

REPORT

Environmental Management System and Community Engagement Report 2025.

Rain Carbon Canada Inc.

Submitted by Gord Gilmet

Rain Carbon Canada Inc.

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1.0 Introduction

Rain Carbon Canada Inc. (Rain Carbon) operates a coal tar and petroleum-based material processing facility located at 725 Strathearne Avenue N. in Hamilton, Ontario (the Facility). Coal tar from various sources are blended, distilled and fractionated into six fractions, which include light oil, tar acid oil, naphthalene oil, wash oil, heavy aromatic oil and coal tar pitch. These products, which are shipped from the Facility by tanker truck and rail car, are essential basic materials for the following downstream industries: aluminum, graphite products, refractory, chemicals, construction, wood preservation and automotive. These basic materials are processed further by other industries to make industrial products such as carbon electrodes, concrete superplasticizers, carbon black pigment and pavement sealer.

The primary processes utilized at the Facility include coal tar receiving, storage, distillation, product storage and shipping, fume gathering and incineration, fume scrubbing, natural gas combustion and wastewater collection and treatment. The Rain Carbon site spans 5 hectares.

1.1 Site-Specific Standards

Rain Carbon submitted Site-Specific Standard (SSS) Applications to the Ontario Ministry of the Environment, Conservation and Parks (MECP) for benzene and benzo(a)pyrene [B(a)P] to demonstrate compliance with Ontario Regulation (O. Reg.) 419/05 while continuing to reduce emissions as much as possible with technology-based solutions and best practices. The SSS for benzene and B(a)P were approved on November 21, 2017 (Reference Number 7856-9VDPSR) as summarized in Table 1 and expired on November 21, 2022.

Table 1: Summary of Benzene and B(a)P Site-Specific Standards

Contaminant, CAS Number	Applicable Dates	Annual Site-Specific Standard [$\mu\text{g}/\text{m}^3$]
B(a)P, 50-32-8	November 21, 2017 – December 31, 2017	0.062
	January 1, 2018 – June 30, 2018	0.0613
	July 1, 2018 – Nov 21, 2022	0.0008
Benzene, 71-43-2	November 21, 2017 – June 30, 2018	27.7
	July 1, 2018 – Nov 21, 2022	12.7

Rain Carbon was issued Site-Specific Standard (SSS) approvals in 2017 for benzene and benzo(a)pyrene [B(a)P] (Reference Number 7856-9VDPSR; Approval Numbers 201-17-rv0 and 202-17-rv0). The SSS expired on November 21, 2022, after which the Facility was operating under a bridging order (the Order) 1-134982315 issued December 14, 2022. The Order required the use of a new dispersion model CALPUFF, refinement of the ESDM Report and submission of a SSS Renewal Application and ECA Application to reflect the modifications documented in the Action Plan. The first submission of the Technological Benchmarking Report (TBR) and Action Plans were provided to the Ontario Ministry of the Environment, Conservation and Parks (MECP) in March 2023 as part of the SSS Renewal Application in May 2023. Also the site submitted an Abatement Plan to the MECP on May 18, 2023 covering TRS, naphthalene and SO₂.

1.2 Environmental Compliance Approval Number 7313-8KEN49 Notice No.1 November 17, 2022

This report is required to be prepared by the Facility's ECA 7313-8KEN49 Notice No 1 Nov 17 2022 Section 7 – Environmental Monitoring Team Subsection 6.

This Report is intended to include the following information with respect to the preceding calendar year (2025):

- i) Documentation of all complaints received by the Company relating to air emissions and the resolution of those complaints.
- ii) A written summary of the actions taken each calendar year to implement the Action Plan for benzene and B(a)P, including a description of each action taken, the date of implementation of each action taken and dates for the implementation of actions yet to be taken; and
- iii) The minutes of the Environmental Monitoring Team (EMT) meetings held during the calendar year and any related follow-up actions.

This Report will be made available for public inspection at the Facility during office hours and on the Rain Carbon website and will also be presented at the next EMT meeting after March 2026.

2.0 ENVIRONMENTAL MANAGEMENT SYSTEM

Rain Carbon is committed to the responsible management of its operations and products to ensure there is no unacceptable risk to employees, the public and the environment. They are committed to comply with all applicable environmental, legal and other requirements, including voluntary measures and air emission and wastewater limits. Rain Carbon is dedicated to pollution prevention by minimizing the environmental impact of their operations and products through spill prevention measures and waste minimisation. They strive to continually improve environmental performance through maintaining an effective Environmental Management System (EMS). Rain Carbon is certified to ISO 14001:2015 Environmental Management System.

2.1 Complaint Response Procedure

- As part of their EMS, Rain Carbon has implemented a complaints response procedure to record and resolve complaints received from the public. One external Complaint in Feb'25 involved black smoke discharge from a process heater. Lasted a few minutes. No impact.

2.2 Abatement Plans for B(a)P, Benzene; Total Reduced Sulphur, Naphthalene and Sulphur Dioxide

An Abatement Plan for B(a)P and benzene was submitted to the MECP on May 20, 2022 and an Abatement Plan covering TRS, naphthalene and SO₂ was submitted to the MECP on May 18, 2023. These Abatement

Plans contain actions Rain Carbon will take to reduce emissions of these substances. Regular updates are provided to the MECP and presented at subsequent EMT meetings.

3.0 Community Engagement

Open and transparent communication with our community is very important to Rain Carbon. Rain Carbon is committed to an open exchange of information with stakeholders. As required by ECA 7313-8KEN49 Notice No 1 Nov 17 2022 , Rain Carbon held various meetings to inform the public and key stakeholders about the steps being taken to reduce emissions and to demonstrate compliance with O. Reg. 419/05. Table 2 summarizes the meetings that have been held in 2025. A copy of the meeting minutes and follow-up actions from the EMT meetings is provided in Appendix B – Environmental Monitoring Team Minutes and Follow-up Actions.

Table 2: Summary of Community Engagement Meetings

Date	Meeting Description	Purpose
February 26, 2025	First EMT Meeting	<ul style="list-style-type: none"> ■ Virtual meeting instructions ■ Approval of meeting minutes ■ Action items from previous EMT meeting ■ Air Quality Monitoring Program ■ LDAR Program ■ Regulatory Updates ■ Next EMT meeting (schedule and location)
May 28, 2025	Second EMT Meeting	<ul style="list-style-type: none"> ■ Virtual meeting instructions ■ Approval of meeting minutes ■ Action items from previous EMT meeting ■ Air Quality Monitoring Program ■ LDAR Program ■ Regulatory Updates ■ Next EMT meeting (schedule and location)
September 17, 2025	Third EMT Meeting	<ul style="list-style-type: none"> ■ Virtual meeting instructions ■ Approval of meeting minutes ■ Action items from previous EMT meeting ■ Air Quality Monitoring Program ■ LDAR Program ■ Regulatory Updates ■ Next EMT meeting (schedule and location)
December 10, 2025	Fourth EMT Meeting	<ul style="list-style-type: none"> ■ Virtual meeting instructions ■ Approval of meeting minutes ■ Action items from previous EMT meeting (n0 actions) ■ Air Quality Monitoring Program ■ LDAR Program ■ Regulatory Updates ■ Next EMT meeting (schedule and location)

4.0 Conclusion

This Report is intended to fulfill MECP reporting requirements for an EMS and Community Engagement Report as outlined in ECA 7313-8KEN49 Notice No 1 Nov 17 2022.

This Written Summary was prepared for the exclusive use of Rain Carbon and is intended to fulfil MECP reporting requirements for a Written Summary as outlined in the above noted ECA. The contents of the Written Summary are based on Facility changes throughout 2025. Any changes in Facility conditions and operational practices completed subsequent to this period are not accounted for. Persons other than Rain Carbon and the previously mentioned Ontario regulatory authorities using this document or the observations, conclusions or recommendations stated within, will do so at their own risk.

Appendix A

2025 Summary of Implemented Process Improvement Actions for Benzo(a)Pyrene and Benzene As Required by Site Specific Standard Approvals for Rain Carbon Canada

In 2025, Rain Carbon continued to implement Process Improvement Actions that were approved in the benzene and B(a)P Action Plans and included in the SSS Approvals

Rain Carbon Activity	Source Type/Pollution Control	Rationale, if available
Storage Tank – Internal inspection	N/A	No emission reduction directly but improves robustness of system
Continuation and extensions of LDAR Program	Fugitive Sources	Reduced emission factors due to improved replacement and repair program
Flange Management program	Fugitive Sources	Reduction of fugitive emissions due to higher quality of flange seal
Substitution of Feedstock with lower Benzene and PAH content.	Petroleum based material like FCC decant oil and PFO	The reduction is based on the improved vapour composition (lower partial pressure of benzene and B(a)P) in the headspace of storage tanks and material handling areas (loading and unloading) as well as the fugitive emission from LDAR and non- LDAR sources.
Substitution of liquid coal tar pitch by granulated (solid) petroleum pitch in big bags	Fugitive Sources	By producing lower PAH solid Petro pitches the loading into railcars and trucks will be substituted by enclosed (emission free) big bag filling, 100% control of emissions.

Emission Reduction Actions 2025

- Installation of piping connections for the new TOx, Enclosed Flare and Desulfurization equipment.
- Completed installation of new low emission valves in Pumphouse 1.
- The Abatement Plan covers many of the emission reduction actions:
 - LDAR Program: Continued to follow the current Site Specific LDAR Program.

- Continued with daily tank PVRV VOC measurements by Operators.
- Replacement of tar/tar distillate tank PVRVs with the new European style units.
- Continued with taking storage tanks out of service for cleaning, inspection and repairs as needed. Tk 5 completed in 2025. Tk 69 started.
- Continued to hold regular meetings with the MECP throughout 2025.
- Held four EMT meetings: Feb, May, Sept, Dec and issued minutes of each meeting.
- Received a new ECA in July 2025
 - Includes a new air emissions monitoring program.
 - Gives Rain the authority to install and commission new emissions reduction equipment (TOx, Enclosed Flare and Desulfurization Unit) and to connect existing air emissions control equipment to the above new equipment (FGI, FSS, MBR exhaust streams).
- Site Specific Standard application ongoing.

Rain Carbon completed three LDAR Leak Surveys in 2025. The results from these surveys are summarized below.

Page 22		LDAR Program 2025 – Summary						
BENZENE								
	Total Number of Components	Measured Components	Inaccessible/Unsafe Components	Leaked Points	Repaired Points	Delay of Repair	Comments	
March 2025	3,694	3,022	1,299	Total of 18	Total of 18	Total of 0	<ul style="list-style-type: none"> LDAR Survey March 10 to 14, 2025 18 LDAR components measured leaking 18 LDAR component repairs completed successfully with fugitive emissions under 250 ppm VOC as of May 13, 2025. 	
July 2025	3,694	3,022	1,299	Total of 30	Total of 0	Total of 0	<ul style="list-style-type: none"> LDAR Survey July 21 to 25, 2025. 30 LDAR components measured leaking 30 LDAR component repairs completed successfully with fugitive emissions under 250 ppm VOC as of November 24, 2025 	
November 2025	3,654	3,022	1,299	Total of 35	Total of 11	Total of 0	<ul style="list-style-type: none"> LDAR Survey November 17 to 21, 2025 35 LDAR components measured leaking 11 LDAR component repairs completed successfully with fugitive emissions under 250 ppm VOC as of December 4, 2025 	

Appendix B

TITLE	Rain Carbon EMT Meeting (February 2025) – Meeting Notes
DATE/TIME	February 26, 2025, at 6:00 pm to 8:00 pm
VENUE	Virtual on Teams
ATTENDEES	
MEMBERS OF PUBLIC	Denis Corr, Hans-Peter Boergers, Kerry Le Clair, Jochen Bezner
MECP	Stephen Burt, Heather Arrell, Tim Hung
RAIN CARBON	Andreas Grunewald, Gord Gilmet, Robin Hart
WSP CANADA INC.	Zachary Oldham

1.0 WELCOME, VIRTUAL MEETING GROUND RULES AND APPROVAL OF PREVIOUS EMT MEETING MINUTES

- Zachary Oldham welcomed everyone to the meeting.
- Zach provided the virtual meeting ground rules.
- Denis noted that the September 2024 & December 2024 meeting notes were circulated on February 19th. There were no objections to the approval of these meeting minutes and the minutes were approved.
- There were no other specific action items from last meeting.

2.0 AIR QUALITY MONITORING PROGRAM

Robin presented locations of on-site monitors

Rain Carbon Benzo(a)pyrene [B(a)P] Monitoring Results for November 2024 – January 2025

- Robin presented the Rain Carbon B(a)P results for November 2024. One measurement above the URT of 0.005 µg/m³ at 0.01750 µg/m³ on November 24th at the New West monitor.
- Robin noted that the exceedance result was likely due to fugitive coal tar pitch emissions being released from a coal tar pitch tank PVRV and the PVRV as replaced in February 2025.
- One “Invalid Sample” on November 26th at the North Monitor.
-
- Robin presented the Rain Carbon B(a)P results for December 2024. All results were below the Measured Level Threshold of 0.0043 µg/m³ and below the URT of 0.005 µg/m³.
- Robin noted that no sample result was available on December 20th at the New West monitor due to BVL laboratory analysis not meeting QA/QC criteria.
-
- Robin presented the Rain Carbon B(a)P results for January 2025. All results were below the Measured Level Threshold of 0.0043 µg/m³ and below the URT of 0.005 µg/m³.
-
- Robin presented the 24-hour B(a)P results for January 2022 to January 2025. Robin noted that they have shortened up the scale to be from January 2022 to January 2025
- Denis noted that this level of detail was easier to see, however this may be due to the meeting being virtual compared to in-person.
-

Robin noted that for the most part, the results are below the major threshold level and URT, with some big exceedances that they have dealt with.

□ Robin presented the graph demonstrating the B(a)P rolling annual average results graph for the five monitors from January 2022 to January 2025. Robin noted that they have removed the URT from this graph to expand the scale of the graphing.

Robin noted that the graph is showing fairly stable numbers, with everything below the URT but above the annual limit.

Rain Carbon Benzene Results for November 2024 – January 2025

□ Robin presented the benzene results for November 2024. Two measurements above the 100 µg/m³ URT

• First exceedance on November 14th at the Old West monitor (138 µg/m³)

• Second exceedance on November 26th at East monitor (903 µg/m³) □ Robin noted that they have investigated this and taken a number of corrective actions

□ The likely causes of these two events was Tank 14 PVRV (PVRVs discussed further on)

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□ Robin presented the benzene results for December 2024. One exceedance and one sampler failure

• Exceedance occurred on December 8th at the East monitor (348 µg/m³) □ Robin noted that they have investigated this and taken corrective action

□ The likely causes of this event was also the Tank 14 PVRV (PVRVs discussed further on)

•

• The sampler failure at the North monitor on December 8th (due to a sample timer issue) was resampled on December 10th, producing a value of 8.88 µg/m³.

• Slide notes that Tank 14 PVRV was replaced with a new standard design PVRV on November 22nd, 2024, which was replaced with a temporary new modified “coal tar pitch” PVRV on December 15th, 2024. Replaced again with a new European design PVRV on January 18th, 2025.

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□ Robin presented the benzene results for January 2025. No exceedances above the 100 µg/m³ URT, one sampler failure at the New West monitor on January 13th (resampled on January 15th producing 0.830 µg/m³)

• Robin noted that the sampler failure was again due to sample timers failing to open, however a program is now in place with canisters ready to go and spare VOC sample timers ready to be utilized for quick resampling if another failure occurs in the future.

•

Rain Carbon Tank 14 PVRV Replacement History November 2024 to January 2025

□ Robin presented the PVRV replacement history for Tank 14 and noted that in November it was understood/observed that the Tank 14 PVRV was not operating properly.

□ Change #1 involved removal of original Tank 14 PVRV and installed a temporary blind flange, rerouting pressure relief route to Tank 25.

□ Change #2 on November 21, blind flange was removed and replaced with traditional design PVRV.

□ Change #3 on December 15, traditional design PVRV replaced with temporary new modified “coal tar pitch” PVRV once it was available.

□ Change #4 proactive decision made to change temporary new modified “coal tar pitch” PVRV with new European design PVRV (occurred on January 18th).

□ Andreas noted that new design is operating well and helping to drive down emissions.

Rain Carbon Benzene 24-hour Results January 2022 to January 2025

□ Robin presented the benzene 24-hour results graph for January 2022 to January 2025, demonstrating the higher monitored numbers from June/July 2024 up to the PVRV Change #4 in January and the lower monitored numbers after the change of PVRV.

□ Jochen asked, “You are switching back and forth between all these iterations of the valves and only the last step being the European valve. Does that mean you did not have the European valves on hand earlier on or did you have other reasons?” Andreas responded that the reasoning provided is correct, they ordered the valves somewhere in the second quarter of last year and they received most of them at the very end of 2024. The one on Tank 14 is the first to be put into effect.

The European design has shown good initial results, and they hope to continue replacing the other PVRVs with these in the future, however recalculation work for each of the tanks is required first.

Jochen followed up asking, "Could you give us a timeline by when you will have completed switching tanks over to the European PVRV?"

Andreas responded that they promised to do this for all the tanks that they have ordered (and received) the new European PVRVs by end of first quarter of this year

Andreas & Robin discussed the photos on the next slides showing the European Design PVRV, showing the separate Pressure Relief and Vacuum Relief valves.

Andreas noted that the price for each device is \$16,000.

Daily average of continuous monitoring results for VOCs show, demonstrating higher values from September to December of 2024 and lower results from end of December to January.

Robin showing STN 29164 Benzene 24-hr results (demonstrating the same trend as noted above).

3.0 AMBIENT AIR QUALITY MONITORING – HAMN AND RAIN CARBON RESULTS AND WIND DIRECTION

Zach presented the locations of the HAMN stations and Rain Carbon stations and reminded everyone about what the wind direction mean in terms of to/from for the upcoming discussion of the potential effects of wind directions and speeds on various monitoring stations around the Rain Carbon site.

- Zach presented a slide showing an aerial view of each of the HAMN monitors and the Rain Carbon monitoring stations. The stations associated with Benzene and BaP were identified on the slide.
 - □ Zach presented a summary slide for B(a)P results and explained the context of the information on the slide Results from the HAMN and Rain Carbon monitoring stations are presented with the associated date and observed wind directions at the Rain Carbon site.
 - Specific rows are highlighted for discussion and explanation of trends relating to potential site contribution to BaP results at the various monitors.
 - □ Zach indicated that highlights of numbers are exceedances of the URT for BaP.
 - □ Zach discussed the trends for the highlighted rows: 19-Jan-2024: Wind direction (from W/SW), exceedance at RC-S monitor, no elevated values at HAMN monitor stations towards E (based on wind) or S (based on exceedance) – not seeing impact from Rain Carbon site
 - 18-May-2024: Wind direction (various – no predominant direction), elevated value at HAMN station 29547 (W of site), compare to RC-W monitor (values in line with non-elevated average) – not seeing impact from Rain Carbon site.
 - 30-May-2024, 11-June-2024: Wind direction (30th: various, 11th: from W), elevated values at RC-W monitor, no elevated values at HAMN monitor station towards W (based on exceedance) or E (based on W direction) – not seeing impact from Rain Carbon site.
 - 05-July-2024: Wind direction (from W), elevated value at RC-W monitor, no elevated values at HAMN monitor station towards W (based on exceedance) or E (based on W direction) – not seeing impact from Rain Carbon site.
 - 22-Aug-2024: Wind direction (from W), elevated value at HAMN station 29547 (N of site), no elevated value at RC-N, unlikely Rain Carbon is producing impact for this elevated value.
 - 09-Oct-2024: Wind direction (from W), elevated value at HAMN station 29547 (N of site), no elevated value at RC-N, unlikely Rain Carbon is producing impact for this elevated value.
 - 14-Nov-2024: Wind direction (from W), elevated value at RC-New W monitor, no elevated value observed at HAMN station towards E (based on wind) or W (based on exceedance value).

Zach asked if there were any questions associated with the BaP analysis, Robin commented that they performed an analysis related to BaP and came to the same conclusion (that the Rain Carbon site was likely not contributing to the elevated values at HAMN stations highlighted on the slide).

- Zach switched back to the aerial overview of the stations to provide visual context regarding the stations that are associated with Benzene and highlighted the set-up regarding the summary slide for Benzene results.
 - Zach discussed the trends for the highlighted rows: 12-April-2024: Wind direction (various), no values above URT, RC-E value approaching URT, somewhat elevated values at 29180 and 29164 monitors. Based on various wind directions, not able to draw a concrete conclusion on site contribution to elevated values
 - 17-July-2024: Wind direction (from E/NE), value above URT at RC-E monitor, elevated value at 29102 station (towards N), unlikely that Rain Carbon is producing impact for this elevated value based on wind direction opposing the elevated value relative to site.
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10-Aug-2024: Wind direction (from W/NW), value above URT at RC-E monitor, elevated value at 29102, same conclusions as July 17th, based on wind direction opposing site relative to elevated station value it is unlikely that the Rain Carbon facility is contributing.

22-Aug-2024: Wind direction (from W/SW), value above URT at RC-E & RC-S monitors, elevated value at 29102 and 20164 stations. Value above URT at RC-E lines up with wind directions, 29164 monitor and 29102 monitors do line-up with wind directions, therefore it is likely that Rain Carbon facility was contributing to the elevated values on this day.

27-Sept-2024: Wind direction (from NW/W), value above URT at RC-S, elevated value at 29667. Do not see elevated values at the HAMN monitors south of facility, and the elevated value at 29667 is North of facility (upwind from Rain Carbon site), therefore it is unlikely that Rain Carbon is contributing to the elevated event.

26-Nov-2024: Wind direction (from W), value above URT at RC-E monitor, elevated value at 29164 (east of site). Given elevated values line-up with wind direction, it is likely that Rain Carbon facility was contributing to the elevated value at the HAMN station.

To highlight complexity of this relationship, the 08-Dec-2024 date shows the same trend but with a different wind direction (from N/E).

Zach indicated that he did not know the reason this value was chosen, his assumption was that it is significantly elevated relative to the annual average and therefore easy to spot as elevated but would confirm with Kate.

Tim indicated that the information is hard to visualize and asked if they would get a copy afterwards.

Gord responded and confirmed that a copy would be distributed afterwards.

Zach indicated that he could do a pop-out of the stations to help visualize in the future.

Tim mentioned that each HAMN station has wind directions and it would be beneficial to show these as well since the winds could be different at the HAMN stations.

Denis suggested sending an excel spreadsheet of the content on the slide so that Tim could work with it.

Andreas indicated that this was fine and Zach would put that together

Robin indicated 50-60 feet high, atop a handrail on the roof of the tank (~6 feet above the top of the tank)

Tim indicated that the information is dependent on the wind direction presented from here

Robin noted that the wind directions were not taken directly from their site, but rather four weather stations from surrounding area. Robin takes the wind roses and creates a composite of the wind directions indicated

Tim indicated a better way to present this would be to show a map and with wind roses from each HAMN station plotted and the results show on the plot; this would declutter and allow better visualization of the results.

4.0 LDAR SURVEYS 2024

- Robin presented an update on the LDAR surveys that took place in 2024.
 - □ LDAR Surveys in 2024 were completed in the following time periods. April 22 to April 26, 2024
 - August 12 to August 16, 2024
 - November 18 to November 22, 2024
 -
 - □ LDAR Surveys in 2025 will be completed in the following time periods. March 10 to March 14, 2025
 - July 21 to July 25, 2025
 - November 17 to November 21, 2025
 - Robin noted that the guidance in the new LDAR plan that has been put together (but not officially issued) will be followed.
 -
 - □ A summary of component totals and leakers for LDAR Surveys in 2024 was presented. April 2024 – 2084 measured, 693 inaccessible/unsafe components, 34 leak points and 34 repaired points.
 - August 2024 – 2391 measured, 959 inaccessible/unsafe components, 37 leak points and 37 repaired points.
 - November 2024 – 2960 measured, 1164 inaccessible/unsafe components, 31 leak points and 31 repaired points.
 -

5.0 REGULATORY UPDATES

- □ LDAR Program Rain developed a detailed leak detection and repair (LDAR) program specific to the Hamilton facility and submitted this to the MECP on Feb 15, 2024.
 - This is being finalized now (comments are finished now), currently following protocol in that program.
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- □ Air Monitoring Program Continuation of comments with MECP towards finalizing new air monitoring program.
- Meeting tomorrow (referring to the date following this meeting) to advance these comments.
-

6.0 2025 EMT MEETINGS

- Date of the next meeting – May 28, 2025
- Rain will attempt to book a venue as soon as possible to hold the meeting in-person and let the EMT Members know of venue options. Bernie Morelli or Stony Creek Community Centre
- Potential topics for next meeting: Air quality monitoring, Ambient Air Quality Monitoring, and Regulatory updates.

TITLE

Rain Carbon EMT Meeting (May 2025) – Meeting Notes

DATE/TIME

May 28, 2025, at 6:00 pm to 8:00 pm

VENUE

Virtual on Teams

ATTENDEES

MEMBERS OF PUBLIC

Denis Corr, Danielle Murphy, Manal Chaudhry, Hans-Peter Boergers
Stephen Burt, Natalie Stacey, Kaela Buck,
Darryl Hagman

MECP

RAIN CARBON

WSP CANADA INC.

Andreas Grunewald, Gord Gilmet, Robin Hart
Zachary Oldham

1.0 WELCOME, VIRTUAL MEETING GROUND RULES AND APPROVAL OF PREVIOUS EMT MEETING MINUTES

- Zachary Oldham welcomed everyone to the meeting.
- Zach provided the virtual meeting ground rules.
- Denis noted that the September 2024 & December 2024 final meeting notes were circulated with the invitation to this meeting and the draft EMT meeting notes for February 2025 were also provided. There were no objections to the approval of these meeting minutes and the minutes were approved.
- There were no other specific action items from last meeting.

2.0 AIR QUALITY MONITORING PROGRAM

Robin presented locations of on-site monitors

Rain Carbon Benzo(a)pyrene [B(a)P] Monitoring Results for February 2025 – April 2025

- □ Robin presented the Rain Carbon B(a)P results for February 2025. All results were below the Measured Level Threshold of $0.0043 \mu\text{g}/\text{m}^3$ and below the URT of $0.005 \mu\text{g}/\text{m}^3$.
- Robin noted that there were issues at BVL on February 18th 2025 monitoring event, where there were elevated detection limits (however still no exceedance).
-

• □ Robin presented the Rain Carbon B(a)P results for March 2025. All results were below the Measured Level Threshold of $0.0043 \mu\text{g}/\text{m}^3$ and below the URT of $0.005 \mu\text{g}/\text{m}^3$.

• Robin noted that there were a number of invalid samples on March 2nd, March 4th, March 14th. BVL was required to make adjustments to their cartridges to allow for appropriate pressure drop. BVL issuing an investigation report on the issue. Additionally monitoring events set-up for March 26th and March 29th.

• □ Robin presented the Rain Carbon B(a)P results for April 2025. All results were below the Measured Level Threshold of $0.0043 \mu\text{g}/\text{m}^3$ and below the URT of $0.005 \mu\text{g}/\text{m}^3$.

• □ Robin presented the 24-hour B(a)P results for January 2022 to January 2025. Robin noted that they have done extensive work in clearing and making sure there is no excavated material on-site.

Robin noted that recent elevated numbers were triggered due to construction activities and have not been reduced due to the efforts at site.

Robin noted that the numbers have been relatively flat but there is a slight increase in latest values.

Andreas noted that it is going up at the right but the numbers being shown previously should make the trend come down. Since November it appears to be increasing.

Andreas noted that the graph does not make sense based on the latest numbers.

Natalie noted that she did not think the colours for some of the lines related to the West and Old West lined up with the legend and numbers.

Denis noted that this needs to be investigated and if there is an underlying error that it should be identified. It does not appear to just be some kind of seasonal effect.

Robin noted that the scale is different from the previous graphs and URT has been removed, however Andreas noted that this should not affect the trend.

Gord noted that Rain Carbon would investigate and identify any issue. Andreas noted that the trend was that they had numbers mostly below detection limit and in compliance.

- Robin presented the graph demonstrating the B(a)P rolling annual average results graph for the five monitors from January 2022 to April 2025.

Rain Carbon Benzene Results for February 2025 – April 2025

- □ Robin presented the benzene results for February 2025. Robin noted that on February 6th they had two sampler failures at the North and Old West monitors where the internal valves failed to open.
- An additional monitoring event was set-up for February 8th to measure at the above noted monitors.
- No exceedances above the 100 µg/m³ URT for any monitor, Robin noted that the numbers were low and that the benefits from the retrofit of the European PVRVs can be attributed to the results.

• □ Robin presented the benzene results for April 2025. One exceedance above the 100 µg/m³ URT on March 26th at East monitor □ Robin noted that the likely cause was a process line leak for line to Tank 6 resulting in a VOC fugitive emission.

- □ Robin noted that this leak was reported to the Ministry Spills Action Centre.
- □ Robin noted that this was also detected at the Pyxis monitor and continuous monitor, and that the wind direction resulted in this occurring at the above noted monitors.

• □ Robin presented the benzene results for April 2025. No exceedances above the 100 µg/m³ URT, one sampler failure at the Old West monitor on January 19th (resampled on April 29th producing 7.36 µg/m³)

- Robin noted that the sampler failure was due to pressure receipt issues.

Rain Carbon Benzene 24-hour Results January 2022 to January 2025

- □ Robin presented the benzene 24-hour results graph for January 2022 to April 2025, demonstrating the higher monitored numbers from June/July 2024 up to the PVRV Change #4 in January and the lower monitored numbers
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after the change of PVRV. Robin noted that there is the exception of the exceedance in April 2025 on March 26th, however this was due to the process line leak where the 312 µg/m³ was recorded.

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- Robin presented the Station 29164 results from April 2022 to April 2025. Robin noted that it has been under the AAQC now
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- Robin presented the annual rolling average for benzene from March 2021 to April 2025. Robin noted that the recent trend in the elevated monitors is downwards but that it will take some time for these numbers to come further down as better results are measured.
-

Rain Carbon Air Quality Monitoring Program (PVRV Updates)

- Robin presented an image of the previous PVRV set-up and generally these PVRVs had poor performance and required extensive work and clean-out.
 - Robin presented images of the new European Design PVRVs. Robin noted that all tanks have now been retrofitted with the new metal to metal PVRVs since the last EMT meeting

Robin noted that these PVRVs have been performing well and identified the features of the PVRVs.

Robin noted that the metal-to-metal contact of the PVRVs helps prevent corrosion and degradation of the PVRVs. Robin presented TVA-2020 VOC measurements for Tank 14 at the Pressure Port and Vacuum Port, where almost all numbers were measured to be 0.00 ppm, with a maximum of 4.00 ppm for both ports respectively.

3.0 AMBIENT AIR QUALITY MONITORING – HAMN AND RAIN CARBON RESULTS AND WIND DIRECTION

Zach presented the locations of the HAMN stations and Rain Carbon stations and reminded everyone about what the wind direction mean in terms of to/from for the upcoming discussion of the potential effects of wind directions and speeds on various monitoring stations around the Rain Carbon site. Additionally, Zach noted what was presented at the previous EMT meeting and the direction from the MECP on providing slides with wind data observations at each of the HAMN stations to provide a better overview of potential influences.

- Zach presented a slide showing an aerial view of each of the HAMN monitors and the Rain Carbon monitoring stations. The stations associated with Benzene and BaP were identified on the slide.
 - Zach noted that a previous comment from the MECP was that the monitors we are comparing to at the Rain Carbon site are non-continuous and that it cannot be directly compared to a specific event. Zach noted that this should be kept in mind and Gord would have a piece on continuous monitoring on a later slide.
 - Zach presented a summary slide for 2024 B(a)P results and explained the context of the information on the slide. Results from the HAMN and Rain Carbon monitoring stations are presented with the associated date and observed wind directions at the Rain Carbon site.
 - Specific data was highlighted for discussion and explanation of trends relating to potential site contribution to BaP results at the various monitors.
 -
 - Zach indicated that highlights of numbers are exceedances of the URT for BaP.
 - Zach provided a summary of the 2025 data that Robin had provided in the previous slides. Zach noted that the 2025 Q1 and Q2 HAMN data B(a)P and Benzene was not available yet so a comparison to monitored results at these stations could not be performed yet.
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 - Zach discussed the trends for some of the highlighted numbers/days with wind rose plots at the HAMN stations.:
 - Zach explained the content of the plot slide and what each of the items represented.
 - Zach also noted that based on a previous comment from the MECP, station 29102 is obscured by trees from winds from the North and especially the Northeast quadrant. 11-June-2024: Elevated value above the URT at West monitor at Rain Carbon site. Northern HAMN stations show wind from the east and southern stations show a more varied mix of directions. HAMN station B(a)P numbers are not significantly elevated above annual average so there does not appear to be any significant contribution from the Rain Carbon site to the numbers at these stations.
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•22-Aug-2024: Elevated value off site at station 29547, north of the Rain Carbon site. Winds are in better agreement at each HAMN station, with winds from the west and some from the northwest. Looking to the north Rain Carbon monitor, it is about 1/3 the value of the station 29547 monitor and wind direction is not conducive to B(a)P travelling from the Rain Carbon site and travelling towards the north, therefore unlikely that Rain Carbon was a main contributor.

Zach asked if there were any questions associated with the BaP analysis (which there were not).

- Zach presented a summary slide for 2024 Benzene results and explained the content of the slide
 - Zach noted that a question from the MECP on the last meeting was about the 4 µg/m³ value chosen as an elevated value. Zach noted that this was an arbitrary value chosen as a clearly elevated value above the annual average at 1.37 to 1.72 µg/m³. A definition of a number a few standard deviations away from the average could be used in the future but the reason for the current value is arbitrary.
 - Zach provided a summary of the 2025 data that Robin had provided in the previous slides and again noted that the 2025 HAMN data for Benzene was not currently available for comparison.
 - Zach explained the content of the plot slides and what each of the items represented. 05-July-2025: Elevated value above URT at South monitor, winds from southern HAMN stations show winds from the east, monitor, monitor to the north shows winds from the northwest (although it is blocked to northeast) and station in the northwest shows winds from the northeast. No significantly elevated value above annual average at any of the HAMN stations for these days
 - 17-July-2024: Wind direction generally from the west for each HAMN station. Elevated value at Rain Carbon east monitor above URT. Somewhat elevated value at south monitor, but not above URT. We do not see an elevated value at Station 29164, however we do see an elevated value at Station 29102 of 4.41 µg/m³. Based on the wind components and the location of elevated values at the Rain Carbon monitors. Robin noted that it is quite a difference between the 29164 and 29102 monitors. Robin wondered if the highway with the proximity may affect these results. Denis noted that there likely is and past measurements along the QEW downwind have impacts out to 400m on busy days. The areas where there are no noise barriers are the worst for this issue. Andreas noted that there may be noise barriers now where 29164 is as this number is not elevated. Zach noted he would investigate Google maps for locations of noise barriers.
- 22-Aug-2024: Similar to the previous plot, elevated Rain Carbon east monitor value and elevated Rain Carbon south monitor value above URT. Wind direction generally from the northwest to west for all stations. Elevated values at stations 29102 and 29164 above 3 µg/m³. Winds from the west/northwest are not very conducive to benzene from the Rain Carbon site travelling north to the above noted stations. The north station at the Rain Carbon site is not elevated.
- 22-Aug-2024: Wind direction (from W/SW), value above URT at RC-E & RC-S monitors, elevated value at 29102 and 20164 stations. Value above URT at RC-E lines up with wind directions, 29164 monitor and 29102 monitors do line-up with wind directions, therefore it is likely that Rain Carbon facility was contributing to the elevated values on this day.
- 15-Sept-2024: Elevated value at Rain Carbon south monitor above URT. Elevated value at Stations 29180 and 29667 of 4.42 and 5.00 µg/m³ respectively (west of facility), elevated value at station 29164 at 4.03 µg/m³. Winds are generally from the east across all HAMN stations. Elevated value in the south monitor and wind direction is not conducive to contribution at the station north of Rain Carbon (29164). No value available at the West monitor (unable to report on this day). Potential for Rain Carbon to have contributed to the elevated values at the two other elevated stations. Andreas noted that it must also be a question if the Rain Carbon south monitor value is due to Rain Carbon processes or if there are other offsite impacts and that Rain Carbon sees offsite impacts that affect these monitors. Andreas noted that future monitoring programs will help to explore this.
- 27-Sept-2025: Elevated value at Rain Carbon south monitor above URT. Elevated value at station 29667 at 6.95 µg/m³ (west of Rain Carbon). Winds are generally from the east across all HAMN stations. Station 29180 is right on the upper range of the annual average at 1.70 µg/m³, however not close to the station 29667 value. There is potential for the winds to align and for Rain Carbon facility to contribute to the elevated event at station 29667. Zach noted again that for future meetings, the idea would be to compare to the 2025 HAMN data. Zach asked if there were any questions and turned the presentation back over to Robin.

4.0 LDAR SURVEYS 2024

- □ Robin presented an update on the LDAR surveys being completed in 2025 The slide noted that March 10 to March 14th survey was completed.
- The July 21 to July 25th schedule is to be completed
- The November 17th to 21st schedule is to be completed.
- Robin noted that during the surveys they will be in compliance with the new LDAR survey protocols, the threshold is 250 ppm VOC and the tested components are in benzene service of 0.5% and greater.
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- □ A summary of component totals and leakers for LDAR Surveys in 2024 was presented. March 2025 – 3022 measured, 1299 inaccessible/unsafe components, 38 leak points and 17 repaired points (one component on delay of repair list).
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5.0 REGULATORY UPDATES

- Gord presented on the regulatory updates
 - □ LDAR Program Rain developed a detailed leak detection and repair (LDAR) program specific to the Hamilton facility and submitted this to the MECP on Feb 15, 2024, which has since been accepted.
 - This LDAR program will be included in the new ECA that is being finalized.
 -
 - □ New Environmental Compliance Approval (ECA) Gord noted that MECP proposed a new ECA which covers a revised air monitoring program. Rain Carbon provided their latest comments to the MECP on the 22nd of May. Gord expects it to be finalized shortly.
 - Gord provided bullets that are a high-level summary of what the permits is going to include:
 - Installation of new emissions control equipment (TOx, flare, desulphurization unit) and connection of existing emissions control systems (FSS, FGI, MBR) to this new equipment.
 - Continue with the properly line monitoring for benzene (every 12 days) and B(a)P (every 6 days), which will be more frequent for B(a)P.
 - Passive property line monitoring for benzene, this is where Rain Carbon would do sampling of air along the property line every two weeks and send samples for analysis.
 - Continuous property line monitoring for benzene, including action levels and notifications, with the continuous monitoring being every 10-minutes.
 - Ambient community continuous monitoring for benzene done at the Windermere Park Basin location, station 29164 (where monitoring has been occurring every 12 days for the last several years).
 -

Public reporting and notifications: Rain Carbon has been in conversation with HAMN, where they will play a role in calibrating and managing the operation of the continuous monitors once they are installed and is also working with Rain on the implementation of a reporting platform for where the public can access what is required to be reported.

Gord noted that these discussions are ongoing at this point in time.

Denis noted that this is big news and that the public will be pleased to see what is going on with the new ECA.

Denis asked if the summary could be sent to the public members of the committee.

Andreas noted that they wait until the ECA is finalized to send out to the committee, Gord confirmed that they should wait for the permit to be finalized.

6.0 2025 EMT MEETINGS

- Date of the next meeting – September 2025
 - Gord noted the difficulty in booking a meeting in-person.
 - Rain will attempt to book a venue as soon as possible to hold the meeting in-person and let the EMT Members know of venue options. Bernie Morelli or Stony Creek Community Centre
 - Multiple dates (and December dates) to be considered for booking. Denis suggested looking at multiple dates as well.
 - For September 3rd, 4th, 11th, 17th, or 18th to be considered for September 2025 meeting.
 - For December 3rd, 4th, 10th, or 11th to be considered for December 2025 meeting.
-

TITLE	Rain Carbon EMT Meeting (September 2025) – Meeting Notes
DATE/TIME	September 17, 2025, at 6:00 pm to 8:00 pm
VENUE	Virtual on Teams
ATTENDEES	
MEMBERS OF PUBLIC	Hans-Peter Boergers, Jochen Bezner, Pascale Marchand, Mahtab, Shardul Tiwari, Navid Noor, Danielle Murphy, Kat Bezner
MECP	Heather Arrell, Natalie Stacey
RAIN CARBON	Andreas Grunewald, Gord Gilmet, Robin Hart
WSP CANADA INC.	Zach Oldham

1.0 WELCOME, VIRTUAL MEETING GROUND RULES AND APPROVAL OF PREVIOUS EMT MEETING MINUTES

- Zachary Oldham welcomed everyone to the meeting.
- Zach provided the virtual meeting ground rules.
- Zach noted that the May 2025 final meeting notes were circulated with the invitation to this meeting. There were no objections to the approval of these meeting minutes, and the minutes were approved.
- There were no other specific action items from last meeting.

2.0 AIR QUALITY MONITORING PROGRAM

Robin presented locations of on-site monitors

Rain Carbon Benzo(a)pyrene [B(a)P] Monitoring Results for April 2025 – July 2025

- □ Robin presented the Rain Carbon B(a)P results for April 2025. All results were below the Measured Level Threshold of 0.0043 µg/m³ and below the URT of 0.005 µg/m³.
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- □ Robin presented the Rain Carbon B(a)P results for May 2025. All results were below the Measured Level Threshold of 0.0043 µg/m³ and below the URT of 0.005 µg/m³.
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- □ Robin presented the Rain Carbon B(a)P results for June 2025. Robin noted that on June 18th, there was an URT exceedance (0.00512 µg/m³) at the Old West monitor, which may have been due to a creosote railcar loading event adjacent to the monitor.
-
- □ Robin presented the Rain Carbon B(a)P results for July 2025. All results were below the Measured Level Threshold of 0.0043 µg/m³ and below the URT of 0.005 µg/m³.
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- □ Robin presented the 24-hour B(a)P results for January 2022 to July 2025. Robin noted that as of 2025, results are mainly below the MLT and URT, likely due to the improvement in Rain Carbon's soil management program, where excavation materials are transferred off-site quickly and contained to prevent monitor exceedances.
-
- □ Robin presented the graph demonstrating the B(a)P rolling annual average results graph for the five monitors from January 2022 to July 2025.

Robin noted that monitors demonstrating high values in the past are now showing decreasing trends, demonstrating an improvement in concentration values.

Rain Carbon Benzene Monitoring Results for April 2025 – July 2025

- □ Robin presented the benzene results for April 2025. Robin noted that on April 7th, the Old West Monitor's sample was within the MECP's acceptable pressure of receipt range, but outside the recommended pressure on receipt range.
-

- Robin noted that on April 19th, the Old West monitor's sample was invalid as the Summa canister pressure on receipt was outside the MECP acceptable range. As a result, the sample was successfully re-run on April 29th.
 -
 - Robin presented the benzene results for May 2025. Robin noted that there were a few samples that were within MECP's acceptable pressure of receipt of range, but outside the recommended range.
 - Robin noted that on May 21st, there were two invalid samples at the North and Old West monitoring stations. The monitors were recalibrated, and new samples were obtained on May 27th for the North monitor and May 31st for the Old West monitor.
 - Robin noted that Rain Carbon is still working on trying to improve the recalibration and restart process in order to avoid invalid samples as much as possible.
 -
 - Robin presented the benzene results for June 2025. Robin noted that there were a few samples that were within MECP's acceptable pressure of receipt of range, but outside the recommended range.
 - Robin noted that on June 18th, there was a sampler failure at the New West monitor, due to the internal valve's failure to open. The sample was successfully re-run on June 20th.
 - Robin noted that on June 6th, the South monitor experienced a value of 100 µg/m³ which is in compliance as the value is equal to but does not exceed MECP's URT of 100 µg/m³.
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 - Robin presented the benzene results for July 2025. Robin noted that there were a few samples that were within MECP's acceptable pressure of receipt of range, but outside the recommended range.
 - Robin noted that on July 12th, there were two invalid samples at the East and North monitoring stations.
 - Robin noted that as the weather becomes warmer, the air density decreases which means the canister pressure becomes too low if the settings are not adjusted. Therefore, it is important for the monitors to be calibrated for the summer months to account for the lower outdoor air density.
 - Robin noted that an additional monitoring day for the North monitor was completed on July 16th and an additional monitoring day was completed for the East monitor on July 19th.
 -
 - Robin presented the benzene 24-hour results graph for January 2022 to July 2025, showing the higher monitored numbers from August-December 2024, and how the PVRV change in January has continued to lower the values in 2025. Andreas noted that there is the exception of the exceedance in March 2025, which was due to the process line leak where the 312 µg/m³ was recorded. The leak has been repaired since, resulting in the values returning to lower levels in the following months.
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 - Robin presented the benzene 24-hour results graph at the East monitor for January 2022 to July 2025. The impact of the leak event in March was likely due to the proximity of the event to the monitor.
 - Robin noted the rest of the numbers are below the URT.
 -
 - Robin presented the benzene 24-hour results graph at the North monitor for January 2022 to July 2025. Robin noted an anomaly that can be seen in July 2025 occurring on an additional monitoring day.
 - Robin noted the rest of the numbers are below the URT.
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 - Robin presented the benzene 24-hour results graph at the Old West monitor for January 2022 to July 2025. Robin noted that since November 2024, a reduction can be observed and numbers have remained significantly below the URT.
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 - Robin presented the benzene 24-hour results graph at the South monitor for January 2022 to July 2025. Robin noted that although the South monitor is usually recognized for having higher values, the values have significantly reduced below the URT since December 2024 as a result of the new PVRV installed on the tanks.
 - Navid highlighted the peak observed in September 2024 and was wondering if this should be a concern for the health of residents in the nearby community. □ Andreas explained that measurements are collected at the fence line on the site, and so concentrations expected near residents located further away are expected to be lower due to dispersion. This is demonstrated by the values measured at the community monitor. Rain Carbon is working to prevent leaks through the installation of new control technologies to avoid potential impacts on the community. Robin re-emphasized the success of the new PVRV devices and how numbers have remained low in 2025.
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⑩□ Robin presented the benzene 24-hour results graph at the New West monitor for January 2022 to July 2025. Robin noted that as seen in past trends, the monitor continues to demonstrate low values below the URT.

⑩
⑩□ Robin presented the station 29164 results from April 2022 to July 2025. Robin noted that the values are mainly below the AAQC since January 2025, except for an exceedance in May/June.

⑩
⑩□ Robin presented the annual rolling average for benzene from January 2022 to July 2025. Robin noted that the recent trend in the elevated monitors continues to move downward.

⑩ Only the North monitor can be seen demonstrating a slight increasing trend, due to the July 2025 anomaly.

⑩
⑩□ Jochen asked if Rain Carbon announces on their website whenever there is an URT exceedance for the public to access. Andreas clarified that when the section 30 report is issued it is also uploaded to their website, found here: <https://www.raincarbon.com/sustainability/information-for-residents>

⑩ Jochen mentioned that the website should have a clearer tab or section to find the EMT notes or that the meeting minutes should be uploaded for public access.

⑩ Gord noted that the reports are now much easier to find through the homepage than previously, and that it may be useful to do a demonstration of how to access the reports from the website during the next EMT meeting.

⑩
⑩□ Danielle asked if the ministry level thresholds (URT) consider the cumulative impact of emissions in the surrounding area. Heather responded that the air standards are set per facility, while there are separate objectives, such as the Ambient Air Quality Criteria (AAQC), which account for the area and are used for the community monitors.

⑩
3.0 AMBIENT AIR QUALITY MONITORING – HAMN AND RAIN CARBON RESULTS AND WIND DIRECTION

□ Zach presented the locations of the HAMN stations and Rain Carbon stations and reminded everyone about what the wind direction means in terms of to/from for the upcoming discussion of the potential effects of wind directions and speeds on various monitoring stations around the Rain Carbon site.

□ Zach presented a slide showing an aerial view of each of the HAMN monitors and the Rain Carbon monitoring stations. The stations associated with Benzene and BaP were identified on the slide.

⑩□ Zach presented summary slides for 2025 B(a)P and Benzene results and explained the context of the information on the slide Results from the HAMN and Rain Carbon monitoring stations are presented with the associated date and observed wind directions at the Rain Carbon site.

⑩ Specific data was highlighted for discussion and explanation of trends relating to potential site contribution to BaP results at the various monitors.

⑩
⑩□ Zach mentioned that the Q1 and Q2 results are now available on the HAMN website under the reporting section.

□ Zach noted that based on a previous comment from the MECP, the HAMN stations with wind speeds under 3.6 km/hr are not necessarily accurate and should be neglected for the sake of this meeting. Zach is looking into potentially removing these values for the next meeting. However, the wind rose plots are obtained directly from Rotek and so access to the raw data would be required to alter or replicate the plots. Post-meeting update: Post-meeting update: Rain Carbon to request Rotek to prepare wind roses excluding winds below 3.6 km/hr

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□ Zach explained the content of the plot slides and what each of the items represented. Appendix A presents the aerial images of the HAMN and Rain Carbon monitoring results.

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4.0 LEAK DETECTION AND REPAIR (LDAR) SURVEYS 2025

•□ Robin presented an update on the LDAR surveys being completed in 2025 The March 10 to March 14 and July 21 to July 25 surveys have been completed.

•The November 17 to 21 schedule is to be completed.

- A summary of component totals and leakers for LDAR Surveys in 2025 was presented. March 2025 – 3022 measured, 1299 inaccessible/unsafe components, 18 leaked points and 18 repaired points (no components on delay of repair list).
- July 2025 – 3022 measured, 1299 inaccessible/unsafe components, 29 leaked points and 16 repaired points (nine components currently in progress and four components on delay of repair list).
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- Robin noted that the new LDAR survey protocols, such as the threshold reduction from 500 to 250 ppm VOC, as well as the benzene concentration threshold decreasing from 1% to 0.5%, has helped to identify leaked points that would not have been identified in the previous system.

5.0 REGULATORY UPDATES – NEW ENVIRONMENTAL COMPLIANCE APPROVAL (ECA)

- Gord presented on the regulatory updates
- Gord noted that Rain Carbon’s new ECA has been in effect since July 4, 2025, and it includes a revised air monitoring program.
 - Gord provided a high-level summary of what the permit approves: **Approval of New Equipment:** Installation of new emissions control equipment (Thermal Oxidizer, Enclosed Flare, Desulphurization Unit) and connection of existing emissions control systems (Fume Scrubbing System, Fume Gathering and Incineration System, Membrane Biological Reactor) to this new equipment.
 - Existing Ambient Air Monitoring:** Continuation of the property line 24-hour monitoring for benzene (every 12 days) and B(a)P, which will be more frequent with an increase to every 6 days. □ Shardul asked to clarify what it means to monitor benzene for 24-hours every 12 days.
 - Gord explained that every 12 days, benzene is measured for a single 24-hour period.
 - Shardul also asked why 12 days are used between benzene measurements.
 - Natalie explained that the 12 days are an established schedule coming from the US EPA and the Canadian Federal National Air Pollution Network which helps establish a non-continuous schedule that is consistent across the industry (e.g., HAMN and ambient air monitoring stations). The length of 12 days was selected as it allows for variation over different days of the week (as opposed to every 14 days), helping to capture process variations, different operational conditions, and meteorological variations at a facility. Similarly, pollutants that need to be measured more frequently adhere to a six-day monitoring schedule (as opposed to 7 days), to account for variations and avoid sampling on the same day each week.
 - Andreas added that the 12 days also follow the frequency of the HAMN station monitoring.
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 - Passive Monitoring:** Implementation of passive property line monitoring for benzene no later than 12 months from ECA issue date. This includes installation of at least six monitoring locations along the property line where benzene concentrations will be continuously measured over a two-week period at each monitor. After 12 months and going forward, the rolling annual average benzene concentration will be recorded at each monitor.
 - Continuous Benzene Monitoring:** no later than 12 months from the ECA issue date. One benzene monitor will be installed on each side of the site (4 total monitors) and would be programmed to immediately alert Rain Carbon and the MECP of an exceedance of benzene of either 90 µg/m³ average over one hour and 30 µg/m³ over 24 hours. The monitors will also collect meteorological data every hour for wind speed, direction and temperature at the site and determine and record the hourly average of such data. Ambient community continuous monitoring for benzene done at the Windermere Basin Park location (station 29164). □ Kat asked why the Windermere Park was selected as opposed to other HAMN stations that are in the community. Natalie responded that it was chosen due to its predominantly downwind location of the site to assess potential impacts from Rain Carbon’s operations compared to other community locations.
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 - Kat asked why other monitoring stations in the community, such as Saint Christopher’s Park and Parkdale, only monitor for PM_{2.5} and PM₁₀. Kat wondered if stations could monitor other chemicals, such as sulphur dioxide, which can be harmful to the community. Natalie mentioned that there is already a continuous benzene monitor in Saint Christopher’s Park and at the Beach Boulevard station, and that the MECP has been in discussion with HAMN about posting the data to the HAMN website. The Parkdale location would not be ideal for continuously monitoring benzene as the monitors are not in an enclosed building and would therefore require infrastructure upgrades. Natalie suggested that Kat reach out to HAMN and/or MECP for more information or to further discuss the monitoring concerns.
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•**Public reporting and notifications:** Rain Carbon will ensure that benzene passive monitoring results are posted on a publicly accessible website(s) as soon as practicable. The calculated hourly benzene averages and meteorological data from the continuous benzene monitors and the ambient community monitor will be available publicly within one hour of after the end of the averaged period. □ Pascale asked for clarification on the meaning of “practicable”. Gord responded that it could take a couple of weeks, depending on the time it takes to send samples to the lab and receive the results.

•Andreas added that most practicable time could be every month when the monthly report is posted publicly, but that this topic is still under discussion.

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•**Continuous Process Monitoring:** Rain Carbon shall continuously monitor, record, retain, and report the following parameters in the undiluted gas leaving the Thermal Oxidizer and Enclosed Flare: sulphur dioxide concentration, carbon monoxide concentration, oxygen concentration, flow rate, and continuous monitoring of temperatures in combustion chambers when in operation. □ Mahtab asked what are the current levels of sulphur dioxide emissions and concentrations that are being monitored by Rain Carbon.

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•Gord clarified that the monitors have not been installed yet, and so no concentrations have been recorded thus far. Once the monitor is installed, it will be able to measure the sulphur dioxide in the exhaust coming from the Thermal Oxidizer and Enclosed Flare units.

•Andreas added that Rain Carbon will also install a desulphurization scrubbing system, which will remove 99% of sulphur from emissions, and so sulphur dioxide emissions are expected to be below the Ontario standards. Rain Carbon hopes to have all the equipment in place to run by beginning of 2026.

•Andreas suggested potentially calculating the difference between the sulphur dioxide emissions before and after the installation of the scrubber to present at the next meeting.

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•**LDAR Program:** Rain Carbon shall continue to implement the LDAR program at the Facility and shall on an annual basis, review and update the existing LDAR program, as needed, to incorporate changes relevant to the facility's operations.

•**LDAR Audit Requirements:** Rain Carbon shall develop a LDAR Audit Plan, which shall describe the investigative procedures used to determine the accuracy and effectiveness of the LDAR program. □ Pascale asked about the new audit requirements for the LDAR program. Heather answered that the first audit needs to be undertaken in 2026, meaning the plan to undertake the audit needs to be developed before then. The audits will be taken every three years following 2026.

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•**Abatement Plan:** Rain Carbon shall implement the Abatement Plan, which shall be updated as necessary or at the direction of the District Manager.

•**Source Testing:** Rain Carbon shall conduct source testing on the Thermal Oxidizer and Enclosed Flare within two months after the Pre-Test Plan has been approved.

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•□ A copy of the permit can be found publicly available on the Environmental Registry of Ontario (ERO) website: <https://ero.ontario.ca/notice/019-9121>

6.0 2025 EMT MEETINGS

- Date of the next meeting – December 2025
 - Gord noted the difficulty in booking a meeting in-person and lack of response from the City.
 - Pascale works for the city and offered to help facilitate the booking process by having Gord email Pascale directly.
 - Rain will attempt to book a venue as soon as possible to hold the meeting in-person and let the EMT Members know of venue options: community centre (Bernie Morelli/Stoney Creek) or a hotel conference room (Centennial Parkway area)
 - Pascale mentioned that the location should be easily accessible by bus.
 - December 3rd or 10th to be considered for December 2025 meeting.
-

TITLE	Rain Carbon EMT Meeting (September 2025) – Meeting Notes
DATE/TIME	December 10, 2025, at 6:00 pm to 8:00 pm
VENUE	In-Person and Virtual on Teams
ATTENDEES	
MEMBERS OF PUBLIC	Hans-Peter Boergers, Jochen Bezner, Pascale Marchand, Shardul Tiwari, Danielle Murphy, Kat Bezner, Denis Corr, Evan, Stacey Currie
MECP	Heather Arrell, Natalie Stacey, Stephen Burt, Darryl Hagman, Tim Hung
RAIN CARBON	Andreas Grunewald, Gord Gilmet, Robin Hart, Matthew Scott-Hansen
WSP CANADA INC.	Zach Oldham

1.0 WELCOME, VIRTUAL MEETING GROUND RULES AND APPROVAL OF PREVIOUS EMT MEETING MINUTES

- Zachary Oldham welcomed everyone to the meeting.
- Zach provided the virtual meeting ground rules.
- Denis noted that the September 2025 final meeting notes were circulated with the invitation to this meeting. There were no objections to the approval of these meeting minutes, and the minutes were approved.
- There were no other specific action items from last meeting.

2.0 AIR QUALITY MONITORING PROGRAM

Robin presented locations of on-site monitors


Rain Carbon Benzo(a)pyrene [B(a)P] Monitoring Results for August 2025 – October 2025

- □ Robin presented the Rain Carbon B(a)P results for August 2025. All results were below the Measured Level Threshold of 0.0043 µg/m³ and below the URT of 0.005 µg/m³.
- Evan asked if the values presented are the two-week average values of the 24-hour concentration at the five different stations
- Robin clarified that these are 24-hour averages taken over a 24-hour period for each respective station.
- □ Robin presented the Rain Carbon B(a)P results for September 2025. All results were below the Measured Level Threshold of 0.0043 µg/m³ and below the URT of 0.005 µg/m³.
- □ Robin presented the Rain Carbon B(a)P results for October 2025. Robin noted that on October 28th, there was an URT exceedance (0.00536 µg/m³) at the New West monitor, and the root cause of this event was not able to be determined with certainty. It is possible that this measurement could have been associated with loading a coal tar pitch trailer at the Spot 7 loading area.
- □ Robin presented the 24-hour B(a)P results for January 2022 to October 2025. Robin noted Rain Carbon received feedback from the MECP on the high value that occurred at the end of January 2024, and the sample is still considered a valid sample.
- Robin noted that most recent values are near or at detection limit for B(a)P

□ Robin presented the graph demonstrating the B(a)P rolling annual average results graph for the five monitors from January 2022 to October 2025. Robin noted that influence of the high value at the end of January 2024 on the rolling average and the decrease related to the North monitor, after this value is no longer included in the rolling average.

Rain Carbon Benzene Monitoring Results for August 2025 – October 2025

- ⑩ □ Robin presented the benzene results for August 2025. Robin noted that on August 17th, there was an invalid sample at the East monitor, which was successfully re-sampled on August 26th.
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- ⑩ Robin noted that on April 17th, there was no sample taken at the North monitor, which was successfully re-sampled on August 20th.
- ⑩ Robin noted that there were a some samples that were within MECP's acceptable pressure of receipt of range, but outside the recommended range.
 - All results were below the URT of 100 µg/m³.
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- ⑩ □ Robin presented the benzene results for September 2025. Robin noted that both sampling days were successful and all results were below the URT of 100 
- ⑩ □ Robin presented the benzene results for October 2025. Robin noted that there issues with the samplers not performing as they should due to an internal sampler timer failure or internal valve leak and Rotek was brought on site to address the samplers.
- ⑩ Invalid samples occurring at the Old West monitor on October 4th, the additional monitoring day October 11th, and the additional monitoring day October 21st, were successfully re-sampled on October 25th.
- ⑩ An invalid sample at the North monitor on October 28th was successfully re-sampled on October 30th.
 - All results were below the URT of 100 µg/m³.
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- □ Robin presented the benzene 24-hour results graph for January 2022 to October 2025. Robin noted that the improvement in values is due to the improvement of the LDAR program, replacement of PVRV, and valves in PH1.
- Robin highlighted the East monitor results to show the improvement since the end of 2024, noting that there was process variation in high April value.
- Pascale asked when you look at November 2024 to May 2025, the North and the South look very low but May 2025 to October 2025, the North and the South seem to have picked up, is there an explanation for that? Robin noted that you get variation in operation and wind direction, as well as some potential sources in the North area, which have since been corrected. Robin noted on the graph for the North monitor that the latest values were low. Andreas also noted that a potential source was TK-69, which has since been taken completely out of service for inspection and recommissioning for next year with the new European style PVRV.
- ⑩ Denis noted that he was surprised at the failure rate of the VOC monitors. Robin responded that what they are finding is that the valve does not open or there is an internal leak. Denis asked if they would replace the current samplers. Andreas noted that Rotek maintains them and that Rotek would come to them if they were to be replaced, but they currently have not. Andreas also noted that next year they would have the continuous online monitoring for benzene and the non-continuous could be decommissioned a year later.
- ⑩ □ Robin presented the station 29164 results from April 2022 to October 2025. Robin noted that the values are mainly below the AAQC since January 2025, except for an exceedance in May/June, with the values below for the recent months.
- ⑩ □ Robin presented the annual rolling average for benzene from January 2022 to July 2025. Robin noted that the trends shown in the graph demonstrate the impact from the recent work in the south berm area, LDAR program, and PH1 is helping to drive numbers down.
- ⑩ Only the North monitor can be seen demonstrating a slight increasing trend, but should come back down again.
- ⑩

3.0 LEAK DETECTION AND REPAIR (LDAR) SURVEYS 2025

□ Robin presented an update on the LDAR surveys that were completed in 2025 The March 10 to March 14, July 21 to July 25, and November 17 to 21 surveys have been completed. Robin explained how an LDAR survey for the Rain Carbon site works.

- ⑩ □ A summary of component totals and leakers for LDAR Surveys in 2025 was presented. March 2025 – 3022 measured, 1299 inaccessible/unsafe components, 18 leaked points and 18 repaired points (no components on delay of repair list).
 - ⑩ July 2025 – 3022 measured, 1299 inaccessible/unsafe components, 30 leaked points and 30 repaired points (no components on delay of repair list).
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November 2025 – 3022 measured, 1299 inaccessible/unsafe components, 35 leaked points and 14 repaired points (no components on delay of repair list, Robin explained that the deadline for the first 14 components was met and for the remainder there is a deadline in mid-January 2026).

Stephen noted that the value of repaired components should be 30 for July 2025 in the slide.

Denis asked if the font could be increased for this slide to improve visibility.

4.0 REGULATORY UPDATES – NEW ENVIRONMENTAL COMPLIANCE APPROVAL (ECA)

- Gord presented on the regulatory updates
 - Gord noted that Rain Carbon's new ECA has been in effect since July 4, 2025, and allows Rain Carbon to install and operate new pollution control equipment, including a thermal oxidizer, enclosed flare, desulfurization unit, two automated railcar loading stations, and the ability to connect existing emissions controls to this new equipment.
 - □ Gord provided details on the continuous process monitoring. Gord noted that Rain Carbon is currently finalizing the Continuous Emissions Monitoring (CEMs) plan for monitoring exhaust concentrations for SO₂, CO, oxygen, as well as the flow rate and temperature of the combustion chamber for the thermal oxidizer and flare.
 - □ Gord presented details on the Environmental Management System & Community Engagement Report 2024. Gord noted the following emission reduction activities in 2024 relating to the Abatement Plan; LDAR program, daily tank PVRV VOC measurements, replacement of tank PVRVs with new European style units, FGI headspace separation, continued taking storage tanks out of service for cleaning, inspection, and repair, constructed two new pitch storage tanks, installed piping connections for the new thermal oxidizer, flare, and desulfurization equipment, and installed new low emission valves in PH1.
 - Gord noted that one external complain on May 31st, 2024 related to the FGI system venting during a vessel being loaded with Carbon Black Oil.
 - Rain Carbon continued to hold regular meetings with the MECP throughout 2024 (and 2025), working to finalize the new ECA, which includes the aforementioned emission reduction equipment as well as the new air emissions monitoring program. The site-specific standard application is still currently ongoing.
 - In February, the MECP set-up a Pyxis benzene monitor on Strathearne Avenue, east of Rain Carbon.
 - Kat asked if the monitors that are continuously measuring would be equipped with a protocol to be viewable to the public on an app. Gord responded that the plan is to get this monitors set-up with the HAMN network and this data would be hosted there.
 - Kat explained that she uses an app called IQAir AirVisual and it has all the HAMN air networks on it for viewing. Andreas asked if alarms could be set in this app and that this would be very handy, which Kat responded that you could.
 - Stephen explained that the ministry has been having discussion with HAMN about expansion of the monitoring network, and that a lot of companies are taking the data from HAMN for free, while HAMN and other companies are paying for the network.
 - Kat explained that this protocol is important for the public as this information becomes easily viewable and accessible, which is not the case with the HAMN network as it is not phone friendly. The apps like AirVisual allow this information to be easily accessible.
 - Denis asked Natalie to comment and also wanted to point out that for the continuous monitoring systems it is important to have a disclaimer that the data has not been validated.
 - Natalie responded that she agreed with Denis's point regarding the disclaimer and that most networks do have this, including HAMN. Natalie noted that it is uncommon for data to need to be corrected but it does happen and issues do come up. Natalie followed up on Stephen's point about sites like IQAir scrapping data from HAMN, noting that HAMN has concerns with other sites scrapping their data and displaying it for free, as this impacts the sustainability of the HAMN network through retaining membership and the associated network fees. Natalie noted that the data sharing and data ownership issue has come up several times over the last few years. If anyone has any questions or comments on ways to improve the data on the HAMN site, to reach out to HAMN or the ministry. The ministry agrees that the public needs this information and for the information to be communicated effectively, sharing this goal with the public.
 - Stephen clarified that he has heard that the HAMN site is no user-friendly, especially from their phone. Kat noted that most people get information from their phones and the focus should be on mobiles first. Stephen followed up to say that for HAMN, a lot of the money is going to monitoring equipment to make sure it is top of the line and the network is expanded, and that there is only so much money in the pot. Stephen noted that the concerns are heard.
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- Kat noted that she wants to be able to see all the data in one place, which she is able to do on the AirVisual app. Stephen reiterated that the goal is always to make sure that the data is as publicly available as possible for all community members but that the systems are not cheap systems to run and getting the right companies at the table to pay for them is a big part of it, so ensuring that everybody who reaps the benefits of this data also pays for fair share as well.
 - Denis noted two points. Firstly, when the industrial monitoring networks were set-up, the data went directly to the ministry. Secondly from an industry point of view, if you want real time alerts, this is done all over Ontario and you can decide who these alerts go to, this has been an established practice.
 - Johan asked if there were any updates on the site-specific application timeline, which Gord deferred to Stephen from the MECP. Stephen responded that the application is currently under review and is being done by the environmental permissions team (not Stephen's team), and that he is not sure what the timeline is. Stephen noted they are bringing in a lot of the data to work towards what the site-specific standard value should be and that we could look to get an environmental permissions rep at one of the EMT meetings, as this has been asked at Dofasco and Stelco meetings. Johan responded that it would be good to get a rep from that team. Heather responded that they are dealing with a moving target with the installation of the additional pollution control units. Stephen noted he would bring this request back to the manager of the environmental permissions group to see if they could get a rep at the next EMT meeting.
- □ Gord continued to present on details regarding the Environmental Management System & Community Engagement Report 2024. Gord noted that there was the installation of the secondary containment in the South Tank Farm, implementation of an Environmental Emergency (E2) Plan, and commissioning of a reverse osmosis unit, which collects and cleans rainwater for use in processes.
- Stephen explained that the E2 regulation is for if you store or keep certain volumes of specific products on the site, then an emergency plan relating to these
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5.0 2026 EMT MEETINGS

- Date of the next meeting – February 2026
- Denis noted that Kat mentioned that the in-person meeting for the December 2025 EMT meeting was difficult to get to for those that live in the neighbourhood of Rain Carbon.
- Pascale noted that Carrie has an in at the football stadium and Denis noted that the first booking attempts could be for the football stadium; if Gord's future attempts to book at the usual venues are met with the same resistance, then he is to reach out to Pascale to get assistance with booking.
- Johan asked if Rain Carbon is still consulting with Stelco and AMD regarding their public meetings. Rain Carbon noted that they are not but since they are not currently overlapping, they would continue with the same schedule.
- Rain will attempt to book a venue as soon as possible to hold the meeting in-person and let the EMT Members know which venue was able to be booked.
- February 25th to be considered for February 2026 meeting.



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