



REPORT

# January 2026 B(a)P Sampling Results Above Measured Level Report

*Rain Carbon Canada Inc.*

Submitted by:

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## 1.0 INTRODUCTION

The ambient air monitoring measurements for January 2026 follow 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**.

As required by the Plan, Rain completed three monitoring events in the month of January 2026 (January 3, 15, and 27) and submitted a monthly summary report to the MECP entitled “January 2026 Ambient Air Monitoring Report” (the AAMR).

As presented in the January 2026 AAMR, there were two B(a)P concentrations recorded above the 0.0043 µg/m<sup>3</sup> Measured Level threshold which triggered the preparation of this report, as set out in the **ECA #7313-8KEN49 Notice No.1 issued November 17, 2022**.

This report includes information on the causes and prevention of future concentrations above the Measured Level threshold. Where possible, this report will include the following items as per the **ECA #7313-8KEN49 Notice No.1 issued November 17, 2022**.

An analysis of what may have caused the B(a)P concentration to be above the Measured Level Threshold.

- Production rate(s) at the time measuring B(a)P concentrations to be above the Measured Level Threshold.
- An assessment of additional equipment, technically feasible methods and operational measures that are available to further minimize the likelihood of measurements above the Measured Level Threshold; and
- A proposed schedule to implement any actions that would minimize the likelihood of measurements above the Measured Level Threshold.

## 2.0 B(a)P MONITORING

The monitoring program for B(a)P consists of setting up a polyurethane foam (PUF) polyaromatic hydrocarbon (PAH) sampling system at five locations at the Facility, as presented in Figure 1 and also at the HAMN Station 29164. Samples were collected over a 24-hour period. Air quality data acquisition and instrument performance were evaluated by Rain Carbon Canada Inc. personnel. The laboratory analysis was conducted by Bureau Veritas Laboratories, which is ISO17025 compliant and accredited.

**Figure 1: Monitor and Source Locations**



The B(a)P measurements ranged from < 0.00029 µg/m<sup>3</sup> to **0.0101µg/m<sup>3</sup>**.

The MECP included a Measured Level threshold as a trigger to evaluate progress on B(a)P emission reduction. This level set by the MECP is not directly related to the ESDM Report results. Two of the B(a)P concentrations measured on **January 26, 2026, were above the 0.00430 µg/m<sup>3</sup> Measured Level threshold** which triggered the preparation of this report, as set out in the ECA #7313-8KEN49 Notice No.1 issued November 17, 2022, and both measurements were also **above the 0.00500 µg/m<sup>3</sup> B(a)P Upper Risk Threshold (URT)**.

**Table 1: Summary of January 2026 B(a)P Measurements.**

Monitoring Event Date	Measured Concentration [µg/m <sup>3</sup> ]					HAMN STN 29164
	East	North	Old West	South	New West	
January 2	<0.00030	< 0.00029	< 0.00029	< 0.00031	< 0.00031	0.00058
January 8	0.00056	0.00044	0.00143	< 0.00033	0.00108	< 0.00031
January 14	< 0.00029	0.00032	< 0.00031	< 0.00032	< 0.00031	< 0.00030
January 20	0.00074	0.00170	< 0.00030	< 0.00031	< 0.00030	< 0.00030
January 26	<b>0.00502*</b>	0.00293	0.00032	<b>0.0101*</b>	0.00034	0.00033

**\*B(a)P measurement above the 0.00430 µg/m<sup>3</sup> B(a)P Measured Level threshold.**

## 2.1 Facility Conditions During Monitoring

The Facility was undergoing normal operations during January 26, 2026, monitoring event. Table 2 summarizes the daily vehicle loading activities at the Facility during January 26, 2026, monitoring events at the sources previously identified as the main contributors to B(a)P emissions.

**Table 2: Summary of Facility Activities on January 26, 2026**

Monitoring Event	Area	Modelling Source ID	Daily Vehicle Loading [US gal]				
			Pitch	Creosote	Naphthalene Oil	LPSB	RT-12
January 26, 2026	Railcar Loading	LS3	17,234	0	0	0	0
	Truck Loading	LS2	0	0	0	0	0
	Truck Loading	LS4	86,470	0	0	0	0

The daily vehicle loading data is based on information derived from the Systems, Application and Products (SAP) Enterprise Resource Planning software system which tracks the amount of material loaded into trailers and rail cars in kilograms. This data was converted to US gallons, representing the amount of material loaded during the monitoring event (i.e., daily amount loaded). This daily loading data allows for a better representation of Facility conditions during the 24-hour monitoring events.

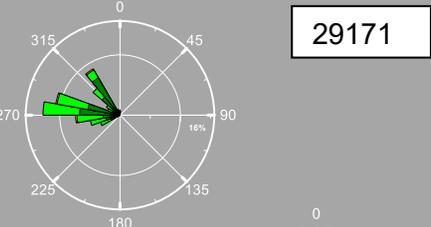
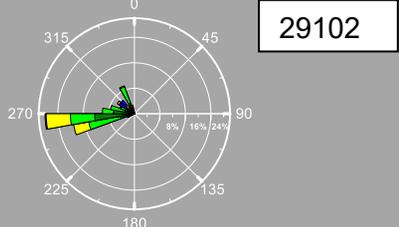
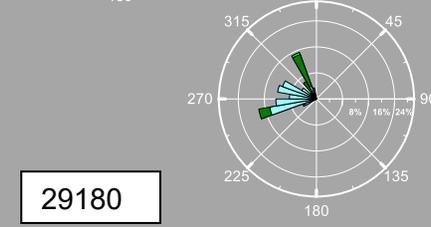
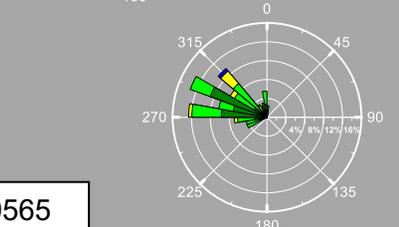
The monitoring and control of loading volumes is part of Standard Operation Procedures (SOPS) for material loading.

### **3.0 MONITORING RESULTS AND ANALYSIS**

At this time, a general correlation between Facility operations and measured concentrations cannot be identified. Although the monitors are located within the Facility's property, their measurements are likely impacted by emissions from other industrial facilities and transportation sources in the vicinity.

Table 3 summarizes January 26, 2026, monitoring results and wind conditions and facility loading operations. The analysis of the results is presented below Table 3.

**Table 3: Summary of Wind Conditions, Facility Operations and Measured B(a)P Concentrations during Monday January 26, 2026**

	HAMN Station	Wind Direction & Strength	Overall				
	29171	W, WNW, NW (Calm, Moderate, Strong)					
	29102	W, WSW (Calm, Moderate)					
	29180	WSW, W, NW (Calm, Moderate, Strong)					
	29565	W, WNW, NW (Calm, Moderate, Strong)					
Facility Operations	Facility Area	Modelling Source ID	Daily Total Amount Loaded [US gal]				
			Pitch	Creosote	Naphthalene Oil	LPSB	RT-12
	Railcar Loading	LS3 (close to Old West and New West Monitors)	17,234	0	0	0	0
	Truck Loading	LS2 (close to Old West Monitor)	0	0	0	0	0
Truck Loading	LS4 (close to New West Monitor)	86,470	0	0	0	0	
Measured Concentrations [µg/m³]		East Monitor	North Monitor	Old West Monitor / New West Monitor		South Monitor/STN29164	
		0.00502	0.00293	0.00032 / 0.00034		0.0101 / 0.00033	

**Monday January 26, 2026, monitoring event:**

The **Monday, January 26, 2026**, Hamilton site wind direction was from general **westerly, west northwesterly and north westerly** directions over the course of the day. This information is summarized in the table below.

<b>Monitoring Event</b>	<b>January 26, 2026</b>
<b>Wind Strength</b>	<b>Calm   Moderate</b>
<b>Main Wind Direction</b>	<b>W, WNW, NW</b>

The loading activities during January 26, 2026, monitoring event are summarized in the table below.

<b>Monitoring Event</b>	<b>January 26, 2026</b>
Total Volume Loaded from Rail Car Loading LS3 [US gal]	17,234
Total Volume Loaded from Truck Loading LS2 Spot 1 [US gal]	0
Total Volume Loaded from Truck Loading LS4 Spot 7 [US gal]	86,470

During January 26, 2026, the monitoring event the railcar loading activity was for 17,234US gal of coal tar pitch only.

The truck loading LS4 (Spot 7) activity was for 86,470 US gal of coal tar pitch only There was no truck loading at LS2 (Spot 1).

### **East Monitor Measurement on January 26, 2026**

The **0.00502  $\mu\text{g}/\text{m}^3$  B(a)P** measurement at the east monitor on the **Monday January 26, 2026, monitoring event** was above the 0.00430  $\mu\text{g}/\text{m}^3$  Measured Level threshold and above the 24-hour upper risk threshold (URT) of 0.005  $\mu\text{g}/\text{m}^3$  B(a)P. This was determined, statistically, to be a special cause variation event with one specific likely assignable cause.

The wind direction was from a general north westerly direction and in the absence of any on site sources, an offsite source located to the northwest of the east monitor may have been the likely source of the **0.00502  $\mu\text{g}/\text{m}^3$  B(a)P** measurement at the **east monitor** on the **Monday January 26, 2026, MECP monitoring event**.

### **South Monitor Measurement on Monday January 26, 2026**

The **0.01010  $\mu\text{g}/\text{m}^3$  B(a)P** measurement at the south monitor on the **Monday January 26, 2026, monitoring event** was above the 0.00430  $\mu\text{g}/\text{m}^3$  Measured Level threshold and above the 24-hour upper risk threshold (URT) of 0.005  $\mu\text{g}/\text{m}^3$  B(a)P. This was determined, statistically, to be a special cause variation event with one specific likely assignable cause. A “green” coal tar pitch truck/trailer loading audit at LS4 was conducted on the Monday January 26, 2026, monitoring event however no railcar loading audit at LS3 was conducted as only one railcar was loaded on that day.

The wind direction was from a general north westerly direction and in the absence of any on site sources, an offsite source located to the northwest of the south monitor may have been the likely source of the **0.0101  $\mu\text{g}/\text{m}^3$  B(a)P** measurement at the south monitor on the Monday January 26, 2026, MECP monitoring event.

A “green” coal tar pitch truck/trailer loading audit at LS4 was conducted on the Monday January 26, 2026, monitoring event however no railcar loading audit at LS3 was conducted as only one railcar was loaded on that day.

In addition, the coal tar pitch tank PVRV checks conducted on Monday January 26, 2026, monitoring event did not reveal any visible fugitive B(a)P emissions.

#### 4. CONCLUSION

This report was prepared to fulfill the requirements of the **ECA #7313-8KEN49 Notice No.1 issued November 17, 2022.**

**Table 4: Conclusions**

	<b>Conclusions</b>
<p>Analysis of what may have caused the B(a)P concentration to be above the Measured Level Threshold.</p>	<p><b><u>East Monitor Measurement on January 26, 2026</u></b></p> <p>The <b>0.00502 µg/m³ B(a)P measurement at the east monitor on the Monday January 26, 2026, monitoring event</b> was above the 0.00430 µg/m³ Measured Level threshold and above the 24-hour upper risk threshold (URT) of 0.005 µg/m³ B(a)P. This was determined, statistically, to be a special cause variation event with no specific likely assignable cause.</p> <p>The wind direction was from a general north westerly direction and in the absence of any on site sources, an offsite source located to the northwest of the east monitor may have been the likely source of the <b>0.00502 µg/m³ B(a)P</b> measurement at the east monitor on the Monday January 26, 2026, MECP monitoring event.</p> <p><b><u>South Monitor Measurement on Monday January 26, 2026</u></b></p> <p>The <b>0.01010 µg/m³ B(a)P measurement at the south monitor on the Monday January 26, 2026, monitoring event</b> was above the 0.00430 µg/m³ Measured Level threshold and above the 24-hour upper risk threshold (URT) of 0.005 µg/m³ B(a)P. This was determined, statistically, to be a special cause variation event with no specific likely assignable cause.</p> <p>The wind direction was from a general north westerly direction and in the absence of any on site sources, an offsite source located to the northwest of the south monitor may have been the likely source of the <b>0.0101 µg/m³ B(a)P</b> measurement at the south monitor on the Monday January 26, 2026, MECP monitoring event.</p> <p>A “green” coal tar pitch truck/trailer loading audit at LS4 was conducted on the Monday January 26, 2026, monitoring event however no railcar loading audit at LS3 was conducted as only one railcar was loaded on that day.</p>
<p>Loading volumes(s) in US gal at the time measuring B(a)P concentrations to be above the Measured Level threshold.</p>	<p>Details on loading volumes (US gal) are presented in Section 2.0 of this report.</p>

<p>Assessment of additional equipment, technically feasible methods and operational measures that are available to further minimize the likelihood of measurements above the Measured Level threshold and the proposed schedule to implement any actions that would minimize the likelihood of measurements above the Measured Level threshold-</p>	<p>Rain will continue conducting vehicle loading audits on each monitoring day to continue assessing the operations of loading equipment and operators' implementation of Standard Operating Procedures.</p>
	<p>Rain Carbon's Abatement Plan includes installation of fully enclosed automated railcar loading in Q1 2027.</p>

Signature Page



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