Air Quality Monitoring Annual Report

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Crowley Australia Pty Ltd

Project Caymus
April 2, 2024

Air Quality Monitoring Annual Report

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Executive Summary

This report summarises results from the first year of air quality monitoring being undertaken adjacent to the Project Caymus bulk fuel storage facility, which is under construction in the East Arm industrial area near Darwin. Results are summarised for the 12-month periods:

- 8th February 2023 to 7th February 2024; and
- 8th February to 31st December 2023 (and the 2023 calendar year as per National Environmental Pollution Measure (NEPM) reporting requirements.

In future, annual reports will be reported for the calendar year only in accordance with NEPM reporting conventions.

The ambient air quality monitoring program comprised of a single monitoring location located west of the Railway Terminal in the East Arm Industrial area, near Darwin. Monitoring was conducted in accordance with the Annual Air Quality Monitoring Plan (Jacobs, 2023), comprising passive diffusive sampling for a set of hydrocarbons identified during the air quality impact assessment (Jacobs, 2022b).

No measurements of substances exceeded ambient air quality standards during the monitoring period. Data capture was reliable across the program during the reporting period, despite no data for January 2023 due to the program starting in February and a laboratory mishap in October. The data captured was considered sufficiently reliable for the purpose for which it was obtained and used.

The results represent baseline air quality (hydrocarbons) for the project, providing the basis to assess air quality impacts from emissions of these pollutants from the project in future years, once the bulk fuel storage facility is operational.

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1. Introduction

Project Caymus is currently under construction by Crowley Australia Pty Ltd (Crowley) and Crowley's contractors. The 300 ML-capacity Bulk Fuel Storage Facility (BFSF) comprises eleven fuel tanks: four vertical floating-roof tanks for F-35; and seven vertical fixed-roof tanks for F-44 (F-35 and F-44 are military jet fuel types).

On 29th November 2021 the Northern Territory Government approved construction and operation of the BFSF and ancillary infrastructure for the transfer and storage of jet fuel – Environmental Approval Number EP2021/008 – 002. Crowley images showing the fuel farm under construction at East Arm Wharf are provided in Figure 1.

Figure 1-1 Crowley BFSF under construction at East Arm Wharf (Crowley)

Air quality monitoring is required as part of Northern Territory Government (NTG) Environmental Approval EP2021/008 – 002 under Section 65 of the Environment Protection Act 2019 (NTG, 2021). Condition 11 of the approval outlines the requirements in regard to air quality, with condition 11 g) detailing the annual monitoring requirements which are the focus of this report.

Condition 11. Air Quality

The approval holder must ensure there are no attributable impacts from the action on the following environmental outcome:

Protect air quality and minimise emissions and their impacts on the Darwin airshed so that environmental values are maintained.

To demonstrate that the outcome in condition 11 is met, the approval holder must:

g) Undertake annual monitoring for total volatile organic compounds and BTEX at the boundary of the operating premises in accordance with approved air emission monitoring techniques in the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales (EPA 2016), or latest version, to the satisfaction of the CEO. The results from the annual monitoring must be evaluated as part of the Compliance Assessment Reporting process under condition 6.

2. Methodology

The Air Quality Monitoring Plan (Jacobs, 2022) outlines the methodology selection process in relation to the conditions in the Environmental Approval.

Radiello diffusive samplers for volatile organic compound (VOC) with analysis by thermal desorption and GC-MS was the method selected for annual VOC monitoring. A description of the passive samplers and other information is provided by Radiello (2024). Laboratory analysis for this project is sub-contracted to Envirolab Pty Ltd.

2.1 Pollutants

The identification of air pollutants was determined by the Jacobs (2022b) air quality impact assessment. These pollutants were included in the annual monitoring plan with monitoring methodology selected to ensure all identified pollutants could be measured with appropriate analytical sensitivities, and with reference to the NSW Environment Protection Authority (NSW EPA) Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales (NSW EPA, 2022a).

The following pollutants were identified for inclusion in the air quality monitoring program:

- Total volatile organic compounds (TVOC)
- Benzene, toluene, ethylbenzene, and xylenes (BTEX)
- Cumene
- Cyclohexane
- n-hexane.

2.2 Assessment Criteria

The NSW EPA Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (NSW EPA, 2022b), provides air impact criteria (AIC) adopted for this assessment (Jacobs 2022b). NSW EPA (2022b) clearly states, '*Assessment criteria must not be used as limit conditions in environment protection licences. Compliance with assessment criteria (i.e. in the ambient air at the boundary of the premises or nearest sensitive receptor) cannot be readily determined for regulatory purposes. For point sources, a site-specific stack emission limit can be calculated (see Sections 10 and 11.1) so that the assessment criteria will not be exceeded at and beyond the boundary of a premises because of emissions from those sources*'.

The phrase, '*Compliance with assessment criteria (i.e. in the ambient air at the boundary of the premises or nearest sensitive receptor) cannot be readily determined for regulatory purposes*', acknowledges the difficulty in monitoring individual pollutants at the analytical sensitivity necessary and at the temporal resolution adopted in modelling assessments. Therefore, alternative assessment criteria have been identified and adopted to better align with the temporal resolution of monitoring results.

The monitoring results are reported as 2-week average concentrations and are continuously monitored over the year, which means that direct comparisons can be made against annual assessment criteria. Also, comparisons can be made against 24-hr assessment criteria, with reasonable assumptions as outlined in Section 2.4.

Sources of assessment criteria for interpretation of monitoring results have been summarised in Table 2-1. There are three sources referred in the table, the National Environment Protection (Air Toxics) Measure (Air Toxics NEPM) (NEPC 2011) is a national regulatory document and has been adopted as the primary reference for assessing monitoring results. For compounds which are not included in the NEPM or for alternative averaging times, the EPA Victoria Guideline for Assessing and Minimising Air Pollution in Victoria (EPA Vic,

2022), has been used. The Impact Assessment Criteria (AIC) adopted in the impact assessment (Jacobs 2022) have been included for completeness – noting these are hourly criteria and not to be used for regulatory purposes.

The Air Toxics NEPM (NEPC 2011) sets national environment protection goal and monitoring investigation levels for benzene, toluene and xylenes that are applicable to States and Territories. Whilst the air toxics NEPM is not directly applicable to State or Territory air quality assessments, the monitoring investigation levels are routinely referenced when interpreting air quality monitoring data in jurisdictions where there are no established air quality standards applicable to monitoring data. Examples where NEPM air toxics monitoring investigation levels have been applied in such circumstances include: INPEX Annual Environmental Monitoring Report 2019-2020 (INPEX 2020), EPA Victoria Tullamarine Landfill VOC monitoring study (EPC Vic 2012), and West Gate Tunnel Project (Golder 2022).

Relevant air quality objectives for monitored pollutants sourced from the *National Environment Protection (Air Toxics) Measure (2011)* 'Air Toxics NEPM', are presented in Table 2-1. The Air Toxics NEPM criteria limits are presented in units of ppm; however, as diffusion tubes results are reported as a mass concentration, converted criteria limits have also been presented.

The EPA Victoria Guideline for Assessing and Minimising Air Pollution in Victoria (EPA Vic, 2022) published air pollution assessment criteria (APAC) and are intended to "enable an understanding of the current condition of the environment and a basis for assessing actual and potential risks to environmental values". APACs with averaging times of 24 hours of more are included in Table 2-1. The NSW criteria adopted by the impact assessment are included. However, they are not intended for regulatory purposes and are included here for completeness only.

Table 2-1 Air Monitoring Assessment Criteria

Pollutant	Averaging period	NEPM Investigation Level		EPA Victoria APAC		NSW IAC
		ppm	µg/m^3 (25°C, 1 atm)	ppm	µg/m^3 (25°C, 1 atm)	µg/m^3 (25°C, 1 atm)
Benzene	1 hour					29
	24 hours	-	-	0.009	29	
	Annual	0.003	10.5	-	-	
Toluene	1 hour					360*
	24 hours	1	3767	-	-	
	7 days	-	-	0.07	260	
	Annual	0.1	377	-	-	
Ethylbenzene	1 hour					8,000
	24 hours	-	-	5	21,712	
	Annual	-	-	0.06	261	
	1 hour					190*

Pollutant	Averaging period	NEPM Investigation Level		EPA Victoria APAC		NSW IAC
		ppm	µg/m³ (25°C, 1 atm)	ppm	µg/m³ (25°C, 1 atm)	µg/m³ (25°C, 1 atm)
Xylenes (as total of ortho, meta and para isomers)	24 hours	0.25	1085	2	8,685	
	Annual	0.2	868	0.02	100	
Cumene	1 hour					21*
	Annual			0.08	400	
Cyclohexane	1 hour					19,000
	Annual			1.7	6,000	
n-hexane	1 hour					3,200
	Annual			0.2	700	

* Odour based AIC

AIC values published in the NSW guidance (NSW EPA, 2022b) are sourced from EPA Victoria 'State Environment Protection Policy (Air Quality Management)' (SEPP(AQM)) (Victoria Government, 2001), which is no longer enforced in Victoria, having been replaced by an Environmental Reference Standard and supporting documentation including EPA Vic (2022), from which the APAC listed in Table 2-1 are sourced. The odour-based AIC, (based on the SEPP AQM), adopted in the impact assessment are no longer included in any regulatory documentation in Victoria, with all current APAC based on health-based criteria only. Odour assessments in Victoria are now assessed by other methods and no longer include concentration-based criteria for assessment of individual odorous compounds.

2.3 Monitoring Location

The Radiello diffusive sampler was deployed at a location between the facility boundary and the nearest sensory receptor (Darwin Passenger Rail Terminal), as recommended by the AQMP (Jacobs, 2022). Figure 2-1 shows the location of the sampler; approximately 70m from the site boundary, 120m from the nearest tank and 55m from the Darwin Passenger Rail terminal.

Figure 2-1 Diffuse sampler monitoring location

This site was selected for the following reasons:

- The location is easily accessible for sample deployment and collection.
- The location is between the nearest sensitive receptor and the pollutant source.
- The location is far enough away from the sewage pump station that any VOCs it may release (unlikely but possible) will be unlikely to influence results.
- The location is far enough distant from the emission source that the sampling location should be representative of the nearest sensitive receptor location conditions i.e. vertical dispersion of tank roof vent emissions should result in similar exposures at both the monitoring location and the nearest sensitive receptor. (A sample location too close to the tank may result in emissions being missed given the height of the tank vents).

2.4 Frequency and timing

The Radiello sampler was first deployed on the 8th of February 2023, with the sampler exchanged every two weeks thereafter. This report will analyse the sampling over a 12-month period, ending on the 7th of February 2024. The deployment and retrieval dates of the cartridges are shown in **0**.

Laboratory results are reported as an average over the sampler exposure duration, nominally two weeks. When comparing to the project assessment criteria, the following there is a discrepancy between the sampling time and averaging period for the assessment criteria. For annual averages, the average of all

samples over the year was calculated, however for assessment criteria with averaging times less than 2-weeks, a conservative assumption has been made.

The results for longer-term (approximately fortnightly) averages were interpreted as 24-hour or 7-day samples; i.e., the calculations assumed the total VOCs masses collected over two-week periods were collected over a shorter period of 24 hours. This is an overly conservative method of interpretation, however for monitoring results which are low, it provides a simple and conservative interpretation method.

Should results during the operational phase of the project demonstrate that measurements are approaching or exceeding the assessment criteria using this interpretation method. An alternative method of interpretation or modification of the monitoring methodology may be required.

2.5 Deviations from Monitoring Plan

Table 2-2 Deviations from below outlines any deviations from the AAQMP (Jacobs, 2022) which apply to this investigation.

Table 2-2 Deviations from Monitoring Plan

Affected Scope	Deviation from Monitoring Plan	Impact to Investigation
Change of sampling location after the first sampling period.	The sampler was initially located closer to the Darwin Passenger Terminal. However, after the first sampling period, the sampler was relocated 10m closer to the facility boundary due to the identification of a nearby sewage pump station. The low detection limits of the Radiello diffuse sampler meant that the sewage pump station had the potential to interfere with the results, if VOC were present in the sewer.	Relocating the monitoring location has not affected the outcome of the program as it is still located between the facility boundary and the nearest sensitive receptor. Background VOC concentrations would be unaffected by the relocation.
Air quality data not available between 4/10/23 and 1/11/23.	Samples U14V and U615V were misplaced by the laboratory. As a result, there is no data captured between 4/10/23 and 1/11/23.	Due to this error data capture is below 75% during Q4 (Oct - Dec) for all analytes. This is below the NEPM requirement for the calculation of annual average; however, all analyte concentrations are well below the annual criteria making annual exceedance unlikely.
A total of 24 samples were collected over the 12-month period.	In the plan it states that 26 samples will be taken over the 12-month period, however for the below reasons only 24 samples were collected. ▪ Sample U604V and U619V were mistakenly left exposed for 4 weeks instead of 2.	While a maximum exposure period of 2-weeks is recommended in the Radiello manual, extending the exposure to 4-weeks is unlikely to influence the accuracy of the monitoring results.

3. Air Quality Monitoring Summary

Analysis of monitoring results for BTEX, cumene, cyclohexane, hexane and TVOC are presented in the following subsections. The monitoring data are reported against the air quality standards (Table 2-1).

An average concentration i.e., annual average, must include at least 75% valid data for the period being reported. For demonstrating annual compliance, in addition to the 75% annual data availability, at least 75% data per calendar quarter is required to cover possible seasonal effects in pollution behaviour (NEPC, 2001).

The results were assessed against NEPM investigation levels and EPA Victoria APACs as set out in Section 2.2. Where there are assessment criteria from both sources for a particular averaging period, priority has been given to the NEPM investigation levels, as these are enforced nationally.

For assessment criteria with averaging time less than the sampling time, the conservative maximum possible concentration is reported. In the case of 24-hr average assessment criteria, a conservative maximum possible 24-hr concentration was calculated by assuming the sampler was only deployed for 24-hours, rather than the nominal 14-day exposure. This is an overly conservative method of interpretation, however for monitoring results which are low, it provides a simple and conservative interpretation method.

For VOCs results with results below the limits of detection reported by the laboratory, the limit of detection was used as a conservative (high) estimate of the pollutant concentrations.

3.1 Benzene

The project assessment criteria for benzene are the NEPM annual average investigation level and the EPA Victoria 24-hour APAC. The statistical analysis of fortnightly average measured benzene results is summarised in Table 3-1.

Table 3-1 Benzene results summary

Statistic	Assessment Criteria		Averaging Period	Concentration (µg/m^3) (12-month monitoring Period)	Concentration (µg/m^3) (2023 Calendar Year)
	Source	Value (µg/m^3)			
Maximum Sample Result	NA		~14 Days (sampler exposure time)	0.230	0.230
Max 24-hour	EPA Vic	29	24-hour (conservative max)	3.21	3.21
Annual Average	NEPM	10.5	Annual	0.104	0.111

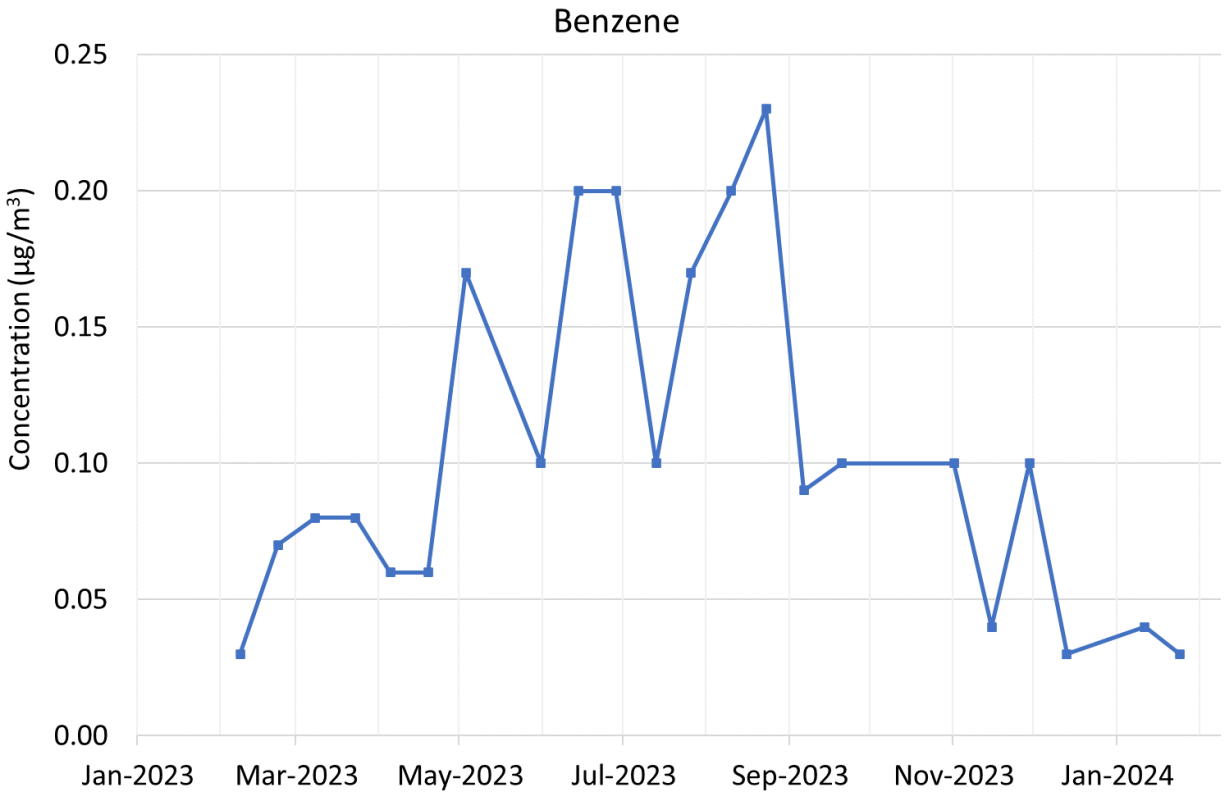


Figure 3-1 Benzene monitoring results

The benzene annual average for the 2023 calendar year was 0.111µg/m^3. The highest fortnightly average was 0.230 µg/m^3 between the 23/08/2023 and 06/09/2023.

3.2 Toluene

The project assessment criteria for toluene are the NEPM annual and 24-hour average investigation levels and the EPA Victoria 7-day APAC. The statistical analysis of fortnightly average measured toluene results is summarised in Table 3-2.

Table 3-2 Toluene results summary

Statistic	Assessment Criteria		Averaging Period	Concentration (µg/m^3) (12-month monitoring Period)	Concentration (µg/m^3) (2023 Calendar Year)
	Source	Value (µg/m^3)			
Maximum Sample Result	NA		~14 Days (sampler exposure time)	1.20	1.20
Max 24-hour	NEPM	3,767	24-hour (conservative max)	16.8	16.8
Max 7-day	EPA Vic	260	7-day (conservative max)	2.4	2.4
Annual Average	NEPM	377	Annual	0.446	0.478

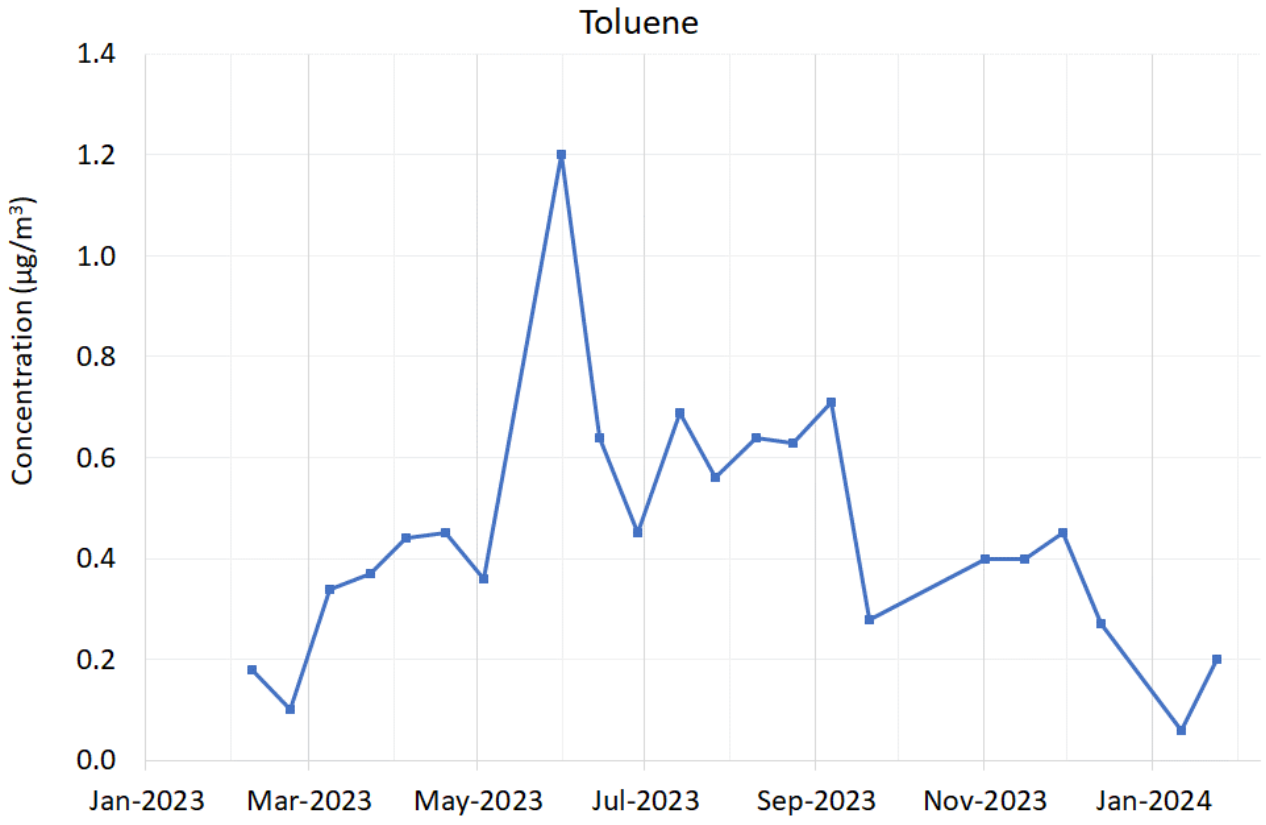


Figure 3-2 Toluene monitoring results

The toluene annual average for the 2023 calendar year was 0.478 µg /m^3. The highest fortnightly average was 1.20 µg/m^3 between the 31/05/2023 and 14/06/2023.

3.3 Ethylbenzene

The project assessment criteria for ethylbenzene is the EPA Victoria annual and 24-hour APAC. The statistical analysis of fortnightly average measured ethylbenzene results is summarised in Table 3-3.

Table 3-3 Ethylbenzene results summary

Statistic	Assessment Criteria		Averaging Period	Concentration (µg/m^3) (12-month monitoring Period)	Concentration (µg/m^3) (2023 Calendar Year)
	Source	Value (µg/m^3)			
Maximum Sample Result	NA		~14 Days (sampler exposure time)	0.620	0.620
Max 24-hour	EPA Vic	21,712	24-hour (conservative max)	8.1	8.1
Annual Average	EPA Vic	261	Annual	0.164	0.177

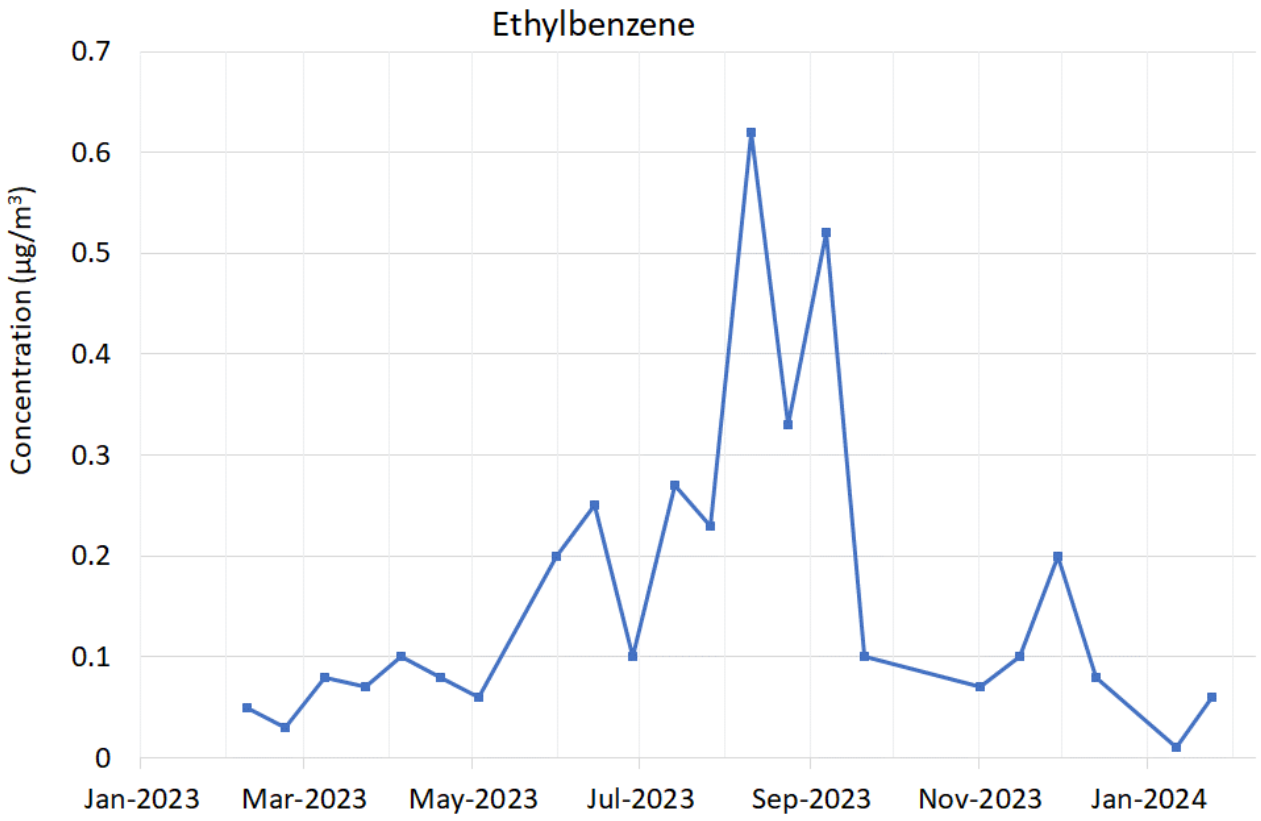


Figure 3-3 Ethylbenzene monitoring results.

The ethylbenzene annual average for the 2023 calendar year was 0.177 µg/m^3. The highest fortnightly average was 0.620 µg/m^3 between the 10/08/2023 and 23/08/2023.

3.4 Xylenes

The project assessment criteria for xylene are the NEPM annual and 24-hour average investigation levels. The statistical analysis of fortnightly average measured xylenes results is summarised in Table 3-4.

Table 3-4 Xylenes results summary.

Statistic	Assessment Criteria		Averaging Period	Concentration (µg/m^3) (12-month monitoring Period)	Concentration (µg/m^3) (2023 Calendar Year)
	Source	Value (µg/m^3)			
Maximum Sample Result	NA		~14 Days (sampler exposure time)	1.70	1.70
Max 24-hour	NEPM	1,085	24-hour (conservative max)	23.9	23.9
Annual Average	NEPM	868	Annual	0.483	0.522

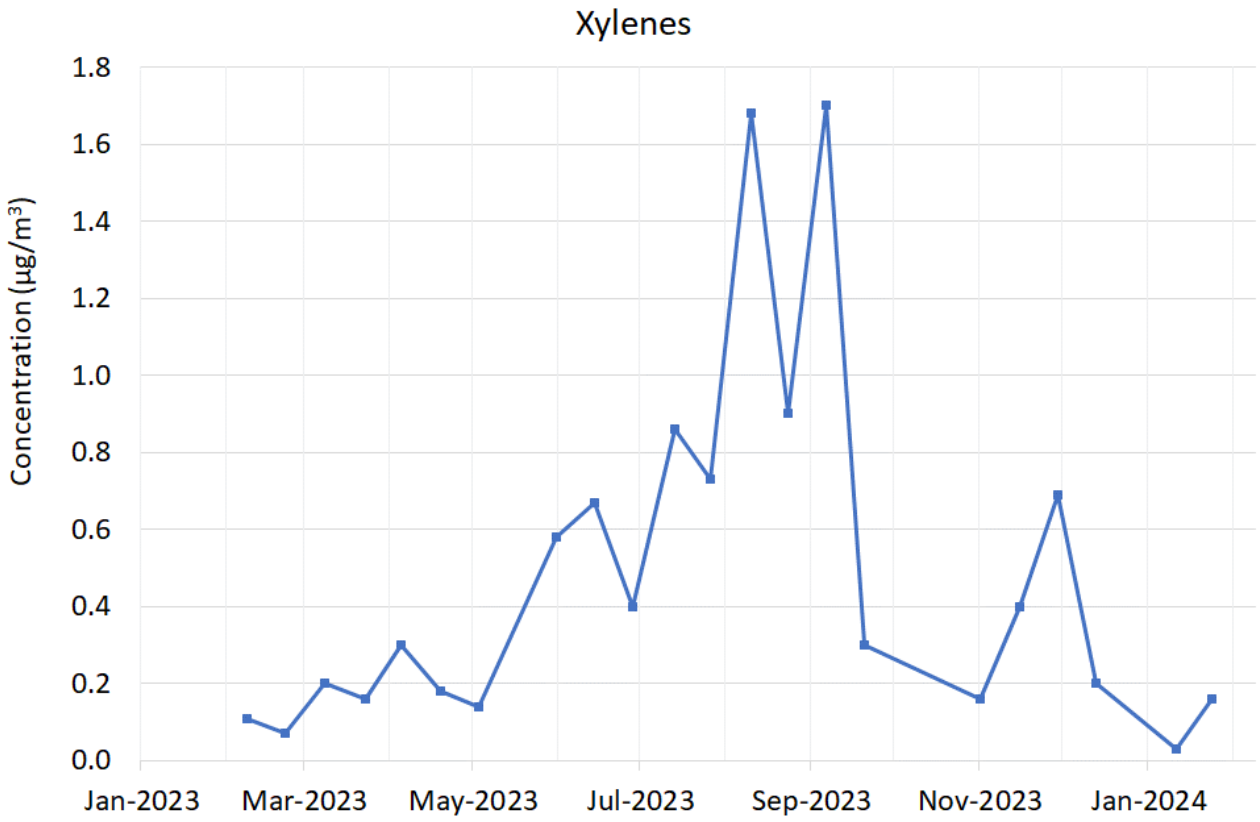


Figure 3-4 Xylenes monitoring results.

The xylenes annual average for the 2023 calendar year was 0.522 µg/m^3. The highest fortnightly average was 1.70 µg/m^3 between the 06/09/2023 and 20/09/2023.

3.5 Cumene (Isopropylbenzene)

The project assessment criteria for cumene is the EPA Victoria annual average APAC. The statistical analysis of fortnightly average measured cumene results is summarised in Table 3-5.

Table 3-5 Cumene results summary

Statistic	Assessment Criteria		Averaging Period	Concentration (µg/m^3) (12-month monitoring Period)	Concentration (µg/m^3) (2023 Calendar Year)
	Source	Value (µg/m^3)			
Maximum Sample Result	NA		~14 Days (sampler exposure time)	0.009	0.009
Max 24-hour	NA		24-hour (conservative max)	0.12	0.12
Annual Average	EPA Vic	400	Annual	0.004	0.004

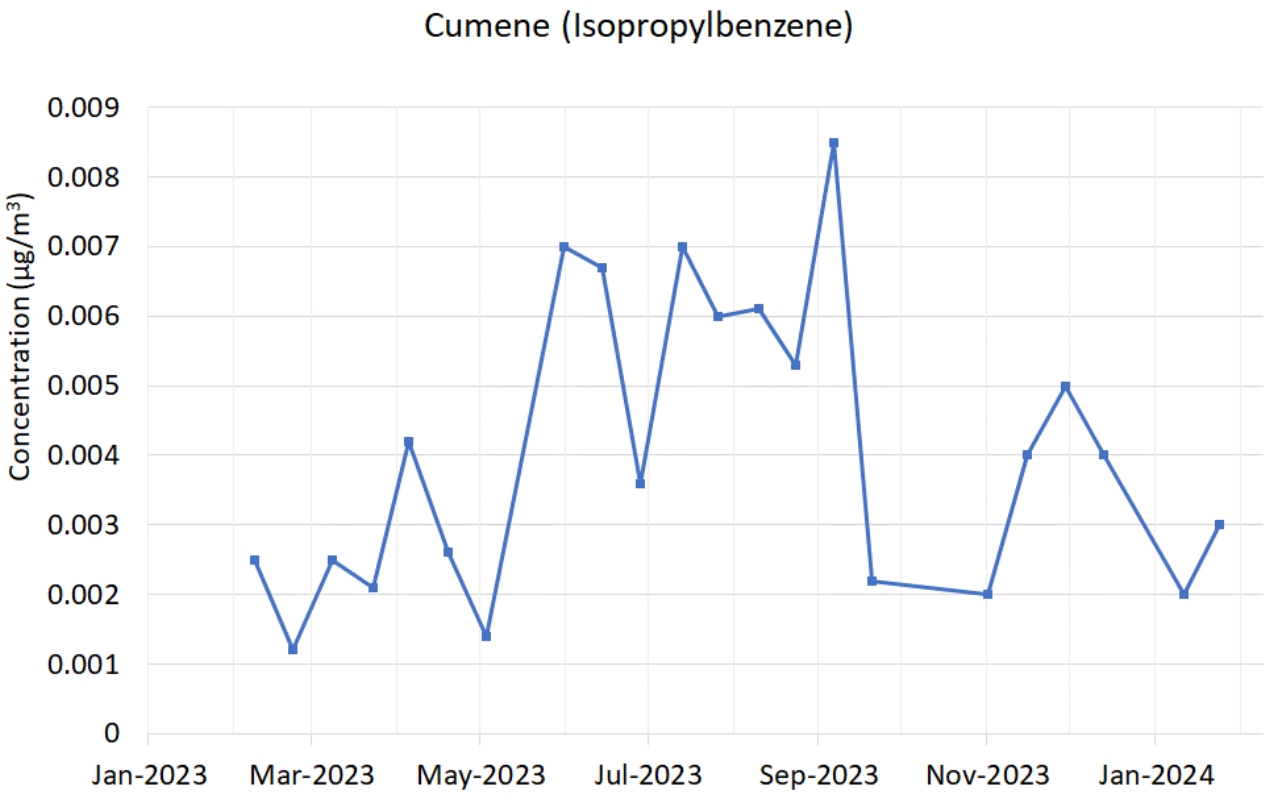


Figure 3-5 Cumene monitoring results.

The cumene annual average for the 2023 calendar year was 0.004 µg/m^3. The highest fortnightly average was 0.009 µg/m^3 between the 06/09/2023 and 20/09/2023.

3.6 Cyclohexane

The project assessment criteria for cyclohexane is the EPA Victoria annual average APAC. The statistical analysis of fortnightly average measured cyclohexane results is summarised in Table 3-6.

Table 3-6 Cyclohexane results summary

Statistic	Assessment Criteria		Averaging Period	Concentration (µg/m^3) (12-month monitoring Period)	Concentration (µg/m^3) (2023 Calendar Year)
	Source	Value (µg/m^3)			
Maximum Sample Result	NA		~14 Days (sampler exposure time)	0.01	0.01
Max 24-hour	NA		24-hour (conservative max)	0.13	0.13
Annual Average	EPA Vic	6,000	Annual	0.002	0.002

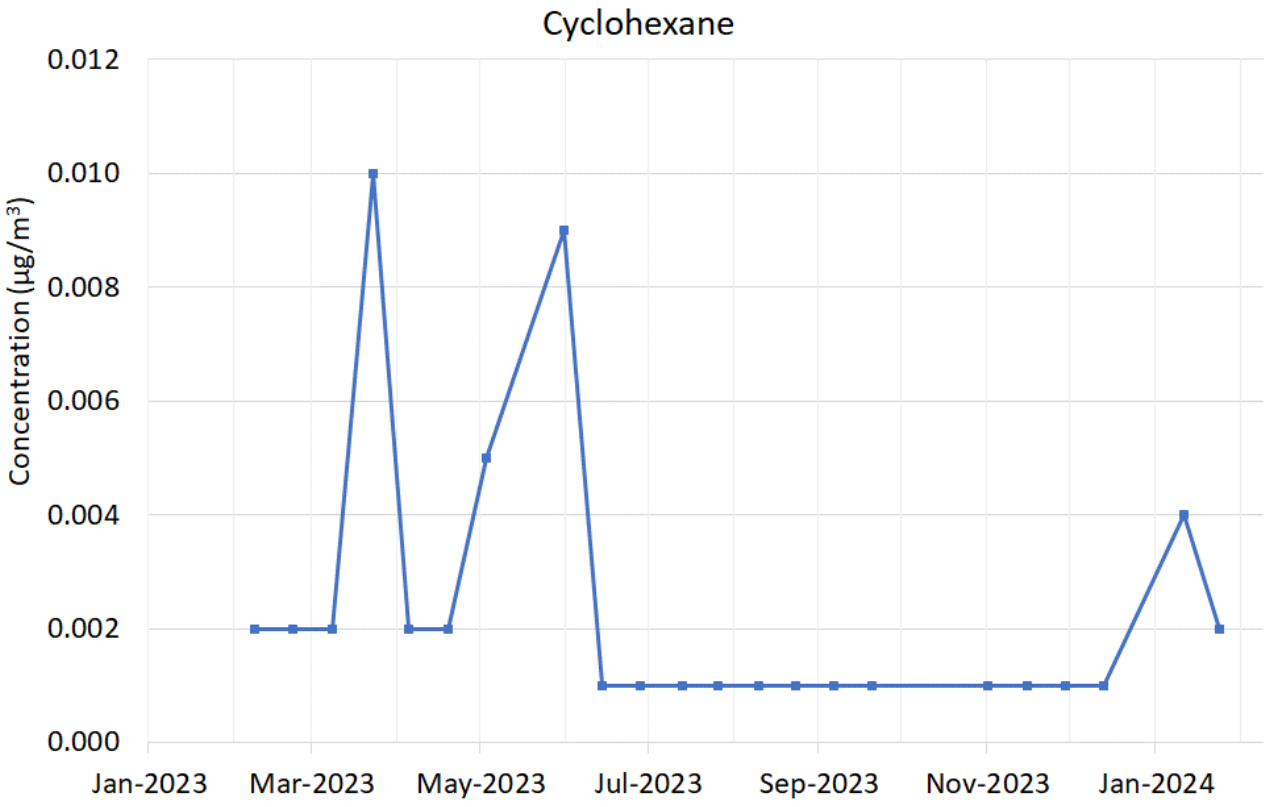


Figure 3-6 Cyclohexane monitoring results.

The cyclohexane annual average for the 2023 calendar year was 0.002 µg/m^3. The highest fortnightly average was 0.010 µg/m^3 between the 23/03/2023 and 05/04/2023.

3.7 N-Hexane

The project assessment criteria for n-hexane is the EPA Victoria annual average APAC. The statistical analysis of fortnightly average measured hexane results is summarised in Table 3-7.

Table 3-7 Hexane results summary

Statistic	Assessment Criteria		Averaging Period	Concentration (µg/m^3) (12-month monitoring Period)	Concentration (µg/m^3) (2023 Calendar Year)
	Source	Value (µg/m^3)			
Maximum Sample Result	NA		~14 Days (sampler exposure time)	0.270	0.270
Max 24-hour	NA		24-hour (conservative max)	3.8	3.8
Annual Average	EPA Vic	700	Annual	0.115	0.124

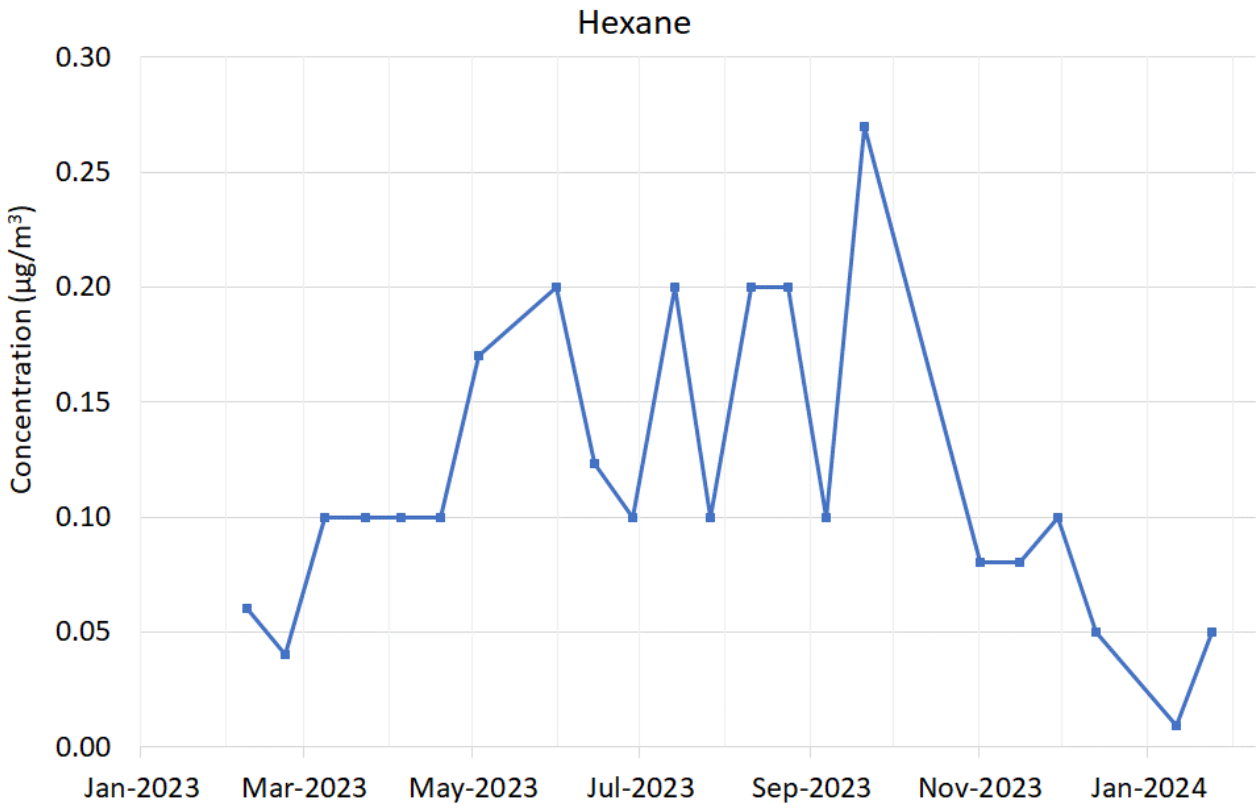


Figure 3-7 N-Hexane monitoring results.

The n-hexane annual average for the 2023 calendar year was 0.124 µg/m^3. The highest fortnightly average was 0.270 µg/m^3 between the 20/09/2023 and 04/10/2023.

3.8 Total Volatile Organic Compounds (TVOC)

There are no assessment criteria for TVOC. The statistical analysis of measured TVOC results is summarised in Table 3-8.

Table 3-8 TVOC results summary

Statistic	Assessment Criteria		Averaging Period	Concentration (µg/m^3) (12-month monitoring Period)	Concentration (µg/m^3) (2023 Calendar Year)
	Source	Value (µg/m^3)			
Maximum Sample Result	NA		~14 Days (sampler exposure time)	10.0	10.0
Max 24-hour	NA		24-hour (conservative max)	140	140
Annual Average	NA		Annual	5.07	5.38

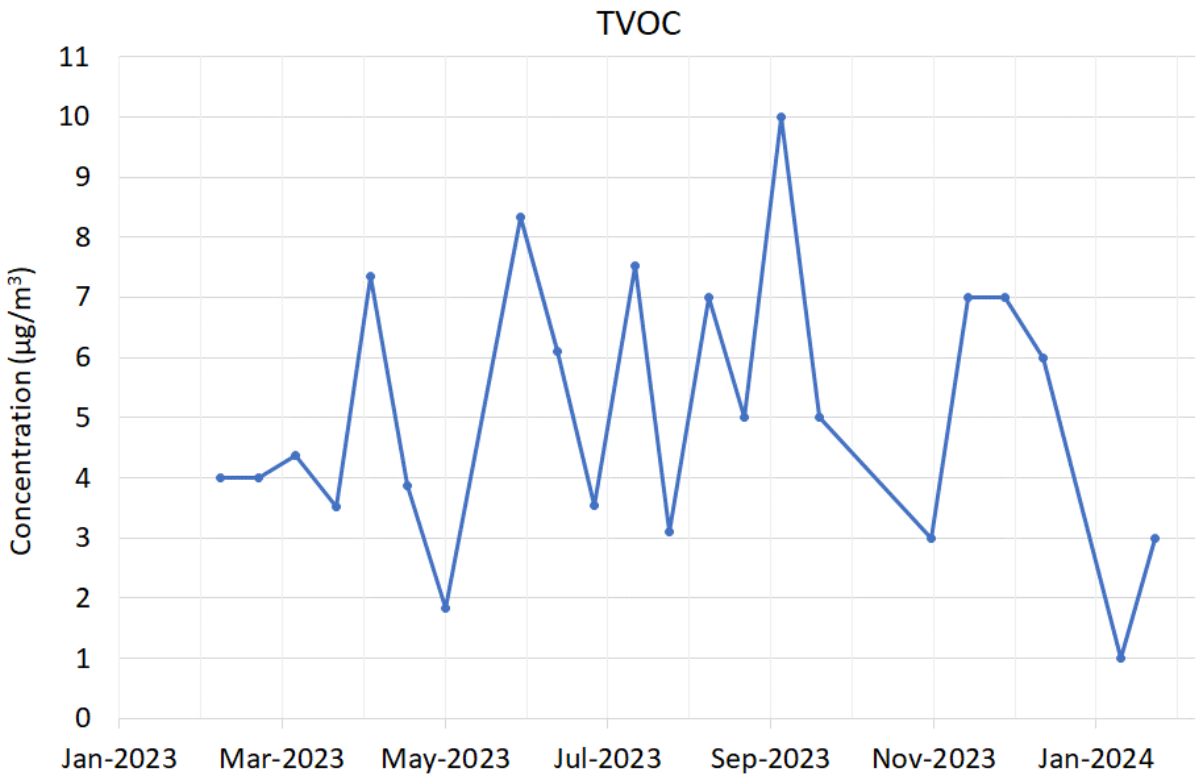


Figure 3-8 TVOC monitoring results.

The TVOC annual average for the 2023 calendar year was 5.38 µg/m^3. The highest fortnightly average was 10.0 µg/m^3 between the 06/09/2023 and 20/09/2023.

4. Measurement Results Summary

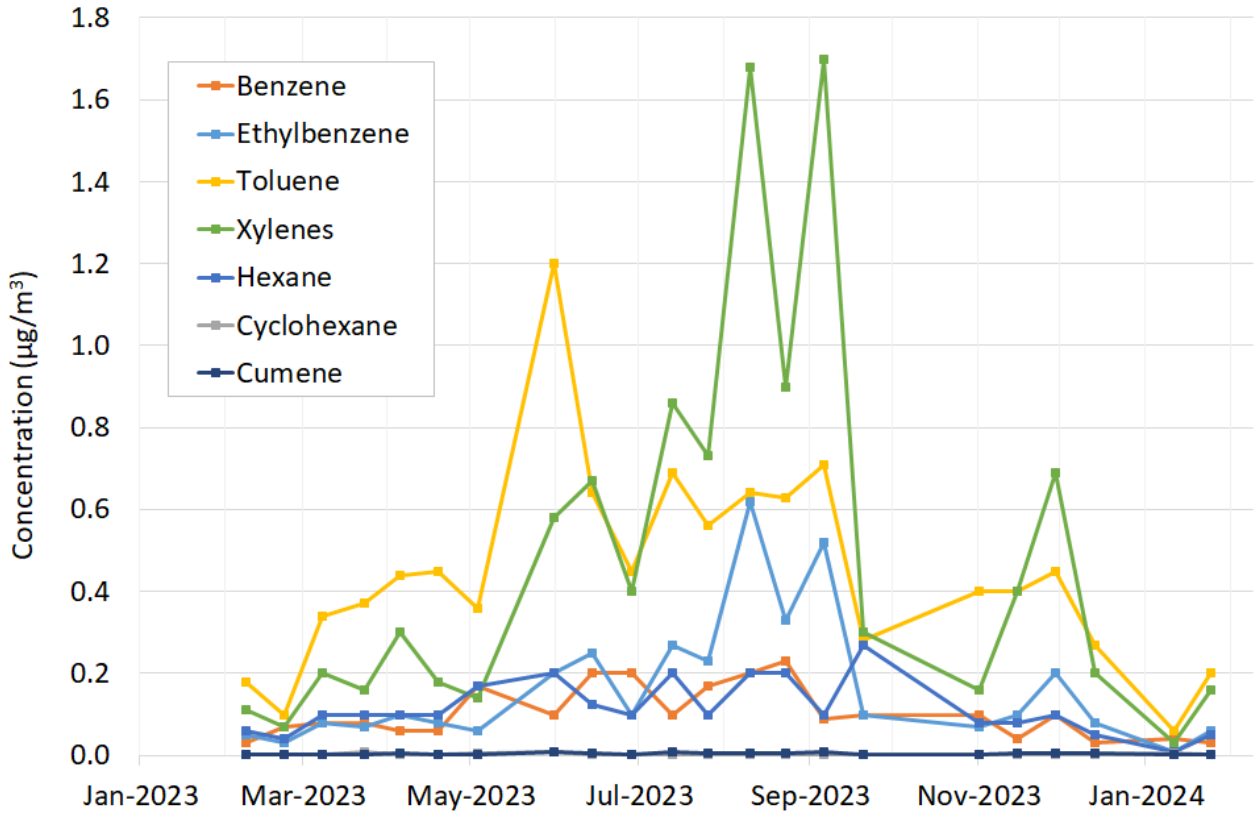
No substances exceeded assessment criteria during the 2023 calendar year, or the 12-month monitoring period.

Data capture in total for the 2023 calendar year was above 75% for all analytes, however in the 4th quarter data capture was below the 75% quarterly requirement in the NEPM guidelines.

- The laboratory misplaced samples in October resulting in data capture below 75% during Q4 (Oct - Dec) for all analytes. This is below the NEPM requirement for calculation of annual average; however, all annual average concentrations are well below the annual assessment criteria and represent >90% of the year, meaning annual exceedance would be highly improbable.

All the sampler measurement results are illustrated in Figure 4-1.

Figure 4-1 Monitoring results – all compounds



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Appendix A. Site photolog

Description	Image
Radiello diffusive sampler – April 2023	
Radiello diffusive sampler – May 2023	

Radiello diffusive sampler – July 2023	
Radiello diffusive sampler – August 2023	

Radiello diffusive sampler – December 2023	
Radiello diffusive sampler – February 2023	

Appendix B. Sampling Dates

Sample ID	Deployment Date	Retrieval Date
U598V	08/02/23	22/02/23
U599V	22/02/23	08/03/23
U600V	8/03/23	23/03/23
U601V	23/03/23	5/04/23
U602V	05/04/23	19/04/23
U603V	19/04/23	3/05/23
U604V[1]	03/05/23	31/05/23
U605V	31/05/23	14/06/23
U606V	14/06/23	28/06/23
U607V	28/06/23	13/07/23
U608V	13/07/23	26/07/23
U609V	26/07/23	10/08/23
U610V	10/08/23	23/08/23
U611V	23/08/23	06/09/23
U612V	6/09/23	20/09/23
U613V	20/09/23	4/10/23
U614V[2]	4/10/23	18/10/23
U615V[2]	18/10/23	1/11/23
U616V	1/11/23	15/11/23
U617V	15/11/23	29/11/23
U618V	29/11/23	13/12/23

[1] Sample U604V and U619V were exposed for 4 weeks.

[2] Samples lost by lab – No data available.

Sample ID	Deployment Date	Retrieval Date
U619V[1]	13/12/23	11/01/23
U620V	11/01/23	24/01/24
U621V	24/01/24	8/02/24

Appendix C. Results Tables

Pollutant / deployment date	Concentration (µg/m^3)									
	8/2/23	22/2/23	8/3/23	23/3/23	5/4/23	19/4/23	3/5/23	31/5/23	14/06/23	28/6/23
Total volatile organic compounds (TVOC) as Toluene	4.0	4.0	4.4	3.5	7.3	3.9	3.7	8.3	6.1	3.54
Benzene	0.03	0.07	0.08	0.08	0.06	0.06	0.17	0.20	0.20	0.20
Toluene	0.18	0.10	0.34	0.37	0.44	0.45	0.36	1.2	0.64	0.45
Ethylbenzene	0.05	0.03	0.08	0.07	0.10	0.08	0.060	0.20	0.25	0.10
Xylenes	0.11	0.07	0.20	0.16	0.30	0.18	0.14	0.58	0.67	0.40
Cumene (Isopropylbenzene)	0.0025	0.0012	0.0025	0.0021	0.0040	0.0030	0.0010	0.0070	0.0067	0.0036
Cyclohexane	<0.002	<0.002	0.002	0.010	<0.002	<0.002	0.005	0.009	<0.001	<0.001
Hexane	0.06	0.04	0.10	0.10	0.10	0.10	0.170	0.20	0.123	0.10

Pollutant / deployment date	Concentration (µg/m^3)									
	13/7/23	26/7/23	10/8/23	23/8/23	6/9/23	20/9/23	4/10/23	18/10/23	1/11/23	15/11/23
Total volatile organic compounds (TVOC) as Toluene	7.52	3.10	7.00	5.00	10.0	5.00	-	-	3.00	7.00
Benzene	0.10	0.17	0.20	0.20	0.09	0.10	-	-	0.1	0.04
Toluene	0.69	0.56	0.64	0.63	0.71	0.28	-	-	0.40	0.40
Ethylbenzene	0.27	0.23	0.62	0.33	0.52	0.10	-	-	0.07	0.10
Xylenes	0.86	0.73	1.68	0.90	1.7	0.30	-	-	0.16	0.40
Cumene (Isopropylbenzene)	0.007	0.006	0.006	0.005	0.009	0.002	-	-	0.002	0.004
Cyclohexane	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	0.001	0.001
Hexane	0.20	0.10	0.20	0.20	0.10	0.27	-	-	0.08	0.08

Pollutant / deployment date	Concentration (µg/m^3)							
	29/11/23	13/12/23	11/01/24	24/01/24				
Total volatile organic compounds (TVOC) as Toluene	7.00	6.00	1.00	3.00				
Benzene	0.10	0.03	0.04	0.03				
Toluene	0.45	0.27	0.06	0.20				
Ethylbenzene	0.20	0.08	0.01	0.06				
Xylenes	0.69	0.20	0.03	0.16				
Cumene (Isopropylbenzene)	0.005	0.004	0.002	0.003				
Cyclohexane	<0.001	<0.001	0.004	0.002				
Hexane	0.10	0.05	0.009	0.05				