



REPORT

B(a)P Monitoring Quarterly Written Summary Report
Ruetgers Canada Inc.

Submitted to:

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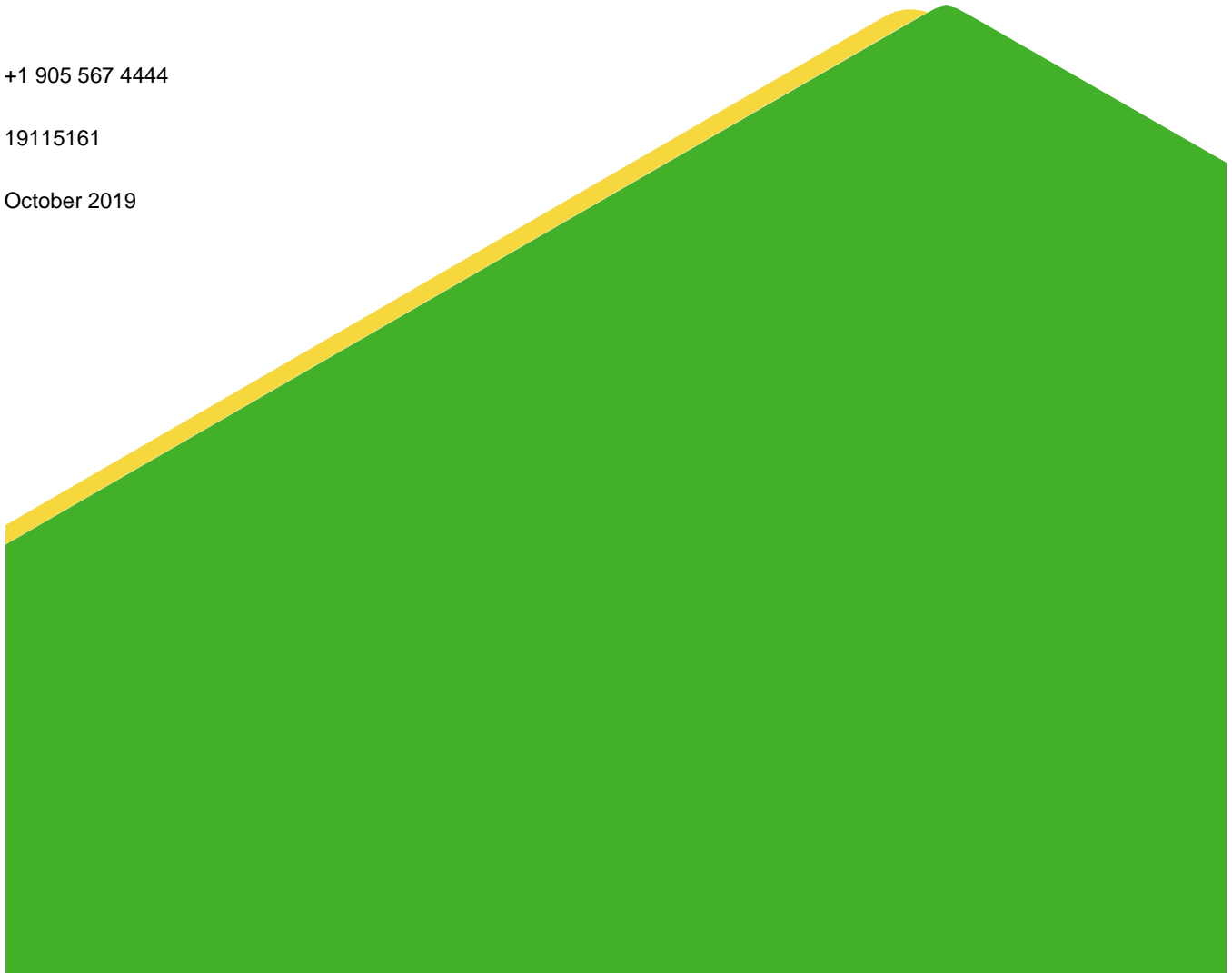
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1.0 INTRODUCTION

Golder Associates Ltd. (Golder) was retained by Ruetgers Canada Inc. (Ruetgers) to prepare quarterly written summary reports of benzo(a)pyrene [B(a)P] ambient monitoring measurements for the coal tar and petroleum material processing plant located at 725 Strathearne Avenue N., Hamilton, Ontario (the Facility). This report summarizes the measurements taken at the Facility during the third quarter of 2019 (July to September) as part of the Ruetgers ambient monitoring program.

The ambient monitoring measurements have been taken in accordance with the April 2018 Monitoring Plan for B(a)P and Benzene (the Plan) approved by the Ontario Ministry of the Environment, Conservation and Parks (MECP) on May 15, 2018. The Plan and monitoring program have been developed as per the conditions of the Site-Specific Standard (SSS) approvals for B(a)P (no. 201-17-rv0) and benzene (no. 202-17-order-rv0) issued to the Facility on November 21, 2017. Please note, Ruetgers submitted a Monitoring Plan Amendment to the MECP on September 10, 2019. Once this Monitoring Plan Amendment is approved, Ruetgers will relocate the North, East and West Monitors.

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 four locations at the Facility. Samples are collected over a 24-hour period. Air quality data acquisition and instrument performance were evaluated by Rotek Environmental Inc. personnel. The laboratory analysis was conducted by Bureau Veritas Laboratoire, which is ISO17025 compliant and accredited. Additional details on the locations of the monitoring stations are provided in the monthly Ambient Air Quality Monitoring Reports (AAMRs) prepared for monitoring events during July to September 2019.

B(a)P measurements from July, August, and September 2019 are summarized in Table 1. Copies of the laboratory analysis reports may be found in the AAMRs for July, August, and September.

Table 1: Summary of July, August, and September B(a)P Measurements

Date	Measured Concentration [$\mu\text{g}/\text{m}^3$]			
	East - Top of Tank-36	North - MCC	West - Tank-77 Platform	South - Berm
July 8-9, 2019	Invalid Sample*	Invalid Sample*	Invalid Sample*	Invalid Sample*
July 20-21, 2019	0.00187	0.00113	Below detection limit**	Below detection limit**
August 1-2, 2019	0.00133	0.00295	0.01060	0.00083
August 13-14, 2019	Below detection limit**	0.00314	0.00253	0.00064
August 25-26, 2019	0.00038	0.00257	0.00244	0.00057
September 6-7, 2019	Below detection limit**	0.00137	0.00463	0.00070
September 18-19, 2019	0.00063	0.00169	0.00069	0.00070
September 30 - October 1, 2019	0.00120	0.00901	0.00252	0.00043

*Collection error

**The detection limit ranges from $<0.00031 \mu\text{g}/\text{m}^3$ to $<0.00037 \mu\text{g}/\text{m}^3$

2.1 B(a)P Measurements Comparison to MECP Thresholds

During the third quarter of 2019, there were two monitoring events that measured B(a)P concentrations above the Upper Risk Threshold of $0.005 \mu\text{g}/\text{m}^3$, namely the August 1-2 and September 30-October 1.

The MECP included a Measured Level threshold in the B(a)P SSS as a trigger to evaluate progress on the B(a)P Action Plan. This level, set by the MECP, is not directly related to the ESDM Report results. There were three measurements above the 0.0043 µg/m³ Measured Level threshold during the third quarter of 2019. This triggered the preparation of reports, as required by the B(a)P SSS. As per Condition 2 of the SSS, Ruetgers prepared two separate reports that included information on the causes of measurements being above the Measured Level threshold and prevention of future occurrences. Ruetgers completed the first phase of an engineering study to assess the effectiveness of all actions completed to date. Ruetgers submitted the Effectiveness Study to the MECP on October 3, 2019.

Please note that Ruetgers submitted an Emission Summary and Dispersion Modelling (ESDM) Report to the MECP Hamilton District Office in May 2019 to reflect the Facility's updated loading data. This ESDM Report (V6.0) also included the new non-operational storage tank (Tank 93) and the venting system in the Tanker Truck Loading area. ESDM Report V6.0 will be revised to incorporate the improvements from the benzene and B(a)P Action Plans.

3.0 CONCLUSIONS

This report summarizes the measurements taken at the Facility during the third quarter of 2019 (July – September) as per the Plan and the conditions of the Site-Specific Standard (SSS) approvals for B(a)P (no. 201-17-rv0) and benzene (no. 202-17-order-rv0) issued to the Facility on November 21, 2017.

During the third quarter of 2019, there were three measurements above the 0.0043 µg/m³ Measured Level threshold. This triggered the preparation of reports, as set out in the B(a)P SSS. As per Condition 2 of the SSS, Ruetgers prepared two reports during the third quarter that included information on the causes and prevention of future measurements being above the Measured Level threshold.

Signature Page

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