.33	4.68
East Passive Benzene Monitor	6.66	8.08
East Passive Benzene Monitor Duplicate	7.09	6.57
New West Passive Benzene Monitor	2.24	5.97
Southwest Passive Benzene Monitor	6/03	5.45
Southeast Passive Benzene Monitor	6.48	10.7

For the passive benzene monitor measurements for the 14-day period July 30 to August 13, 2026, the maximum benzene measurement was **7.09 ug/m3 benzene at the east passive benzene monitor duplicate.**

For the passive benzene monitor measurements for the 14-day period August 13 to 27, 2026, the maximum benzene measurement was **10.7 ug/m3 benzene at the southeast passive benzene monitor.**

Signature Page

Robin Hart

Robin S. Hart P.Eng.

Environmental Engineer

Rain Carbon Canada Inc.

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