

REPORT

July 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 July 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 five monitoring events in the month of **July 2026 (July 1, 7, 13, 19 and 25)** and submitted a monthly summary report to the MECP entitled “July 2026 Ambient Air Monitoring Report” (the AAMR).

As presented in the July 2026 AAMR, there was one B(a)P concentration recorded above the $0.0043 \mu\text{g}/\text{m}^3$ 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**.

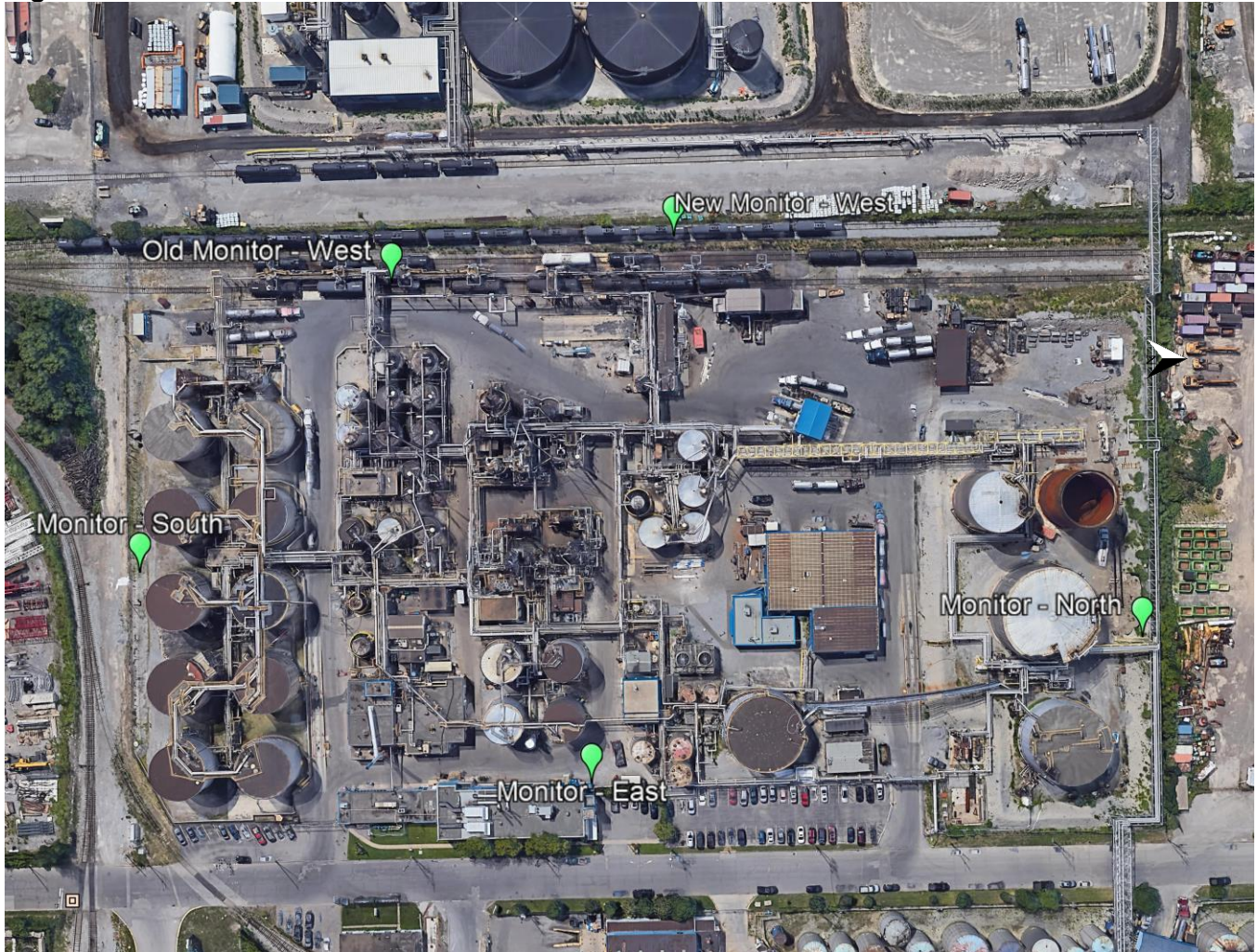
An analysis of what may have caused the B(a)P concentration to be above the Measured Level Threshold.

- Production rate(s) at the time measuring B(a)P concentration 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 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.

The B(a)P concentration measured below on **Tuesday July 7, 2026, was above the 0.00430 µg/m³ 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 this measurement was also **above the 0.00500 µg/m³ B(a)P Upper Risk Threshold (URT)**.

The concentration of **0.00761 µg/m³ B(a)P** measured at the **old west monitor** on the **Tuesday July 7, 2026, MECP monitoring event** was above the 0.00430 µg/m³ B(a)P Measured Level Threshold (MLT) which triggered the preparation of the July 2026 AML report. This measurement was also above the 24-hr Upper Risk Threshold (URT) of 0.0050 µg/m³ B(a)P which required a Section 30 Notification to the MECP.

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

Monitoring Event Date	Measured Concentration [µg/m ³]					HAMN STN 29164
	East	North	Old West	South	New West	
July 1	0.00111	0.00150	<0.00033	0.00037	0.00035	<0.00034
July 7	0.00114	0.00084	0.00761*	0.00091	0.00078	<0.00031
July 13	0.00191	0.00143	0.00049	0.00038	<0.00049	0.00177
July 19	0.00141	0.00134	0.00218	0.00121	0.00152	<0.00032
July 7	<0.00033	<0.00033	0.00067	<0.00034	<0.00034	<0.00031
July 31	0.00097	0.00047	0.00068	<0.00033	0.00048	0.00038

***B(a)P measurement both above the 0.00430 µg/m³ B(a)P Measured Level Threshold (MLT) and the 0.0050 µg/m³ B(a)P Upper Risk Threshold (URT)**

2.1 Facility Conditions During Monitoring

Table 2 summarizes daily vehicle loading activities at the Facility during July 7, 2026, monitoring event for sources previously identified as the primary contributors to B(a)P emissions.

Table 2: Summary of Facility Activities on July 7, 2026.

Monitoring Event	Area	Modelling Source ID	Daily Vehicle Loading [US gal]				
			Pitch	Creosote	Naphthalene Oil	LPSB	RT-12
July 7, 2026	Railcar Loading	LS3	17,363	31,020	0	0	0
	Truck Loading	LS2	0	0	0	0	0
	Truck Loading	LS4	117,926	0	0	0	8,274

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.

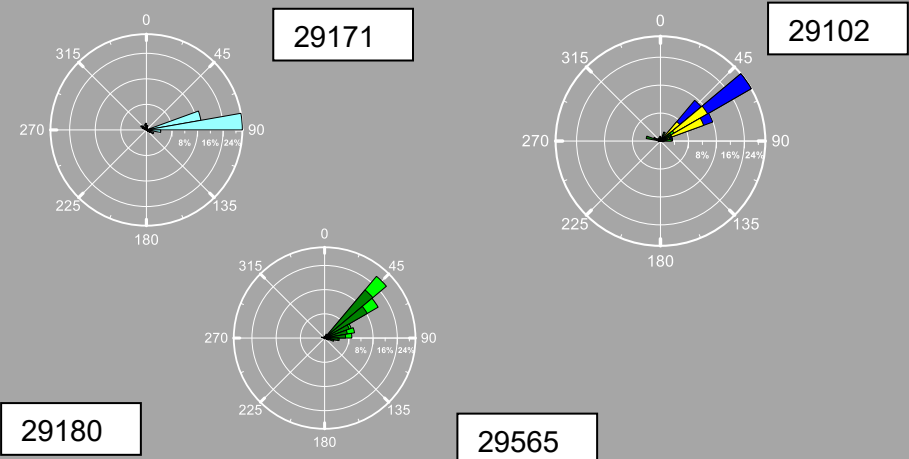
The monitoring and control of loading volumes is part of Standard Operation Procedures (SOPS) for material loading.

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 July 7, 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 Tuesday July 7, 2026.

	HAMN Station	Wind Direction & Strength	Overall				
	29171	E, ENE (Calm, Moderate)					
	29102	NE (Moderate, Strong)					
	29180	NE (Calm, Moderate, Strong)					
	29565	No measurements					
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)	17,363	31,0120	0	0	0
	Truck Loading	LS2 (close to Old West Monitor)	0	0	0	0	0
	Truck Loading	LS4 (close to New West Monitor)	117,926	0	0	0	8,274
Measured Concentrations [µg/m³]		East Monitor	North Monitor	Old West Monitor / New West Monitor		South Monitor/STN29164	
		0.00114	0.00084	0.00761* / 0.00078		0.00091 / < 0.00031	

Tuesday July 7, 2026, monitoring event:

The **Tuesday, July 7, 2026**, Hamilton site wind direction was from a general **north easterly** direction over the course of the day. This information is summarized in the table below.

Monitoring Event	July 7, 2026
Wind Strength	Calm Moderate Strong
Main Wind Direction	E, ENE, NE

The table below summarizes loading activities during the July 7, 2026, monitoring event.

Monitoring Event	July 7, 2026
Total Volume Loaded from Rail Car Loading LS3 [US gal]	48,383
Total Volume Loaded from Truck Loading LS2 Spot 1 [US gal]	0
Total Volume Loaded from Truck Loading LS4 Spot 7 [US gal]	126,200

During the July 7, 2026 monitoring event, railcar loading consisted of 17,363 US gal of coal tar pitch and 31,020 US gal of creosote.

The truck loading LS4 (Truck Loading Spot 7) activity was for 117,926 US gal of coal tar pitch and 8,274 US gal of RT-12. There was no truck loading at LS2 (Spot 1).

Old West Monitor Measurement on Tuesday July 7, 2026

The **0.00761 $\mu\text{g}/\text{m}^3$ B(a)P** measurement at the old west monitor on the Tuesday July 7, 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.

- A “green” coal tar pitch truck/trailer loading audit at LS4 (Truck Loading Spot 7) was conducted on the Tuesday July 7, 2026, monitoring event.
- A “green” creosote railcar loading audit at LS3 (railcar loading track 2 spot 3) was conducted on the Tuesday July 7, 2026, monitoring event.
- **However notable coal tar pitch emissions** were observed while loading a railcar at LS3 (railcar loading track 2 spot 5) of coal tar pitch on Tuesday July 7, 2026.
- The coal tar pitch tank PVRV checks conducted on Tuesday July 7, 2026, monitoring event did not reveal any visible fugitive B(a)P emissions.

On Tuesday July 7, 2026, the overall wind direction was from a **general north easterly direction** and the coal tar pitch railcar being loaded adjacent to the old west monitor may have been a likely source of the **0.00761 $\mu\text{g}/\text{m}^3$ B(a)P measurement** at the old west monitor on the Tuesday July 7, 2026, MECP monitoring event.

- During Tuesday July 7, 2026 monitoring event, railcar loading consisted of 17,363 US gal of coal tar pitch and 31,020 US gal of creosote.
- The truck loading LS4 (Truck Loading Spot 7) activity on Tuesday July 7, 2026, MECP monitoring event was for 117,926 US gal of coal tar pitch and 8,274 US gal of RT-12.

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

	Conclusions
Analysis of what could have caused the B(a)P concentration to be above the Measured Level Threshold.	<u>Old West Monitor Measurement on Tuesday July 7, 2026</u> The 0.00761 $\mu\text{g}/\text{m}^3$ B(a)P measurement at the old west monitor on the Tuesday July 7, 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. • A “green” coal tar pitch truck/trailer loading audit at LS4 (Truck Loading Spot 7) was conducted on the Tuesday July 7, 2026, monitoring event. • A “green” creosote railcar loading audit at LS3 (railcar loading track 2 spot 3) was conducted on the Tuesday July 7, 2026, monitoring event. • However notable coal tar pitch emissions were observed while loading a railcar at LS3 (railcar loading track 2 spot 5) of coal tar pitch on Tuesday July 7, 2026. • The coal tar pitch tank PVRV checks conducted on Tuesday July 7, 2026, monitoring event did not reveal any visible fugitive B(a)P emissions. On Tuesday July 7, 2026, the overall wind direction was from a general north easterly direction and the coal tar pitch railcar being loaded adjacent to the old west monitor may have been a likely source of the 0.00761 $\mu\text{g}/\text{m}^3$ B(a)P measurement at the old west monitor on the Tuesday July 7, 2026, MECP monitoring event.
Loading volumes(s) in US gal at the time measuring B(a)P concentrations to be above the Measured Level threshold.	Details on loading volumes (US gal) are presented in Section 2.0 of this report.

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.	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. Rain Carbon's Abatement Plan includes installation of fully enclosed automated railcar loading in Q1 2027.
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Signature Page

A handwritten signature in black ink that reads "K. S. Hart". The letters are cursive and fluid, with the first name "K." and last name "Hart" clearly distinguishable.

Robin S. Hart P.Eng.

Environmental Engineer Rain

Carbon Canada Inc
