

Table of Contents

Mon	nthly Environmental Report		1
Execu	tive Summary		3
Non-	-Compliance Events		7
Defini	itions		8
1.	Introduction		9
1.1.	Background		9
1.2.	Project Delivery		9
1.3.	Reporting Framework		11
1.4.	Monthly Environment Report	: Endorsement	11
2.	Compliance Review		11
2.1.	Relevant Project Works		11
2.2.	Key Environmental Elements		13
2.2	.1. Noise		13
2.2	.2. Vibration		14
2.2	.3. Air Quality		14
2.2	.4. Water Quality		16
2.2	.5. Erosion and Sed	liment Control	19
2.3.	Complaints Management		19
2.4.	New Upcoming Project Works	S	21
2.5	Non-Compliance Events		23
Apper	ndix A RIS Monthly Report	t	25
Annar	ndiv R TSD Monthly Report	.	26



Executive Summary

This Monthly Environmental Report (MER) has been produced for Project Works undertaken on site for January 2024 for the Rail, Integration and Systems (RIS), and Tunnel, Stations and Development (TSD) packages. The report addresses the obligations outlined in the Coordinator-General's change report – *Coordinator-General's change report – no. 13 (March 2022).* Plus, the individual contractor's Construction Environmental Management Plans (CEMPs), which have been developed generally in accordance with the Project's Outline Environmental Management Plan (OEMP). The Cross River Rail Delivery Authority (Delivery Authority), as the Proponent of the Cross River Rail Project, is required to submit a monthly report to the Coordinator-General to demonstrate compliance with the imposed conditions.

Section 1 of this report provides a background to the project and the Coordinator-General's conditions. Section 2 provides a review of the contractor's reports contained in **Appendix A** (RIS Monthly Report) and **Appendix B** (TSD Monthly Report).

The Environmental Monitor (EM) has reviewed and endorsed this MER. This endorsement follows ongoing and new document reviews, and surveillance across the relevant project worksites.

The CEMPs prepared by both Unity Alliance (RIS Contractor) and CBGU JV on behalf of Pulse (TSD Contractor) for their Relevant Project Works were endorsed by the EM and submitted to the Coordinator-General in accordance with Condition 4(a) and 4(b) respectively.

The table below presents a summary of compliance status against each condition with a short comment for each:

Imposed Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
1.	General conditions – compliance with the Project Changes relevant to the contractor's scope	Yes	The CEMP and site management plans are in accordance with the Project Changes.
2.	Outline Environmental Management Plan – timely submission to the Coordinator- General including required sub- plans		OEMP dated June 2020 is effective for the reporting period.
3.	Design – achievement of the Environmental Design Requirements	NA	Ongoing progress with design packages.
4.	4. Construction Environmental Management Plan – all relating to Relevant Project Works.		RIS – CEMP Revision 13 covering full scope of RIS works is effective from 14 March 2022. TSD – CEMP Revision 11 covering full scope of TSD works is effective from 24 November 2022.
5.	Compliance and Incident management – Non-compliance events, notifications and reporting.	Yes	No Non-Compliance Event (NCE) were reported in January 2024.





Imposed Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
6.	Reporting – Monthly and Annual reporting.	Yes	This MER, including RIS and TSD Monthly Reports, has been submitted in accordance with the conditioned requirements.
			Refer to Appendix A and Appendix B.
7.	Environmental Monitor (EM) – engaged and functions resumed.	Yes	Ongoing weekly site inspections and document reviews continue to take place.
8.	Community Relations Monitor (CRM) – engaged and functions resumed	Yes	Ongoing.
9.	Community Engagement Plan – developed and endorsed by Environmental Monitor.	Yes	CEMPs endorsed with Community Engagement Plan.
10.	Hours of work – Project Works undertaken during approved hours.	Yes	Project Works have been undertaken in accordance with project requirements. This has been achieved through Standard Working Hours, Extended work hours and Managed Work.
	Noise – Project Works must aim to achieve internal noise goals for human health and well-being.	Yes	Noise monitoring met project noise requirements at Sensitive Places. RIS – Noise monitoring was not triggered. TSD – Noise monitoring was undertaken to validate predicted noise modelling and to monitor construction impacts at sensitive places. Noise monitoring confirmed project requirements were met. Refer to Appendix B (Table 3 and Section 3.2).
11.	Vibration – Project Works must aim to achieve vibration goals for cosmetic damage, human comfort and sensitive building contents.	Yes	Vibration monitoring met project vibration requirements at Sensitive Places. RIS – Vibration monitoring occurred at the John MacDonald Stand. The contractor confirmed the monitoring results met project requirements. See Appendix A (Section 3.1 and Table 4). TSD – Vibration monitoring occurred at Woolloongabba at the heritage building along Main Street and at a residential building near the Southern Portal. The contractor confirmed the monitoring results met project requirements. See Appendix B (Section 3.1 and Table 2).





Imposed Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
12.	Property damage – relating to ground movement.	Yes	RIS – Vibration modelling has been undertaken for Relevant Project Works, and Property Damage Sub-plans have been developed and implemented. Precondition surveys have been completed at heritage, commercial and residential buildings at RNA, Northern Corridor and Dutton Park to Salisbury stations. TSD – Vibration modelling has been prepared and is ongoing. Where required, building condition survey reports are completed for heritage and residential buildings. One enquiry relating to property damage was received during December 2023. The enquiry was investigated by the TSD contractor, the Delivery Authority and the Environmental Monitor and was determined to be highly unlikely caused by Project Works. Vibration monitoring data demonstrates vibration levels experienced by properties in the area were significantly below the CG Goals.
13.	Air quality – Works must aim to achieve air quality goals for human health and nuisance.	Yes	Air quality monitoring met Project air quality requirements. RIS – Contractor confirmed they continued to meet the requirements under Condition 13 and the OEMP. Refer to Appendix A (Tables 5, 6, 7 and 8 and Section 3.2, plus Figures 1, 2, and 3). Data gaps were experienced at RNA Showgrounds, however, the Contractor confirmed they continued to meet the requirements under Condition 13 and the OEMP. Refer to section 2.2.3 below and Appendix A (Table 6 and Section 3.2.1). TSD – Contractor confirmed they continued to meet the requirements under Condition 13 and the OEMP. Data gaps were experienced at Woolloongabba and Boggo Road, however, the Contractor confirmed they continued to meet the requirements under Condition 13 and the OEMP. Refer to Section 2.2.3 below and Appendix B (Table 4.2.2 and 5 and Section 3.3).





14.	Traffic and transport – Works must minimise adverse impacts on road safety and traffic flow.	Yes	Traffic Management Plans are covered in the CEMPs. Sub-plans for all active worksites have been reviewed by the EM.
15.	Water quality – Works must not discharge groundwater from the construction site above the relevant environmental values and water quality objectives. Monitor and report on water quality in accordance with CEMP and Sub-plans.	Yes	Monitoring and reporting on groundwater and surface water quality was undertaken in accordance with RIS and TSD Water Quality Management Plans. RIS – No groundwater discharges occurred during January 2024. Post rainfall monitoring was triggered as per Condition 15(b). The contractor confirmed the project outcomes were met. Refer to Appendix A (Table 9) for post rainfall monitoring results. TSD – Active discharge of groundwater occurred from Albert Street and Boggo Road. Monitoring results of groundwater quality prior to discharge is consistent with the pre-construction water quality levels. Refer to Appendix B (Table 6) for groundwater monitoring results. Surface water discharges occurred at Northern Portal and Boggo Road. The monitoring results demonstrated surface water discharges met project water quality discharge criteria. Refer to Appendix B (Table 7) for surface water monitoring results. Post rainfall monitoring was triggered as per Condition 15(b). The TSD contractor confirmed the project outcomes were met. Refer to Appendix B (Section 3.5 and Table 8) for further details. Routine surface water monitoring occurred across TSD project sites. Refer to Appendix B (Section 3.5 and Table 8) for further details.
16.	Water resources – Evaluate potential impact, plan works, implement controls and monitor inflow of groundwater associated with drawdown.	Yes	RIS – There is no sustained groundwater extraction involved in the RIS scope of works so predictive modelling of groundwater drawdown is not required. Collection of hydrological data to model potential inflow rates into excavations during construction has been undertaken. TSD – Inflow of groundwater into the worksites is being continuously monitored to validate the predictive modelling.





17.	Surface water – Must be designed to avoid inundation from stormwater due to a 2-year (6hr) ARI rainfall event and flood waters due to a 5-year ARI rainfall event and constructed to avoid afflux or cause the redirection of uncontrolled surface water flows, including stormwater flows, outside of worksites.	Yes	Contractors continue to consider this condition in their site planning and design.
18.	Erosion and sediment control – Provisions for erosion and sediment control must be consistent with the Guidelines for Best Practice Erosion and Sediment Control (International Erosion Control Association, 2008) and the Department of Transport and Main Roads' Technical Standard MRTS52.	Yes	Site specific ESC plans for all active work sites have been reviewed by the EM and implemented on site.
19.	Acid sulfate soils – managed as per the Queensland Acid Sulfate Soil Technical Manual.	Yes	Acid Sulfate Soil Management Plans have been prepared and implemented for all active worksites.
20.	Landscape and open space – general requirement to minimise impacts on landscapes and open space values and specific requirements around Victoria Park.	Yes	The construction of a temporary access road through Victoria Park was undertaken under a Heritage Exemption Certificate approved by the Department of Environment and Science (DES) on 24 July 2021. Consideration has been taken to minimise loss of trees and the area of park impacted during these temporary works.
21.	Worksite rehabilitation – worksites rehabilitated as soon as practicable upon completion of works or commissioning, and in consultation with Brisbane City Council.	N/A	N/A

Non-Compliance Events

There were no NCE raised in January 2024.





Definitions

Acronym	Definition
ARI	Average Recurrence Interval – The average or expected value of the periods between exceedances of a given rainfall total accumulated over a given duration.
CEMP	Construction Environmental Management Plan
CGCR	Coordinator-General's Change Report
CRM	The Community Relations Monitor engaged in accordance with Imposed Condition 8
Contractor	The contractors appointed to design, construct, and commission the Project
Coordinator-General	The corporation sole preserved, continued, and constituted under section 8 of the SDPWO Act.
CRR	Cross River Rail
DESI	Department of Environment, Science and Innovation
EIS	Environmental Impact Statement
EM	The Environmental Monitor engaged in accordance with Imposed Condition 7
ESC	Erosion and sediment control
IECA	International Erosion Control Association
Imposed condition/s	A condition/s imposed by the Coordinator-General under section 54B of the SDPWO Act for the Project
MER	Monthly Environment Report
MRTS52	Transport and Main Roads Specifications MRTS52 Erosion and Sediment Control
NCE	Non-Compliance Event
OEMP	Outline Environmental Management Plan
Project	The Cross River Rail Project
Project Works	As defined in the Imposed Conditions
Proponent	The Cross River Rail Delivery Authority
RfPC	Request for Project Change
RIS	Rail, Integration and Systems
SDPWO Act	State Development and Public Works Organisation Act 1971
Sub-plan	Any sub-plan of the CEMP
The Delivery Authority	The Cross River Rail Delivery Authority
TSD	Tunnel, Stations and Development





1. Introduction

1.1. Background

The Cross River Rail Project (the Project) is a declared coordinated project under the *State Development and Public Works Organisation Act 1971* (SDPWO Act). The CRR Environmental Impact Statement (EIS) was evaluated by the Coordinator-General who recommended the Project proceed, subject to Imposed Conditions and recommendations. Since the evaluation of the EIS, several Requests for Project Change (RfPC) submissions have been evaluated by the Coordinator-General. RfPC 13 was endorsed in March 2022 by the Coordinator-General.

The Coordinator-General has imposed conditions on the Project that apply throughout the design, construction, and commissioning phases. These are referred to as the Imposed Conditions. In addition, the Coordinator-General has approved the Project's OEMP which outlines the environmental management framework for the Project. The OEMP includes environmental outcomes and performance criteria which must be achieved for the Project.

Imposed Conditions 5 and 6 nominate the compliance and reporting requirements for the Project. This monthly report addresses these requirements.

1.2. Project Delivery

The Delivery Authority is responsible for planning and delivering the Project. The Project established environmental management plans and secured some of the secondary environmental approvals in addition to enabling works.

The two main delivery packages which require reporting under the Coordinator-General's imposed conditions are:

- Tunnel, Stations and Development (TSD) being delivered by CBGU JV; and
- Rail, Integration and Systems (RIS) being delivered by Unity Alliance.

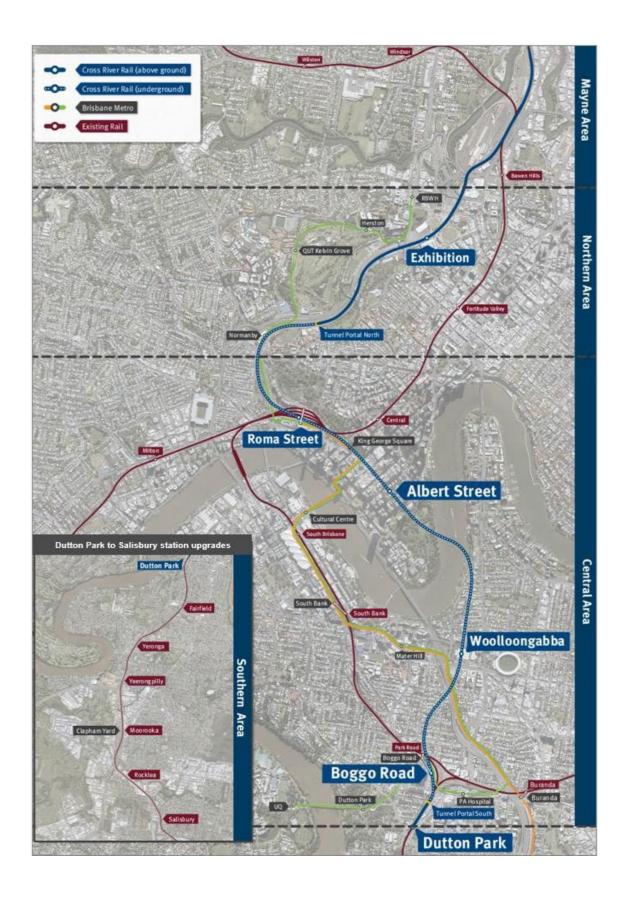
The Project is geographically divided into four areas:

- Mayne Area
- Northern Area
- Central Area: and
- Southern Area.

These areas and delivery packages are shown in the figure below.









1.3. Reporting Framework

This MER has been prepared to comply with Imposed Conditions 6 and 7 of the Coordinator-General Change Report (CGCR) and includes:

- monitoring data and associated interpretation of the results required by the imposed conditions and Construction Environmental Management Plan (CEMP);
- details of any NCEs, including incidents, corrective actions, and preventative actions; and
- details of any complaints, including description, responses, and corrective actions.

Reporting on environmental elements captured in each monthly environmental report, including the annual environmental report, is reviewed and endorsed by the EM.

1.4. Monthly Environment Report Endorsement

This MER has been endorsed by the EM and the endorsement provided to the Coordinator-General.

2. Compliance Review

This MER has been reviewed and endorsed by the EM as per Imposed Condition 7 of the CGCR.

2.1. Relevant Project Works

The following Project Works were undertaken in January 2024:

Area	Project Works
Mayne Area	Mayne Yard North –
	 Schedule 18, Part 1 ALT Notice issued for SP1 on 10-Jan '24; and
	Anticipate achieving Practical Completion of SP1 by 9 Feb 2024.
	Mayne Yard East / West –
	RIS-EXT-24 (Albion formation for Tie-in of CRR Lines) successfully completed;
	RC14 Pier 1 piling also completed;
	Mayne East entry road reconfiguration on schedule with drainage, CSR,
	hydraulics, and bulk earthworks ongoing as planned; and
	Compressor Building construction commenced.
Northern Area	RNA / Exhibition –
	Station works and BR44 viaduct progressing to program;
	BR44 viaduct final FRP on spans and CSR installation outside of parapet;
	Station scope continuing with remaining structural steel installation, roofing,
	services rough-in, ceiling scope on platform, block work, final inground service
	installation and FRP slabs at plaza level; and
	RSS wall 220 commenced.
	Northern Corridor –
	Auxiliary Road Hand-over to Rail Systems Teams. Track installation commenced;
	VP Feeder Station Hand-over to TP&C Team;
	Soil nails between BB Road to Exhibition Station commenced;
	ERS Civil scope completed;
	DRS piling and CSR scope completed;
	 Victoria Park ROS installation ongoing, Energex VPFS pre-commissioning (75% complete);
	Traction Power cabling from VPFS to Roma St installed;
	Traction Power pit earthing and cable supports complete;
	Earthworks completed to SG for CRR-DN alignment (alt freight path) with only
	southern tie-in through Mayne-neck remaining;
	BR08 (3 track bridge over Breakfast Ck) Pier 4 girders installed; pier 1 headstock poured; and
	RIS-N-EXT-24 B2A SCAS successfully completed on 15 Jan 2024.





Central Area

Roma Street -

- Main Station Building escalator installation continues, service lift operational and LV cabling pulling continuing;
- M&E Building services installation and fit-out continues, TVS installation continues and LV sub route cabling ongoing; and
- Cavern PSD header beam installation completed, PSD door installation commenced, ongoing escalator installation and LV cable sub-routes cable pulling.

Albert Street -

- Lot 1 continuing ongoing internal jump form cycle pours and B4 suspended slab formwork installed;
- Lot 2 Ongoing structural steel install in AS1 shaft, PSD support frame install and completed final platform topping slab pour; and
- Lot 3 concrete structure concrete pours nearing completion, continued slab steel fixing and continued M&E fit out install on B4.

Woolloongabba -

- External wall pours continue to progress;
- L0 Station box precast 50% complete;
- Mezzanine spans 5-7 continuing;
- Blockworks continues;
- Sewer install along East/West Road HDPE pipe welding, trenching and install;
- Framing for architectural void in Southern cavern 80% complete; and
- M&E building services ongoing in South Cavern Back of House and platform culverts; B6 platform electrical earthing is ongoing.

Tunnel fit-out -

- Fit out work ongoing in B2G, G2A, A2R and R2NP in MC01 and MC02;
- Southern Portal M&E activities are ongoing;
- Northern Portal termination of electrical and sump works; and
- Ongoing M&E fit-out works in the cross passages.

Boggo Road -

- Concrete to insitu structure ongoing;
- Reinforcement to insitu structure ongoing;
- Buttress plank 29 of 34 installed;
- Deck units install 82 of 119 complete;
- HV Room 1 commissioning continues;
- M&E fit-out continuing in northern and southern Back of House; and
- Platform screen door steel installation ongoing.

Southern Portal -

- Continue FRP works to Eastern and Western Approach Bridges substructures;
- Post frames and screens install ongoing;
- Relieving slab works ongoing;
- MC01 and MC02 in-situ ski jump FRP ongoing; and
- Shaft 3 finishes and repair ongoing.

Southern Area

Southern / Dutton Park -

- Progressed work on PL1, PL2, Kent Street entry, and Noble Street entry.
 Predominantly inground services, platform slabs, blockwork, piling, structural concrete, structural steel, building and soffit framing, cable rough-in, and roofing;
- Continued fit out of overpass modules, stair 2 installed;
- Progressed work external to the station including drainage CSR / TFR progress throughout the corridor; and
- Completed Transition to Operations stage RIS-S-11A (Up Sub onto final alignment & install portal turnout).

Fairfield station -

- Minor defect rectification and close-out; and
- Completed high level design solutions for end of platform egress lighting issues and platform lighting control.

Yeronga station -

• Progressed remaining minor defect / punch list items.





Yeerongpilly station -

- Platform 1: Progressed installation of Northern half of the platform including installation of low-level services, drainage, earthworks, and structural foundations; and
- Platform 2/3: Progressed lower-level services, bulk backfill, conduits installation, and structural foundations.

Clapham Yard -

- Murial Avenue Bridge: Maintenance Access Walkway installation continues;
- Open V-drains commenced;
- Bridge BR94 (Chale Street) completed;
- Completed critical OHLE foundations; and
- Electrical / Comms Installation.

Rocklea station -

- Continued installation of lifts:
- Delivery and installation of switchboards and distribution boards;
- Installation of platform canopy soffit framing and cable rough-in;
- Installation of bicycle shelter roofing and screening;
- Internal and external framing and lining of station buildings; and
- Brookes Street roadworks, paths, kerbing etc.

Salisbury -

• Early works undertaken during December '23 / January '24 SCAS including preliminary earthworks for the new platform 3 and 2 drainage UTX crossings.

2.2. Key Environmental Elements

2.2.1. Noise

The Coordinator-General's conditions establish a framework for managing the impacts of noise. The Imposed Conditions do not establish noise limits. Compliance with the Imposed Conditions noise requirements involves demonstrating the implementation of the endorsed CEMP and associated Noise and Vibration Management Plan. This establishes the management measures to be applied which aims to achieve the identified noise goals as far as reasonably practicable. The CEMP also includes requirements for the provision of the required community notifications of upcoming work, potential impacts, and how the project team can be contacted in relation to any potential impacts.

For Project Works where potential noise impacts are modelled to be above the noise goal but below the noise goal plus 20dBA, this work is authorised where the endorsed CEMP and associated Noise and Vibration Management Plan is being implemented, including communicating construction activities to potential and actual Directly Affected Persons (DAPs). For Project Works where potential noise impacts are predicted to be more than 20dBA above the relevant noise goal, specific engagement is required with DAPs for these works.

Where internal monitoring was not possible, contractors have undertaken external monitoring at nominated locations. To assess external monitoring and determine compliance with the project's noise requirements, the project applies recommended façade attenuation corrections, which considers receiver property type.

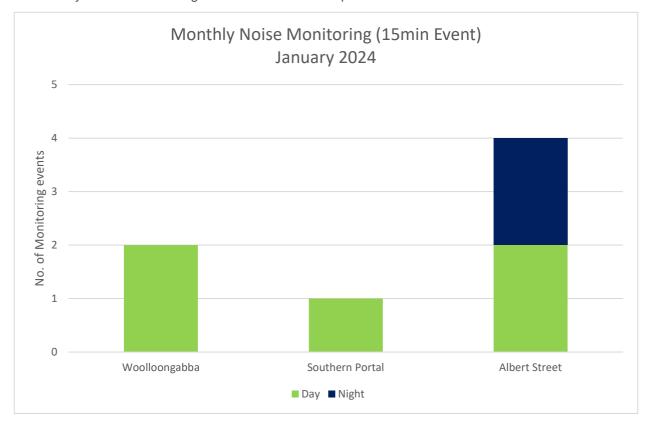
In the Central Area, noise monitoring was undertaken for model verification and to monitor construction impacts at sensitive places at Albert Street, Woolloongabba and Southern Portal. The TSD contractors reported that the project noise requirements have been met during this reporting month. Monitoring results for the Central Area are detailed in **Appendix B** (Table 3).

For all other areas, no noise monitoring sessions occurred during the reporting period. All works including the Out of Hours works that were undertaken during SCAS works have been previously assessed and were deemed consistent with previous monitoring undertaken for the project across the relevant locations undertaking the SCAS works.





A summary of noise monitoring events for the month is provided in the chart below.



2.2.2. Vibration

In the Northern Area, vibration monitoring occurred at the State heritage listed John MacDonald Stand located in proximity to the Exhibition station worksite. The RIS contractor reported the vibration requirements have been met, monitoring results are detailed in **Appendix A** (Table 4).

In the Central area, vibration monitoring occurred at the Heritage building on Main Street adjacent to the Woolloongabba worksite and at a residential property located on Railway Terrace near the Southern Portal worksite. The TSD contractor reported the vibration requirements have been met, monitoring results are detailed in **Appendix B** (Table 2).

For the Mayne and Southern Areas, no vibration monitoring was undertaken during the period and no complaint-based vibration monitoring was triggered.

2.2.3. Air Quality

2.2.3.1. Dust Deposition

Dust deposition monitoring was conducted at Mayne, Northern, Central and Southern Areas. Results met the project air quality goal¹ for all active worksites.

At Mayne Yard, the dust deposition gauge located on the northern bank of Breakfast Creek was reported below the air quality goals which was an improvement from the previous 3 months

In the Northern Area, at RNA Showgrounds, the dust deposition gauge (DDG) was stolen so no sample was available for analysis within the reporting period. This gauge was replaced once this was identified.

In the Central Area, at Woolloongabba, the dust deposition gauge (DDG) located south of the site in Monthly Environmental Report – January 2024

14

Queensland

Government

CROSSRIVER RAIL

the busway, was stolen so no sample was available for analysis within the reporting period. The TSD contractor reported a new DDG was installed as soon as practically possible. For further details see **Appendix B** (Section 3.3.1 and Table 4.2.2).

In the Southern Area, an additional DDG was installed at Railway Terrace on the 13 December 2023.

A summary of the dust deposition results for the month are in the table below.

Air Quality	Air Quality – Dust Deposition Monitoring						
Area	Worksite	Monitoring Location	Comments				
Mayne Area	Mayne Yard	Mayne Yard North	- Results met air quality goal				
Northern Area	RNA / Exhibition	RNA Showgrounds	- Dust deposition gauge stolen.				
	Northern Portal	Northern Portal (near Brisbane Girls Grammar School)	- Results met air quality goal				
Central Area	Albert Street	Mary Street	- Results met air quality goal				
7.11001	Albeit Street	Elizabeth Street	- Results met air quality goal				
	Quarry Street (north of the sit		- Results met air quality goal				
	Boggo Road	Peter Doherty Street/Leukemia Foundation	- Results met air quality goal				
	Southern Portal	PA Hospital - Central Energy Unit along Kent Street	- Results met air quality goal				
	Roma Street Roma Street station		- Results met air quality goal				
		Russian Orthodox Cathedral	- Results met air quality goal				
	Woolloongabba Busway		Dust deposition gauge stolen. A new gauge was installed as soon as practically possible.				
Southern Area	Dutton Park	Dutton Park	- Results met air quality goal				
	Dullon Faik	Railway Terrace	- Results met air quality goal				
	Yeerongpilly	Yeerongpilly	- Results met air quality goal				
	Clapham Yard	Clapham Yard	- Results met air quality goal				

¹ CG air quality goal for dust deposition - 120μg/m² (over an averaging period of 30 days).

2.2.3.2. Particulate Matter and Total Suspended Particulates

Monitoring for particulate matter (PM10) and total suspended particulates (TSP) was conducted at Mayne, Central and Southern Area worksites during the reporting period. Results obtained met the project goals at all active worksites.

In the Central Area, the TSD contractor confirmed that the Boggo Road air quality monitoring unit experienced technical difficulties between 1–2, 6–8 and 29–30 of January 2024. As soon as practicable, the unit was inspected, and the issue was resolved. The nearby (Woolloongabba) DESI air quality monitoring station confirmed air quality levels were below the air quality goals during these outage periods. The Woolloongabba air quality monitoring unit also experienced technical difficulties on the 24 and 30 January 2024. As soon as practicable, the unit was inspected, and the issue was





resolved. The nearby (Brisbane South) DESI air quality monitoring station confirmed air quality levels were below the air quality goals during these outage periods. Refer to **Appendix B** (Table 5 and Section 3.3.2).

A summary of particulate monitoring is provided in the table below.

Air Quality – PM ₁₀ / TSP Monitoring							
Area	Worksite Monitoring Location Comments		Comments				
Mayne Area	Mayne Yard Fast		- Results met air quality goals.				
Northern Area	RNA / Exhibition	RNA showgrounds	Results met air quality goals.Rental monitor active onsite.				
	Albert Street	iStay River City and Capri (Corner of Mary Street and Albert Street)	- Results met air quality goals.				
Central Area	Boggo Road / Southern Portal	North-east of Boggo Road worksite	 Results met air quality goals. Data gaps 1–2, 6–8 and 29–30 of January 2024 due to technical difficulties 				
	Woolloongabba	Place Park, Woolloongabba	 Results met air quality goals. Data gaps 24 and 30 January 2024 due to technical difficulties 				
Southern Area	Clapham Yard	Clapham Yard	- Results met air quality goals.				

2.2.4. Water Quality

Water quality monitoring and reporting was undertaken in accordance with the contractors CEMP and Water Quality Management Plans.

2.2.4.1. Surface Water

During January 2024, active surface water discharges occurred in the Northern and Central Area. Post-rainfall water quality monitoring was triggered across the Mayne, Northen, Central and Southern Areas.

In the Northern Area, active surface water discharge monitoring occurred on 22 occasions at Northern Portal. The monitoring results demonstrated active surface water discharges met project water quality discharge criteria. Refer to **Appendix B** (Table 7) for further details.

Post rainfall monitoring was triggered in receiving waters of Mayne Yard, RNA and Northern Corridor sites.

In the Central Area, post rainfall monitoring was triggered in receiving waters of Roma Street, Albert Street, Woolloongabba and Boggo Road/Southern Portal.

In the Southern Area, post rainfall monitoring was triggered in receiving waters of Clapham Yard, Rocklea and Salisbury including Moolabin Creek, Rocky Waterholes Creek and Stable Swamp Creek. A suspended solids result from a Rocky Waterholes Creek monitoring location on 13 January 2024, equalled the Project Water Quality Objectives criteria for Total Suspended Solids as outlined in the CEMP. This monitoring location is located midstream between Rocklea and Clapham Yard worksites and has a broader catchment size reducing the likelihood of the recorded level being solely attributed to project works. It was noted that the downstream suspended solids results were compliant with the Project Water Quality Objectives. Refer to **Appendix A** (Table 9 and Section





3.3.2) for more details.

Routine surface water monitoring was undertaken across the TSD worksites during the reporting period. Results from the locations reflect the condition of the broader catchment upstream from the worksites. Refer to **Appendix B** (Table 8 and Section 3.5) for further details.

Surface water quality monitoring is summarised in the table below:

Surface Water Quality Monitoring					
Area	Worksite	Discharge	Post-Rain Monitoring	Routine Monitoring	Comments
Mayne Area	Mayne Yard North	No	Yes	Yes	 ESC was implemented in accordance with site specific ESC Plan. Post-rainfall monitoring undertaken. Routine in-stream monitoring undertaken in accordance with WQMP.
	Exhibition/ RNA	No	Yes	Yes	 ESC was implemented in accordance with site specific ESC Plan. Post-rainfall monitoring undertaken. Routine in-stream monitoring undertaken in accordance with WQMP
Northern Area	Northern Portal	Yes	Yes	Yes	 Active surface water discharge met water quality investigation criteria. Post-rainfall monitoring undertaken. Routine in-stream monitoring undertaken in accordance with WQMP.
	Northern Corridor	No	Yes	Yes	 ESC was implemented in accordance with site specific ESC Plan. Post-rainfall monitoring undertaken. Routine in-stream monitoring
					undertaken in accordance with WQMP. Routine in-stream monitoring undertaken in accordance with
	Albert Street	No	Yes	Yes	WQMP. - Post-rainfall monitoring undertaken.
Central Area	1	Yes	Yes	Routine in-stream monitoring undertaken in accordance with WQMP. Post-rainfall monitoring	
	Roma Street	No	Yes	Yes	Post-rainfall monitoring undertaken. Routine in-stream routine monitoring undertaken in accordance with WQMP. Post-rainfall monitoring





					undertaken.
	Woolloongabba	No	Yes	Yes	- Routine in-stream monitoring undertaken in accordance with WQMP.
					Post-rainfall monitoring undertaken. Routine in-stream monitoring
	Southern Portal	No	Yes	Yes	undertaken in accordance with WQMP Post-rainfall monitoring
	Dutton Park	No	No	No	undertaken. - ESC was implemented in accordance with site specific ESC Plan.
	Fairfield station	No	No	No	- ESC was implemented in accordance with site specific ESC Plan.
	Yeronga	No	No	No	ESC was implemented in accordance with site specific ESC Plan.
		No	Yes		ESC was implemented in accordance with site specific ESC Plan.
	Clapham Yard			Yes	- Post-rainfall monitoring undertaken.
Southern					Routine in-stream monitoring undertaken in accordance with WQMP.
Area	Rocklea	No	Yes	Yes	ESC was implemented in accordance with site specific ESC Plan.
					- Post-rainfall monitoring undertaken.
					Routine in-stream monitoring undertaken in accordance with WQMP.
	Salisbury	No	Yes		- ESC was implemented in accordance with site specific ESC Plan.
				Yes	 Post-rainfall monitoring undertaken.
					Routine in-stream monitoring undertaken in accordance with WQMP.





2.2.4.2. Groundwater

Groundwater discharge occurred at Albert Street and Boggo Road. The groundwater discharge results exceeded relevant water quality objectives (WQOs)² for several water quality parameters. However, these results are consistent with the receiving environment baseline monitoring pre-construction data. The contractor confirmed no changes have occurred onsite to the construction methodologies that would have affected the groundwater results. The contractor reduced the water treatment sampling regime in accordance with project requirements. Water treatment plant results will be reported quarterly. Refer to **Appendix B** (Table 6) for further details.

There were no groundwater discharges at Mayne, Northern or Southern Area worksites.

Groundwater quality monitoring is summarised in the table below:

Groundwater Quality Monitoring					
Area	Worksite	Discharge	Comments		
Mayne Area	Mayne Yard North	No	- No groundwater discharges.		
	RNA/Exhibition	No	- No groundwater discharges.		
Northern Area	Northern Portal	No	- No groundwater discharges.		
	Albert Street	Yes	Discharge of groundwater met Project requirements.		
Central Area	Boggo Road / Southern Portal	Yes	Discharge of groundwater met Project requirements.		
Central Area	Roma Street	No	- No groundwater discharges.		
	Woolloongabba	No	- No groundwater discharges.		
Southern Area	Clapham Yard	No	- No groundwater discharges.		

² The Brisbane River Estuary environmental values and water quality objectives (Basin no 143 – mid-estuary) in the Environmental Protection (Water) Policy 2009

2.2.5. Erosion and Sediment Control

Site specific Erosion and Sediment Control (ESC) Plans have been prepared, updated, and implemented at Mayne Yard, RNA Showgrounds, Northern Portal, Normanby, Roma Street, Albert Street, Woolloongabba, Boggo Road, Southern Portal, Southern, Dutton Park, Fairfield, Yeronga, Yeerongpilly, Clapham Yard, Rocklea and Salisbury worksites.

2.3. Complaints Management

A total of eight (8) complaints were received during the month, of which all were project related.

RIS works received five (5) complaints related to project works in January 2024 relating to signage/wayfinding, vehicle access and worker parking impacts at Yeerongpilly, noise and signage/wayfinding at Fairfield and noise at Dutton Park. For further details and breakdown of

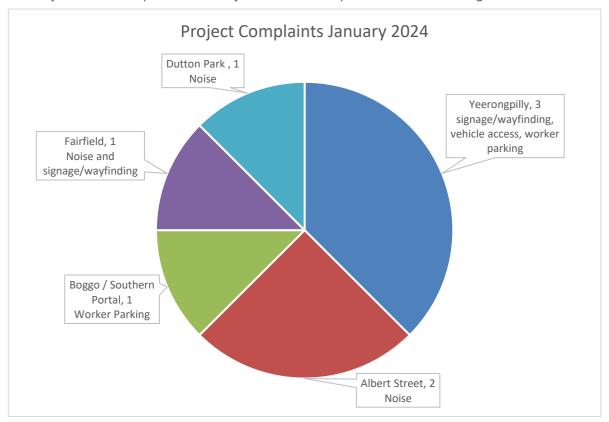


Queensland Government

complaints, refer to Appendix A (Table 3).

TSD works received three (3) project related complaints related to noise at Albert Street and worker parking at Boggo Road For further details and a breakdown of complaints, refer to **Appendix B** (Table 10).

The Project Works complaints summary for the month is provided in the following chart.



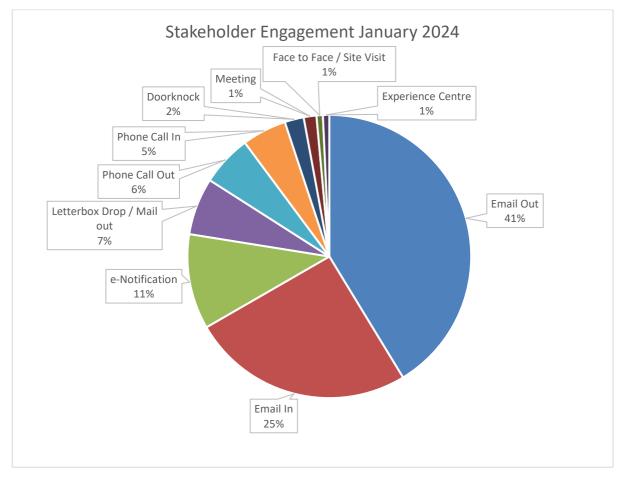
When attended noise monitoring was undertaken in response to a complaint, the contractor confirmed on all occasions that works undertaken at the time of the complaint adhered to project requirements. In some instances, previously attended noise monitoring data, representative of the relevant construction activities was used to confirm the works adhered to the project noise requirements.

To close out a complaint, the monitoring data is reviewed (where applicable) against compliance with the CEMP, site environmental management plans and permits, and checks that required community notification has taken place. Contractors have also confirmed that planned mitigation to reduce the impact was implemented. This is reviewed together to verify if project requirements have been met.

For scheduled out of hours works, community notification was provided, as well as regular project updates. Stakeholder engagement undertaken on the project during the month is in the chart below.







2.4. New Upcoming Project Works

The key new planned Project Works for the coming months include:

Area	New planned works in the coming months
Mayne Area	 Mayne Yard North – Remaining minor T&C defects are being addressed as access becomes available during Quarter 1 2024; and Anticipate achieving Practical Completion of SP1 by 9 Feb 2024. Mayne Yard East / West – RIS-6C.2 (QR Access Change) – 7 February 2024; N-18 MY-E Shunter Shed commissioning; RIS-N-7A2 (Rd 40 realignment South end wheel lathe) in EXT-25 (February 2024) and EXT-26 (March 2024); Air-Compressor foundations and structural steel erecting; and
Northern Area	 BR16 piling (pedestrian bridge at MY-E). RNA / Exhibition – FRP final platform slab; Ceilings; Complete RSS wall 220 at Northern end of BR44 viaduct; Platform paving to commence; Lift installation to commence; Painting to commence; Shared User Path connection to Bowen Bridge Road to commence; and CSR connectivity on BR44 on 1 March 2024 for handover to Comms Team. Northern Corridor –
	SCAS EXT-25 (14-22 February) including Auxiliary Road tie-ins, CRR-Up connection, final formation either side of Exhibition station BR44 viaduct including





CSR connectivity:

- Completion of TFR scope entirely (pits and conduits);
- Commence road furniture, height gauges, footpaths, etc;
- Track installation commenced 18 January 2024;
- Victoria Park Feeder Station Civils fully completed by 28 January for Injection Test, now delayed to 12 February due to heavy rain on the first date;
- HV Audit to follow February 2024;
- VPFS Energisation 11 March;
- Ground retention works at Exhibition station future UP-CRR Line;
- Holding road driver platform installation; and
- Ext-25 14 February 2024.

Northern Portal -

Final inspection landscaping works by BCC and Victoria parklands.

Central Area

Roma Street -

- Escalator steel installation in cavern:
- Level B4 partition walls, fan cure units and fit-out installation;
- Services installation and fitout on mezzanine:
- External wall cladding bracket installation in Station box;
- L3 water proofing at M&E building;
- B1 and B4 service installation and cable tray installation at M&E building; and
- Pile capping beam construction for the Pavilion.

Albert Street -

- Lot 1 Commence Jump Form cycle 6 and complete slip form demobilisation;
- Lot 2 Commence structural mass fill (NCR) works and complete AS1 structural steel installation; and
- Lot 3 Commence canopy/roof structural steel install and complete lift 2 install
 including testing and commissioning.

Woolloongabba -

- Platform screen door steel support install ongoing in Southern cavern;
- Saccardo Nozzle install;
- TVS fans installation following installation of attenuators; and
- Escalator delivery and ongoing M&E fit-out works.

Boggo Road -

- Ongoing perimeter / internal wall and topping slab pours;
- Recommence station box deck units and buttress planks installation;
- Ongoing M&E fit-out works in RIS rooms; and
- Commence HV switch gear in HV1 and termination to L1 and L2.

Southern Portal -

- CSR, bridge works, Freight flyover works and drainage works in upcoming SCAS;
- EG1 lift;
- Bearing plate welding and bridge coating;
- Bridge eastern approach infill pours;
- Bridge western approach deck FRP for topping slabs; and
- Land last deck units and close roof.





Southern Area

Southern / Dutton Park -

- Further progress of the station construction including retaining walls, soil nails, structural concrete for pier protection, structural steel elements, roofing, platform slabs, cable rough-in, building and soffit fit-out;
- TFR pit cable supports, cables and earthing installation; and
- Park Road TSC early works and preparation for temp power for Pre-Commissioning, preservation and SAT.

Fairfield Station -

- Minor defect closeout;
- Closeout of emergency egress lighting control design changes;
- Closeout of final electrical items to enable handover of PCEE;
- Completions documentation compilation; and
- Mildmay Street light pole and zebra crossing installation planned in February SCAS QR S WE24021 (request from local councillor).

Yeerongpilly Station -

- Platform 1: Continue lower-level services, structural foundations, install remaining platform precast walls;
- Platform 2/3: Roofing to canopies and blockwork to the station buildings. Progress preparation for platform slabs to commence in February 2024; and
- Temporary Gantry: Energisation and commissioning planned in January 2024.

Yeronga Station -

- Completion of QR critical defects and finalising completion documentation for PC;
- Closeout of final electrical items to enable handover of PCEE; and
- Closeout of emergency egress lighting control design changes.

Moorooka -

Nil.

Clapham Yard -

- Driveways and stone pitching along Fairfield Road;
- Civil Works, CSR works ongoing, commence driver pathways;
- Track Works include tamping of DG, DGL, HR1 & HR2 has commenced;
- OHW Works Structure install recommences July 2024;
- Signalling works ongoing; and
- Procurement and Planning stage for Electrical / Comms.

Rocklea Station -

- Fitout of stair 01, 02, 03:
- Installation and terminations of switchboards and distribution boards;
- Energex connection planned mid-February;
- Continue installation of lifts;
- Continue services rough-in;
- Continue platform canopy and buildings lining;
- Brookes Street carpark works; and
- End of platform egress pathing.

Salisbury -

CSR, OHW and drainage works.

2.5 Non-Compliance Events

No NCEs were recorded in January 2024. A summary of NCEs to date is shown in the table below.





Status	Date of Event	Category	Area as on the Report	Relevant Condition	Gate 1	Gate 2	Gate 3	Gate 4
⊕ Open								
□ Closed								
CRRDA-001-RIS-001	9/11/19	Noise	Yeronga Station	4, 10, 11	10/11/19	14/11/19	26/11/19	18/12/19
CRRDA-002-TSD-001	27/03/20	ESC	Woolloongabba	4, 15, 18	30/03/20	31/03/20	22/04/20	11/06/20
CRRDA-003-TSD-002	27/03/20	ESC	Boggo Rd	4, 15, 18	30/03/20	31/03/20	22/04/20	11/06/20
CRRDA-005-TSD-004	27/03/20	Reporting	Multiple sites	4, 6, 11, 13	30/03/20	31/03/20	22/04/20	11/06/20
CRRDA-006-TSD-005	27/03/20	Air Quality	Multiple sites	13	30/03/20	31/03/20	22/04/20	11/06/20
CRRDA-004-TSD-003	28/03/20	Traffic	Boggo Rd	4, 10, 14	30/03/20	31/03/20	22/04/20	11/06/20
CRRDA-009-RIS-003	6/05/22	ESC	Clapham Yard	4	28/10/22	28/10/22	12/12/22	12/12/22
CRRDA-010-RIS-004	10/05/22	Acid Sulphate Soils Managem ent	Clapham Yard	4, 19	28/10/22	28/10/22	12/12/22	12/12/22
CRRDA-11-RIS-005	23/11/22	Out Of Hours Works	Fairfield Station	4,10	14/07/23	14/07/23	14/07/23	12/09/23
□ Withdrawn								
CRRDA-007-RIS-002	1/04/20	Air Quality	Multiple sites	13	28/04/20	30/04/20	Withdrawn	
CRRDA-008-TSD-006	8/04/20	Working Hours	Roma Street	4,10	28/04/20	30/04/20	Withdrawn	

Gate 1 - EM notification to contractor. NCE confirmed

Gate 2 - 48 hour NCE notification submitted to CG

Gate 3 - 14 day report submitted

Gate 4 - 14 day report uploaded to CRR website





Appendix A RIS Monthly Report





Monthly CGCR Report – January 2024

Cross River Rail – Rail, Integration and Systems Alliance

Project number:	Q01080		
Document number:	RIS-UNA-ENV-MRP-06610-042		
Revision date:	20 February 2024		
Revision number:	A		

Document Approval

Rev	Date	Prepared By	Reviewed By	Approved By	Remarks
А					
Signatu	ire:				
Signatu	ire:				
Signatu	ıre:				
Signatu	ıre:				





Table of Contents

1	Progress Summary - Relevant Project Works		3
2		nts	
3	Environr	mental Monitoring Results	8
3.1	Acoustics.		8
3.2	Air Quality	[/]	10
3.3	Water Qua	ality	16
4	Complia	nce Review	21
4.1	Non-Comp	oliance Events	21
4.2	C-EMP Co	ompliance	21
Atta	chment 1	Imposed Conditions Non-Compliance Event Report (if required)	23
Atta	chment 2	Monitoring Locations - Noise and Vibration (if required)	24
Atta	chment 3	Monitoring Locations – Air Quality	26
Atta	chment 4	Monitoring Locations – Surface Water	32



1 Progress Summary - Relevant Project Works

The following Project Works were undertaken during the reporting period:

Table 1: Summary of Project Works completed during the reporting period.

Area	Project Works		
Mayne Area	Mayne Yard North		
	Schedule 18, Part 1 ALT Notice issued for SP1 on 10-Jan '24 Anticipate achieving PC of SP1 by 9 Eeb 2024 Anticipate achieving PC of SP1 by 9 Eeb 2024		
	 Anticipate achieving PC of SP1 by 9 Feb 2024 Mayne Yard East / West 		
	 RIS-EXT-24 (Albion formation for Tie-in of CRR Lines) successfully completed. RC14 		
	Pier 1 piling also completed.		
	 Mayne East entry road reconfiguration on schedule with drainage, CSR, hydraulics, and bulk earthworks ongoing as planned. 		
	Compressor Building construction commenced.		
Northern Area	RNA / Exhibition		
Trontinon 7 trou	Station works and BR44 viaduct progressing to program.		
	 BR44 viaduct final FRP on spans and CSR installation outside of parapet. 		
	 Station scope continuing with remaining structural steel installation, roofing, services 		
	rough-in, ceiling scope on platform, block work, final inground service installation and FRP slabs at plaza level.		
	RSS wall 220 commenced.		
	Northern Corridor		
	Auxiliary Road Hand-over to Rail Systems Teams. Track installation commenced.		
	 VP Feeder Station Hand-over to TP&C Team. 		
	 Soil nails between BB Road to Exhibition Station commenced. 		
	ERS Civil scope completed.		
	 DRS piling and CSR scope completed. 		
	 Victoria Park ROS installation ongoing, Energex VPFS pre-commissioning (75% complete). 		
	 Traction Power cabling from VPFS to Roma St installed. 		
	 Traction Power pit earthing and cable supports complete. 		
	 Earthworks completed to SG for CRR-DN alignment (alt freight path) with only southern tie-in through Mayne-neck remaining. 		
	 BR08 (3 track bridge over Breakfast Ck) Pier 4 girders installed; pier 1 headstock poured. 		
	 RIS-N-EXT-24 B2A SCAS successfully completed on 15 Jan 2024. 		
Southern Area	Southern Portal / Dutton Park		
Journal Med	 Progressed work on PL1, PL2, Kent Street entry, and Noble Street entry. Predominantly 		
	inground services, platform slabs, blockwork, piling, structural concrete, structural steel, building and soffit framing, cable rough-in, and roofing.		
	 Continued fit out of overpass modules, stair 2 installed. 		
	 Progressed work external to the station including drainage CSR / TFR progress throughout the corridor. 		
	 Completed TtO stage RIS-S-11A (Up Sub onto final alignment & install portal turnout). 		
Southern Area	Fairfield Station		
Council Alea	Minor defect rectification and close-out.		
	 Completed high level design solutions for end of platform egress lighting issues and 		
	platform lighting control.		
Southern Area	Yeronga Station		
	 Progressed remaining minor defect / punch list items. 		
Southern Area	Yeerongpilly Station		
- Janion / noa	. co.cgr, station		



Area	Project Works
	 Platform 1: Progressed installation of Northern half of the platform including installation of low-level services, drainage, earthworks, and structural foundations. Platform 2/3: Progressed lower-level services, bulk backfill, conduits installation, and structural foundations.
Southern Area	Clapham Yard
	 Murial Avenue Bridge: Maintenance Access Walkway installation continues. Open V-drains commenced. BR94 (Chale Street) completed. Completed critical OHLE foundations. Electrical / Comms – Installation.
Southern Area	 Rocklea Station Continued installation of lifts. Delivery and installation of switchboards and distribution boards. Installation of platform canopy soffit framing and cable rough-in. Installation of bicycle shelter roofing, screening. Internal and external framing and lining of station buildings. Brookes Street roadworks, paths, kerbing etc.
Southern Area	 Salisbury Station Preliminary planning and procurement. Early works undertaken during RIS_XMAS_23_S including preliminary earthworks for the new platform 3 and two drainage UTX crossings.

The following table summarises the upcoming Project Works:

Table 2: Summary of upcoming Project Works

Area	Project Works
Area Mayne Area	Mayne Yard North Remaining minor T&C defects are being addressed as access becomes available during Quarter 1 2024. Mayne Yard East / West RIS-6C.2 (QR Access Change) – 7 February 2024. N-18 MY-E Shunter Shed commissioning. RIS-N-7A2 (Rd 40 realignment South end wheel lathe) in EXT 25 (February 2024) and EXT-26 (March 2024).
	 Air-Compressor foundations and structural steel erecting. BR16 piling (ped bridge at MY-E).
Northern Area	 RNA / Exhibition Station FRP final platform slab. Ceilings. Complete RSS wall 220 at Northern end of BR44 viaduct. Platform paving to commence. Lift installation to commence. Painting to commence. Shared User Path connection to Bowen Bridge Road to commence. CSR connectivity on BR44 on 1 March 2024 for handover to Comms Team. Northern Corridor SCAS EXT-25 (14-22 February) including Auxiliary Road tie-ins, CRR-Up connection,
	 final formation either side of Exhibition station BR44 viaduct including CSR connectivity Completion of TFR scope entirely (pits and conduits). Commence road furniture, height gauges, footpaths, etc. Track installation commenced 18 January 2024.



Area	Project Works
	 Victoria Park Feeder Station Civils fully completed by 28 January for Injection Test Now delayed to 12 February due to heavy rain on the first date.
	 HV Audit to follow February 2024
	 VPFS Energisation 11 March.
	 Ground retention works at Exhibition station future UP-CRR Line.
	 Holding road driver platform installation.
	 Ext-25 14 February 2024.
Southern Area	Southern Portal / Dutton Park
	 Further progress of the station construction including retaining walls, soil nails, structural concrete for pier protection, structural steel elements, roofing, platform slabs, cable rough-in, building and soffit fit-out.
	 TFR pit cable supports, cables and earthing installation.
	 Park Road TSC early works and preparation for temp power for Pre-Commissioning, preservation, and SAT.
Southern Area	Fairfield Station
	Minor defect closeout.
	Closeout of emergency egress lighting control design changes.
	Closeout of final electrical items to enable handover of PCEE.
	Completions documentation compilation.
	 Mildmay Street light pole and zebra crossing installation planned in February SCAS
	QR_S_WE24021 (request from local councillor).
Southern Area	Yeerongpilly Station
	 Platform 1: Continue lower-level services, structural foundations, install remaining platform precast walls.
	Platform 2/3: Roofing to canopies and blockwork to the station buildings. Progress The progress of the station buildings.
	preparation for platform slabs to commence in February 2024.
	Temporary Gantry: Energisation and commissioning planned in January 2024.
Southern Area	Yeronga Station
	Completion of QR critical defects and finalising completion documentation for PC.
	Closeout of final electrical items to enable handover of PCEE.
	Closeout of emergency egress lighting control design changes.
Southern Area	Moorooka Station
	Nil Specific. Rocklea Station
Southern Area	• Fitout of stair 01, 02, 03
	 Installation and terminations of switchboards and distribution boards.
	 Energex connection planned mid-February.
	Continue installation of lifts.
	Continue installation of ints. Continue services rough-in.
	 Continue services rough-in. Continue platform canopy and buildings lining.
	Brookes Street carpark works.
	End of platform egress pathing.
Southern Area	Clapham Yard
Journal Alea	 Driveways and stone pitching along Fairfield Road.
	 Civil Works, CSR works ongoing, commence driver pathways.
	 Track Works include tamping of DG, DGL, HR1 & HR2 has commenced. Tamper remobilising Dec '23.
	OHW Works – Structure install recommences 24 July.
	Signalling works ongoing.
	 Procurement and Planning stage for Electrical / Comms.
	1 Toodionicht and Flamming stage for Electrical / Confillis.



Area	Project Works
Southern Area	Salisbury Station
	 Cessation of activities after XMAS SCAS until 12 February.
	 Drainage, FRP for the drainage pits and general earthworks for the new platform.

Acronyms:

Acronym	Description
CG	Coordinator General
CIP	Cast in Situ Piles
CSR	Combined Services Route
DL	Drainage Line
DRS	Digital Radio System
ERS	Enhanced Radio System
FRP	Form Reo Pour
HV	High Voltage
OHLE	Overhead Line Equipment
OTV	On Track Vehicle
PUP	Public Utility Plant
RNA	Royal National Agricultural and Industrial Association of Queensland
R&R	Remove and Replace
RSS	Reinforced Soil Slopes
RW	Retaining Wall
SCAS	Scheduled Corridor Access Schedule
TtO	Transition to Operations
UTX	Under Track Crossing



2 Complaints

Table 3: Summary of Complaints

Date Received	Location	Issue	Project Works / Activity source of the concern	Reporting Period	Complaint Detail	Unity Response	Status
Monday 22 January	Dutton Park	Noise	Complaint on noise and light spill from out of hours works.	January	Stakeholder emailed to complain about ongoing construction activities at Dutton Park station, particularly out of hours work, noise, and light spill.	Team provided further information on recent program and the southern extended track possession. Team would drop off earplugs in the letterbox to see if they could assist with sleep along with a respite voucher.	Closed
Monday 15 January	Fairfield	Noise	Complaint on noise from Vacuum truck.	January	Stakeholder emailed to complain about noise being produced from a vacuum truck.	Team provided further information on works being undertaken.	Closed
Tuesday 9 January	Yeerongpilly	Traffic	Complaint regarding parking of workforce vehicles.	January	Stakeholder emailed to complain about workforce vehicles parking in Stamford Street, Yeerongpilly over the past few days.	Team thanked the stakeholder and would follow up this the site team.	Closed
Tuesday 9 January	Yeerongpilly	Traffic	Complaint regarding parking of workforce vehicles.	January	Stakeholder emailed to complain about workforce vehicles on Wilkie Street.	Team responded explaining that workforce parking was permitted on the western side of Wilkie Street within the limits of the approved TGS.	Closed
Thursday 4 January	Yeerongpilly	Traffic	Complaint regarding traffic control.	January	Stakeholder emailed to complain about traffic control set up in front of 32 Wilkie Street.	Team provided further information as to why the traffic control lights were in this position as they are located opposite to a live construction access gate.	Closed



3 Environmental Monitoring Results

The below section summarises the monitoring results to be reported in accordance with Imposed Condition 6(b)(i).

3.1 Acoustics

Imposed Condition 11(b) requires that during construction, monitoring and reporting on noise and vibration in accordance with the Noise and Vibration Management Plan, a sub-plan of the Construction Environmental Management Plan (C-EMP) occurs.

3.1.1 Noise Monitoring

Attended noise monitoring was not triggered during the reporting period. Out of hours works were undertaken during SCAS works. These have previously been assessed as part of the analysis under the conditions of approval to verify the assessments undertaken.

Other SCAS works undertaken over the reporting period were consistent with previous monitoring and assessment undertaken for the project.

Noise complaints in Fairfield and Dutton Park were resolved by Communications team.

3.1.2 Noise Monitoring Results

Noise monitoring was not required to be undertaken during the reporting period.

3.1.3 Vibration Monitoring

Vibration monitoring to validate the predictive model was triggered for:

 John MacDonald Stand based on the proximity to the works. The results are presented in the below Table.

Complaint-based vibration monitoring was not triggered. No complaints related to vibration were received during the reporting period.

Vibration monitoring to address property damage was not triggered by the predictive assessment.



3.1.4 Vibration Monitoring Results

Table 4: Summary of Vibration Data

Location	Date (Start and Finish)	Time of day	Closest DAP / Sensitive Place	Receiver Type (table 3 – Imposed Condition 11(e))	Purpose of Monitoring	intensive	Maximum predicted vibration level	distance	Maximum recorded vibration level (mm/s)	Vibration goal for receiver	Exceedance of vibration limit?	Comments
John MacDonald Stand	1/01/24 - 1/02/24	24hrs/7days	John MacDonald Stand	Heritage - DIN4150 Group 1	Construction Monitoring at Sensitive Places - Model Verification	N/A	N/A	N/A	0.01	3mm/s Prop damage> Heritage	No Exceedance	Monitor permanently located in the John MacDonald Stand - no vibration intensive equipment in use during the monitoring period. Background monitoring only.



3.1.5 Interpretation

No results interpretation required this period. The RIS scope of works continues to achieve the outcomes set out by the Imposed Conditions and OEMP.

3.1.6 Noise Monitoring

The RIS scope of works continues to achieve the outcomes set out by the CGCR and OEMP. Monitoring was not triggered during the reporting period related to the activities undertaken.

3.1.7 Vibration Monitoring

The RIS scope of works achieved the outcomes set out by the CGCR and OEMP.

Vibration monitoring was undertaken during the reporting period.

3.2 Air Quality

Imposed Condition 13(b) requires that during construction, monitoring, and reporting on air quality in accordance with the Air Quality Management Plan, a sub-plan of the C-EMP occurs.

Visual monitoring was undertaken during routine environmental inspections. A total of 33 inspections were undertaken by the Environment Team across Mayne Yard, RNA Showgrounds, Northern Corridor, Southern Area, Yeerongpilly station, Clapham Yard, and Rocklea and Salisbury stations.

UNITY has installed the following air quality monitoring devices, therefore data collected from these devices, when active, is reported on in the monthly report regardless of the Project Works occurring.

Table 5: Summary of Air Quality monitoring devices

Monitoring Device Installed by UNITY	Area	Name	Date Installed	Status for the Reporting Period
Dust Deposition Gauge	RNA Showgrounds	AQ-01	13 December 2019	Active
Dust Deposition Gauge	Mayne Yard (Eastern Air Shed)	AQ-04	13 February 2020	Relocated to Mayne Yard North
Dust Deposition Gauge	Clapham Yard (Eastern Air Shed)	AQ-06	1 February 2021	Active
Dust Deposition Gauge	Yeronga station	AQ-07	12 August 2021	Inactive DDG was decommissioned on 10 December 2021 following the completion of earthworks. This was moved to Yeerongpilly and will be reported during the next monitoring period.
Dust Deposition Gauge	Dutton Park	AQ-08	8 July 2022	Active
Dust Deposition Gauge	Mayne Yard North (Eastern Air Shed)	AQ-04 Mayne Yard North	26 August 2022	Active
Dust Deposition Gauge	Yeerongpilly (Wilkie Street)	AQ-09	6 October 2023	Active
Dust Deposition Gauge	Northern Portal (Brisbane Girls Grammar School)	AQ-10	10 October 2023	Active
Dust Deposition Gauge	Railway Terrace, Dutton Park	AQ-11	13 December 2023	Active



Monitoring Device Installed by UNITY	Area	Name	Date Installed	Status for the Reporting Period
TSP / PM ₁₀ Monitor	Mayne Yard East (Eastern Air Shed)	Mayne Yard East	26 August 2022	Active
TSP / PM ₁₀ Monitor	Clapham Yard (Eastern Air Shed)	Clapham Yard	9 August 2021	Active
TSP / PM ₁₀ Monitor	RNA (Western Air Shed)	RNA	25 August 2020	Active

3.2.1 Dust results

As passive dust deposition gauges (DDG) are analysed monthly, results cover the last half of December and the first half of January.

The results are detailed below and compared against Imposed Condition 13(b). The monitoring results show no exceedances of the CGCR Goal of 120mg/m²/day.

One new site was added in this reporting period at Railway Terrace in Dutton Park (AQ-11) and the DDG at RNA (AQ-01) was stolen during the reporting which meant no results could be recorded for this reporting period.

Table 6: Dust deposition gauge results for the reporting period

CGCR Goal (mg/m2/day)	AQ-01 - RNA Showground (mg/m2/day)	AQ-04 Grafton Street (E Mayne) (mg/m2/day)	AQ-06– Clapham Yard (mg/m2/day)			Portal	AQ-11 Railway Terrace (mg/m2/day)
120	Stolen.	77	17	73	27	97	27
Total Rainfall during Period (mm)	154.4	154.4	304.6	127.8	304.6	154.4	127.8

Note: Results recorded in red indicate an exceedance of the CGCR Goal



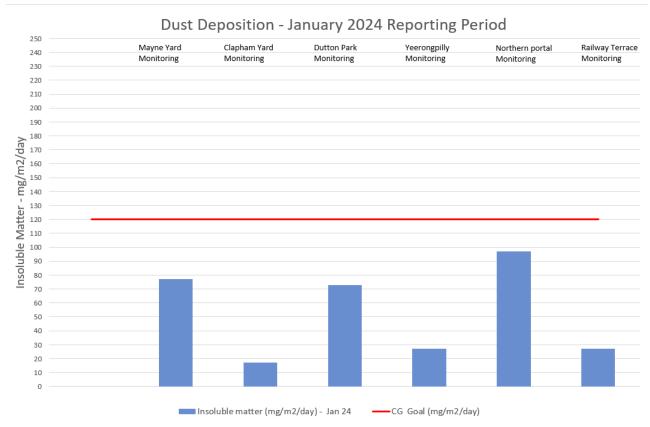


Figure 1: Air Quality Monitoring (Deposited Dust) Results

No exceedances of the Dust Deposition goal were recorded during the reporting period.

Accordingly, the project has met their requirements under Imposed Condition 13 and the OEMP.

3.2.2 Particulates Results

UNITY had three (3) active air quality monitoring stations in place for the reporting period as detailed in Table 5. One (1) rental monitor remains active at RNA.

During the reporting period, works at Mayne Yard consisted primarily of track and structural works.

Works at the RNA (Exhibition grounds) have continued with fitout of structures and trackwork.

Works at Clapham have been ongoing with drainage, foundation, track, and structures work on the flyover.

3.2.2.1 Monitoring Results – Reporting Period

External ambient air quality data was collected for total suspended particles (TSP), and particulate matter less than 10 μ m (PM₁₀).

TSP is one of the indicators for which the Coordinator-General has imposed a goal of 80 μ g/m3 (over an averaging period of 24 hours) the project must aim to achieve under Imposed Condition 13(a).

 PM_{10} is one of the indicators for which the Coordinator-General has imposed a goal of 50 μ g/m3 (over an averaging period of 24 hours) the project must aim to achieve under Imposed Condition 13(a).

These stations have been installed on-site as per AS/NZS 3850 1.1 following consultation with UNITY air quality professionals. The results are represented in the below figures.

There were zero (0) exceedances of TSP and PM10 air quality goals under the CG conditions of approval.



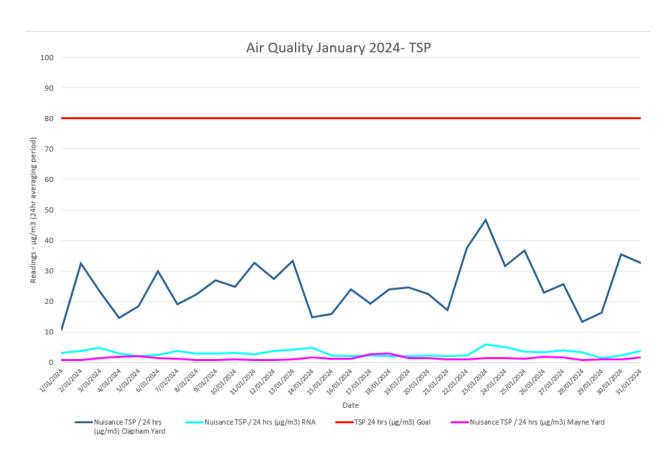


Figure 2: Air Quality Monitoring (TSP) Results

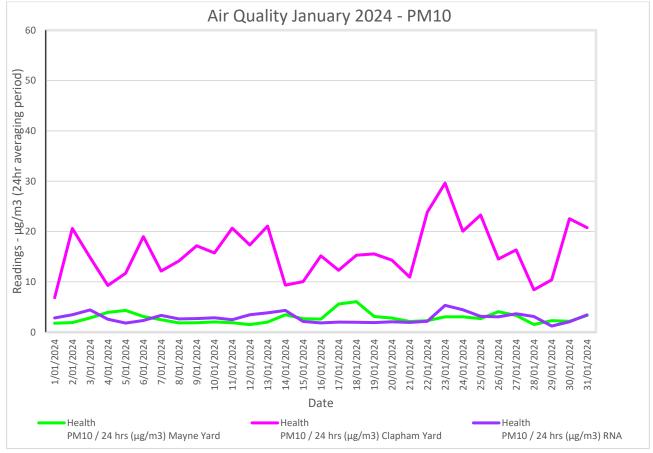


Figure 3: Air Quality Monitoring (PM10) Results



3.2.3 Monitoring Results – Annual Averaging

Imposed Condition 13 (a) sets annual average air quality goals for TSP (Human health) and PM₁₀ (Human health).

The below table summarises where TSP and PM₁₀ monitoring have been carried out over the last 12 months. The National Environment Protection (Ambient Air Quality) Measure Technical Paper No.5 provides guidance and procedures for uniform data recording and handling. (https://www.nepc.gov.au/system/files/resources/9947318f-af8c-0b24-d92804e4d3a4b25c/files/aagprctp05datacollection200105final.pdf).

For air quality data to be officially reported, as per section 4.5 of Technical Paper No. 5, the minimum data capture would be 75% of the year or 274 days.

"It is essential that data loss is kept to an absolute minimum. For representative monitoring data and for credible compliance assessment it is desirable to have data capture rates higher than 95%. 75% data availability is specified as an absolute minimum requirement for data completeness".

In some instances, Relevant Project Works, which triggered TSP and PM₁₀ monitoring was carried out for less than 274 days (e.g., at the Northern Corridor). In such instances the annual averages are still reported but are indicative only as data capture did not meet the 75% data capture requirements of *National Environment Protection (Ambient Air Quality) Measure Technical Paper No. 5 – Data Collection and Handling.*



Table 7: Summary of Air Quality Monitoring Devices Over 12 months

Monitoring Device Installed by UNITY	Area	Date Installed	Date Decommissioned	Number of days data was captured over 365 days period	Data capture over an annual period	Annual performance reporting
TSP / PM ₁₀ Monitor	Northern Corridor (Eastern Air Shed)	23 April 2020	13 January 2021	260 over 365 days	71% over 365 days	Indicative only Data capture did not meet the minimum data capture requirements.
TSP / PM ₁₀ Monitor	Mayne Yard North (Eastern Air Shed)	23 April 2020	11 May 2022	Period 1 (to 23 April 2021) 358 over 365 days Period 2 (24 April 2021 to 25 April 2022) 364 over 365 days Period 3 (26 April 2022 to 11 May 2022) 3 days over 47 days	Period 1 98% over 365 days Period 2 99% Over 365 days Period 3 17% Over 47 days	Applicable for Period 1 Data capture met minimum data capture requirements. Applicable for Period 2 Data capture has met minimum data capture requirements. Applicable for Period 3 Data capture has not met minimum data capture requirements.
TSP / PM ₁₀ Monitor	Mayne Yard East (Eastern Air Shed)	26 August 2022	Not yet decommissioned	Period 1 (Started 26 August 2022) 211 days over 280 days Period 2 (Started 27 August 2023) 87 days over 98 days	Period 1 75% Over 280 days Period 2 88% over 98 days	Applicable for Period 1 Data capture has not yet met minimum data capture requirements. Applicable for Period 2 Data capture has not yet met minimum data capture requirements.
TSP / PM ₁₀ Monitor	RNA (Western Air Shed)	11 June 2020	Not yet decommissioned	Period 1 (to 11 June 2021) 314 over 365 days Period 2 (12 June 2021 to 12 June 2022) 290 over 365 days Period 3 (Started 13 June 2022) 310 over 365 days Period 4 (Started 14 June 2023) 146 over 201 days.	Period 1 86% over 365 days Period 2 79% Over 365 days Period 3 85% Over 350 days Period 4 74% over 201 days.	Applicable for Period 1 Data capture met minimum data capture requirements. Applicable for Period 2 Data capture met minimum data capture requirements. Applicable for Period 3 Data capture met minimum data capture requirements. Not yet applicable for Period 4 Data capture has not yet met minimum data capture requirements.
TSP / PM ₁₀ Monitor	Clapham Yard (Eastern Air Shed)	1 February 2021	286	Period 1 (to 31 January 2022) 326 over 364 days Period 2 (01 February 2022 to 31 January 2023) 190 over 365 days Period 3 (Started 01 February 2023) 286 over 334 days	Period 1 90% over 364 days Period 2 57% Over 365 days Period 3 85% over 334 days	Applicable for Period 1 Data capture met minimum data capture requirements. Applicable for Period 2 Data capture did not meet the minimum data capture requirements. Not yet applicable for Period 3 Data capture has not yet met the minimum data capture requirements.



The below table summarises the applicable and indicative annual data results for TSP and PM₁₀ against the performance goals imposed under Condition 13(a). Results in italic are indicative only.

Table 8: Annual Performance Results

Air Quality Indicator	Goal	Period	Northern Corridor	Mayne Yard North	Mayne Yard East	RNA	Clapham Yard
TSP	90 μg/m ³	Period 1	8 μg/m³	11 μg/m ³	9 μg/m³	18 μg/m ³	8 μg/m ³
		Period 2	-	10 μg/m ³	-	15 μg/m ³	16 μg/m ³
		Period 3	-	Not applicable	-	13 µg/m³	Not yet applicable
		Period 4	-	Not applicable	-	Not yet applicable	-
PM ₁₀	25 μg/m ³	Period 1	5 μg/m³	7 μg/m³	11 μg/m ³	11 μg/m ³	5 μg/m ³
		Period 2	-	7 μg/m³	-	10 μg/m ³	14 μg/m ³
		Period 3	-	Not yet applicable	-	10 μg/m ³	Not yet applicable
		Period 4	-	Not yet applicable	-	Not yet applicable	-

3.2.4 Interpretation

3.2.4.1 Particulates Results

External ambient air quality was collected for total suspended particulates (TSP) and particulate matter less than $10\mu m$ (PM₁₀).

TSP is one of the indicators for which the Coordinator-General has imposed a goal of 80µg/m³ (over an averaging period of 24 hours) the project must aim to achieve under Imposed Condition 13(a).

 PM_{10} is one of the indicators for which the Coordinator-General has imposed a goal of $50\mu g/m^3$ (over an averaging period of 24 hours) the project must aim to achieve under Imposed Condition 13(a).

These stations have been installed on-site as per AS/NZS 3850 1.1 following consultation with UNITY Certified Air Quality Professionals (CAQP).

During the reporting period:

- No particulate results exceeded their relevant goals for PM₁₀.
- There were zero (0) complaints received associated with air quality at Mayne Yard, RNA and Clapham Yard.
- All particulate monitors were recording for the duration of the January monitoring period.

3.3 Water Quality

Imposed Condition 15(b) requires that during construction, monitoring, and reporting on water quality in accordance with the Water Quality Management Plan, a sub-plan of the C-EMP, occurs.

Imposed Condition 15(a) requires that discharges of groundwater from Project Works within the Breakfast Creek catchment must comply with the Brisbane River Estuary environmental values and water quality objectives (Basin no.143 – mid-estuary) in the *Environment Protection (Water) Policy 2009*.

Imposed Condition 15(a) requires that discharges of groundwater from Project Works within Moolabin Creek, Yeerongpilly – Oxley Creek catchment must comply with the Oxley Creek - Lowland freshwater environmental values and water quality objectives (Basin no.143 (part) – including all tributaries of the Creek) in the *Environment Protection (Water) Policy 2009*.



Water quality monitoring to demonstrate compliance with Imposed Condition 15(a) was not triggered during the reporting period. There were no groundwater discharges during the reporting period.

Water quality monitoring to demonstrate compliance with Condition 15(b) and Condition 18 was triggered during the reporting period. Post rainfall response monitoring was undertaken.

3.3.1 Rainfall Records

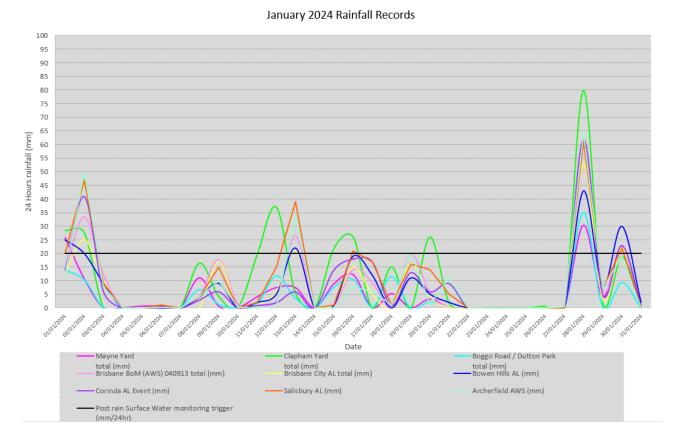


Figure 4: January 2024 Rainfall Records

3.3.2 Post Rainfall Monitoring Results

Post rainfall monitoring is triggered typically following any rainfall event exceeding 20 to 25 mm over 24 hours, however, storm events during the high-risk period of the year (November to March) of lesser amounts but of a higher intensity may cause run-off which would also trigger post-rain monitoring consistent with the C-EMP.

Post rainfall monitoring was triggered as per Condition 15(b) and Condition 18 and undertaken on the 3, 13, 17 and 30 January and reported on below in Table 9 with the RIS scope of works remaining compliant with Imposed Conditions 15 and 18.

The TSS value at SW-7 (Midstream) on 13 January 2024 equalled the Project Water Quality Objectives as outlined in the C-EMP. However, the sample was inadvertently taken further downstream than usual. The samples taken prior to and after 13 January 2024 were taken from the usual location.



Table 9: Summary of Post Rainfall Monitoring Results

			Discharge Criteria ¹			
Date	Location	Waterway	Turbidity (NTU) Nil until Turbidity / TSS correlation achieved ²	TSS (mg/L) <50	DO (%) Nil	pH (pH Unit) Stable pH reading; and General sites: 6.5 – 8.5, or Wallum/Acidic Ecosystems: 5.0 – 7.0
3-Jan-24	SW1 (Upstream / Downstream)	Breakfast Creek	8.9	13	76.4	7.81
3-Jan-24	SW2 (Downstream / Upstream)	Breakfast Creek	11.3	14	74.4	7.44
3-Jan-24	SW3 (Downstream/ Upstream)	Breakfast Creek	13.6	16	83	7.43
3-Jan-24	SW4 (Downstream)	Barrambin Creek	4.7	15	54	7.91
3-Jan-24	SW5 (Upstream)	Moolabin Creek	5.9	14	76	7.35
3-Jan-24	SW6 (Downstream)	Moolabin Creek	6.7	10	68.3	7.19
3-Jan-24	SW7 (Midstream)	Rocky waterholes	9.2	23	51	7.3
3-Jan-24	SW8 (Upstream)	Rocky waterholes	10.3	23	50.2	7.38
3-Jan-24	SW9 (Upstream)	Stable Swamp	9.7	20	78	8.1
13-Jan-24	SW1 (Upstream / Downstream)	Breakfast Creek	6.5	14	65.5	7.43
13-Jan-24	SW2 (Downstream / Upstream)	Breakfast Creek	10.1	15	65.7	7.44
13-Jan-24	SW3 (Downstream/ Upstream)	Breakfast Creek	10.3	13	83	7.21
13-Jan-24	SW4 (Downstream)	Barrambin Creek	10.8	18	72.9	7.71
13-Jan-24	SW5 (Upstream)	Moolabin Creek	10.4	26	84.3	7.25
13-Jan-24	SW6 (Downstream)	Moolabin Creek	11.6	29	55.2	7.34
13-Jan-24	SW7 (Midstream)	Rocky waterholes	22.2	50	66.3	7.37
13-Jan-24	SW8 (Upstream)	Rocky waterholes	19.2	48	70	7.43
13-Jan-24	SW9 (Upstream)	Stable Swamp	18.7	41	69	7.30
17-Jan-24	SW5 (Upstream)	Moolabin Creek	9.4	24	84.3	7.35
17-Jan-24	SW6 (Downstream)	Moolabin Creek	9.6	23	84	7.37
17-Jan-24	SW7 (Midstream)	Rocky waterholes	13.0	38	70.9	7.5
17-Jan-24	SW7a	Rocky waterholes	12.3	39	80.2	7.3
17-Jan-24	SW8 (Upstream)	Rocky waterholes	15.2	37	73.1	7.46
17-Jan-24	SW9	Stable Swamp	8.5	22	75.8	7.65
17-Jan-24	SW9a(Upstream)	Stable Swamp	8.4	22	73.5	7.71

¹ Refer to the waterways and water quality management plan, a C-EMP sub-plan for details of derivation of the discharge criteria.

² Correlations are typically run on the source water (i.e., basins) not the receiving system where there is a dilution component of potentially diffuse sources of sediments from non-Project related areas. Due to the very limited amount of discharges the RIS Scope of Works has experienced, there is no correlation available. Typically, a minimum of 20 data points is used to determine TSS / in field turbidity correlation for site waters.



Date	Location	Waterway	Discharge Criteria³	Date	Location	Waterway
			Turbidity (NTU) Nil until Turbidity / TSS correlation achieved ⁴	TSS (mg/L) <50	DO (%) Nil	pH (pH Unit) Stable pH reading; and General sites: 6.5 – 8.5, or Wallum/Acidic Ecosystems: 5.0 – 7.0
30-Jan-24	SW1 (upstream/ Downstream)	Breakfast creek	34.8	26	104.3	7.68
30-Jan-24	SW2 (Downstream / Upstream)	Breakfast Creek	28.7	34	81.99	7.52
30-Jan-24	SW3 (Downstream/ Upstream)	Breakfast Creek	29.1	46	83.27	7.58
30-Jan-24	SW5 (Upstream)	Moolabin Creek	7.1	8	-	7.83
30-Jan-24	SW6 (Downstream)	Moolabin Creek	23.3	<5	-	7.71
30-Jan-24	SW7 (Midstream)	Rocky waterholes	30.3	<5	83	7.5
30-Jan-24	SW7A (Upstream)	Rocky waterholes	31	<5	88	7.5
30-Jan-24	SW9 (Upstream)	Stable Swamp	34	20	95.3	7.77

3.3.3 Routine Surface Water Monitoring Results

During the reporting period, UNITY undertook routine surface water quality monitoring.

A review of the data sample has identified that over 12 months of continuous data collection has occurred with over 20 monitoring events. The frequency of background monitoring has therefore been reduced to biannually, with dry season (April to August) and wet season (November to March) monitoring to be completed when scheduled.

The wet season bi-annual monitoring was undertaken on the 23 January 2024.

This reduction of monitoring frequency is acceptable to continue informing the Dis-1 Credit for the ISCA 'Excellent Rating' the Project is pursuing.

Table 10: Summary of Biannual Monitoring Results

Date	Location	Waterway	Tide	Turbidity (NTU)	TSS (mg/L)	DO (%)	pH (pH unit)
23 January 2024	SW-1 – Upstream of Mayne Yard	Breakfast Creek	Marine conditions	Field: 7.22 Lab: 6.5	18	61	7.14
23 January 2024	SW-2 – Adjacent to Mayne Yard	Breakfast Creek	High tide	Field: 5.77 Lab: 4.9	14	82	7.33
23 January 2024	SW-3 – Downstream of Mayne Yard	Breakfast Creek	High tide	Field: 6.03 Lab: 3.9	8	84	7.66

³ Refer to the waterways and water quality management plan, a C-EMP sub-plan for details of derivation of the discharge criteria.

⁴ Correlations are typically run on the source water (i.e., basins) not the receiving system where there is a dilution component of potentially diffuse sources of sediments from non-Project related areas. Due to the very limited amount of discharges the RIS Scope of Works has experienced, there is no correlation available. Typically, a minimum of 20 data points is used to determine TSS / in field turbidity correlation for site waters.



Date	Location	Waterway	Tide	Turbidity (NTU)	TSS (mg/L)	DO (%)	pH (pH unit)
23 January 2024	SW-4 – Downstream of Northern Corridor	Barrambin / York's Hollow	Not applicable – non-tidal environment	Field: 4.66 Lab: 4.7	10	83	7.23
23 January 2024	SW-5 – Upstream rail corridor	Moolabin Creek	Not applicable – non-tidal environment	Field: 38.35 Lab: 7.1	8	82	7.63
23 January 2024	SW-6 – Downstream of rail corridor	Moolabin Creek	Not applicable – non-tidal environment	Field: 2.94 Lab: 5.3	6	82	7.63
23 January 2024	SW-7a – Upstream of rail corridor	Rocky Water Holes Creek	Not applicable – non-tidal environment	Field: 9.56 Lab: 8.9	6	77	8.1
23 January 2024	SW-7 – Upstream of rail corridor	Rocky Water Holes Creek	Not applicable – non-tidal environment	Field: 7.31 Lab: 7.9	7	57	7.8
23 January 2024	SW-8 – Downstream of rail corridor	Rocky Water Holes Creek	Not applicable – non-tidal environment	Field: 10.64 Lab: 10.2	10	72	7.77
23 January 2024	SW-9 – Downstream of rail corridor	Stable Swamp Creek	Not applicable – non-tidal environment	Field: 4.28 Lab: <5	5.1	80	8.13
23 January 2024	SW-9A – Upstream of rail corridor	Stable Swamp Creek	Not applicable – non-tidal environment	Field: 38 Lab: 27.5	10	88	7.56

3.3.4 Groundwater Discharge Monitoring Results

Groundwater discharge monitoring was not triggered during the reporting period.

3.3.5 Surface Water Discharge Monitoring

Surface water discharge monitoring was not triggered during the reporting period.



4 Compliance Review

4.1 Non-Compliance Events

The below section summarises the events to be reported in accordance with Imposed Condition 5 and Imposed Condition 6(b)(ii). A non-compliance event (NCE) is defined as Project Works that do not comply with the Imposed Conditions.

4.1.1 Non-Compliance Events Summary

Table 101: Summary of Non-Compliance Events

Event Title	Location, Date, and time of event	Date the Event was Formally Notified to CG/IEM	Conditions Affected	Date the Event Report Formally Sent to CG/IEM	Status of Event
N/A					

4.2 C-EMP Compliance

The below table summarises compliance status with the C-EMP and monitoring requirements of relevant sub-plans for the reporting period.

Table 112: C-EMP and relevant Subplans monitoring requirements - Compliance Status for the reporting period.

Aspect	Monitoring requirement	Activities risk profile	Monitoring undertaken	Compliance status with C-EMP / Subplan	Effect of the non-compliance
Air Quality	Visual monitoring program + Additional particulate monitoring as required based on the outcomes of the predictive assessment/risk profile	Moderate to High	Yes – visual monitoring is undertaken as part of routine inspections. Monitoring for TSP, PM ₁₀ , and deposited dust was also undertaken. TSP, PM ₁₀ monitoring was carried out for three active Worksites	Compliant Compliant	Not Applicable
Air Quality	Complaint's response	Moderate to High	Not triggered	Compliant	Not Applicable
Noise	Buffer distance tests based on the outcomes of the predictive assessment based / risk profile of activities	Moderate to High	No– noise monitoring was not triggered based on the outcome of predictive noise models for the works in January.	Compliant	Not Applicable
Noise	Plant noise audits for noisy plant to validate models input as required	Moderate to High	No	N/A	Not Applicable
Noise	Complaint's response	Moderate to High	Not triggered	N/A	Not Applicable
Vibration	Construction Monitoring at Sensitive Places / DAPs - Model verification based on the outcomes of the predictive assessment based / risk profile of activities	Moderate to High	Yes – monitoring triggered for RNA Stage 3 Works	Compliant	Not Applicable
Vibration	Complaint's response	Moderate to High	Not triggered No complaints	N/A	Not Applicable
Water Quality	Bi-Annual monitoring	N/A	Wet season monitoring completed during the reporting period.	Compliant	Not Applicable



Aspect	Monitoring requirement	Activities risk profile	Monitoring undertaken	Compliance status with C-EMP / Subplan	Effect of the non- compliance
Water Quality	Post Rainfall	Moderate to High	Triggered in the north and south, Field and lab testing undertaken	Compliant	Not Applicable
Water Quality	Dewatering	Moderate to High	Not triggered No dewatering to stormwater	Compliant	Not Applicable



Attachment 1 Imposed Conditions Non-Compliance Event Report (if required)



Attachment 2 Monitoring Locations – Noise and Vibration (if required)



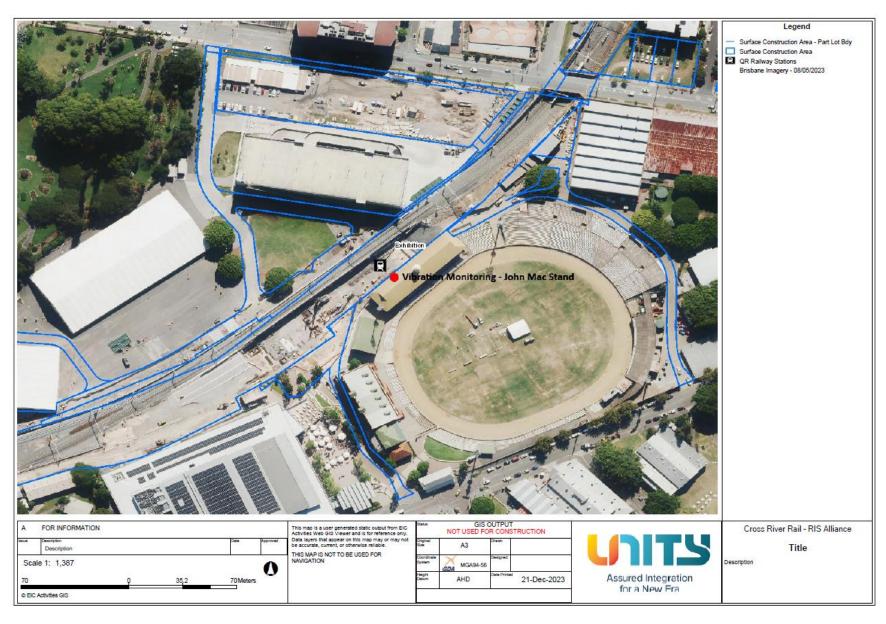


Figure 5: RNA Vibration Monitoring January 2024



Attachment 3 Monitoring Locations – Air Quality



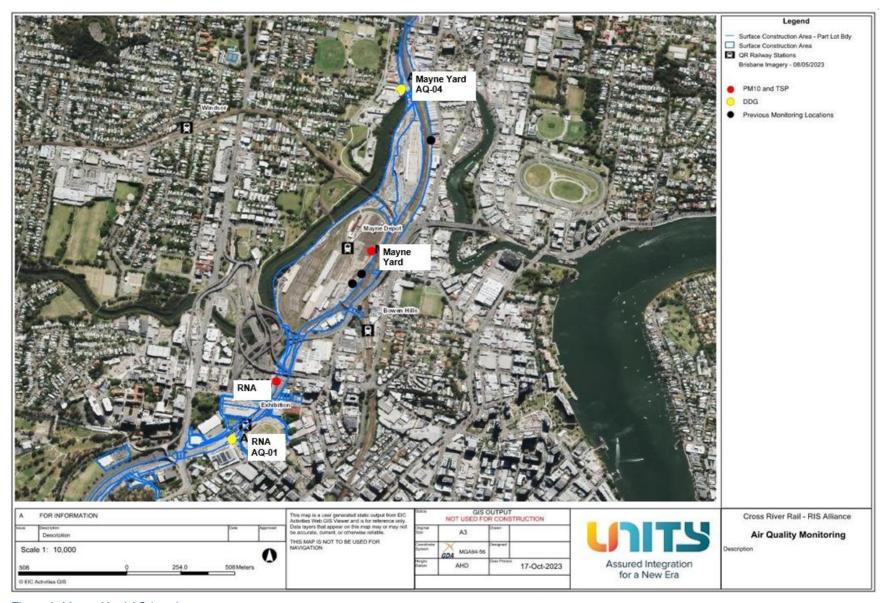


Figure 6: Mayne Yard AQ locations





Figure 7: Northern Portal AQ locations



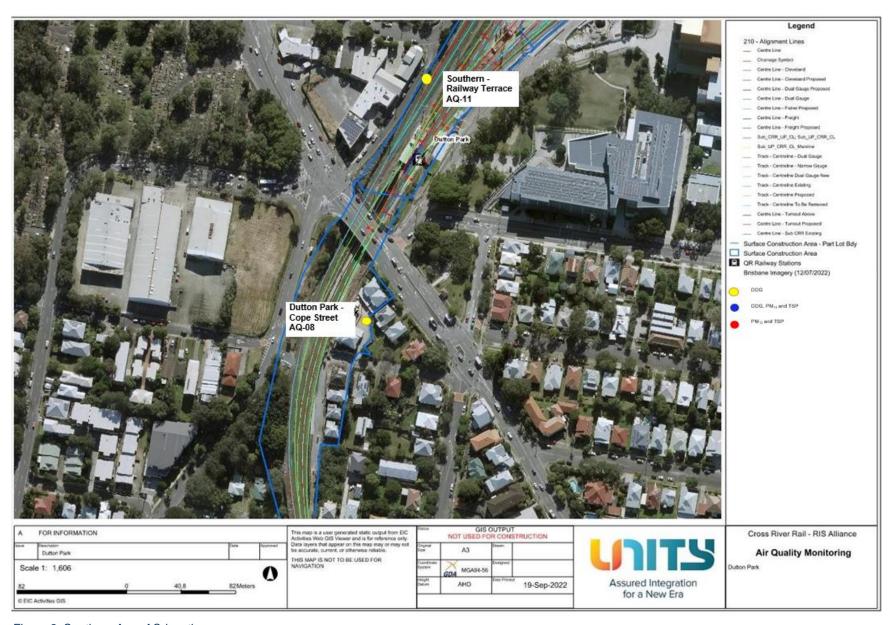


Figure 8: Southern Area AQ locations



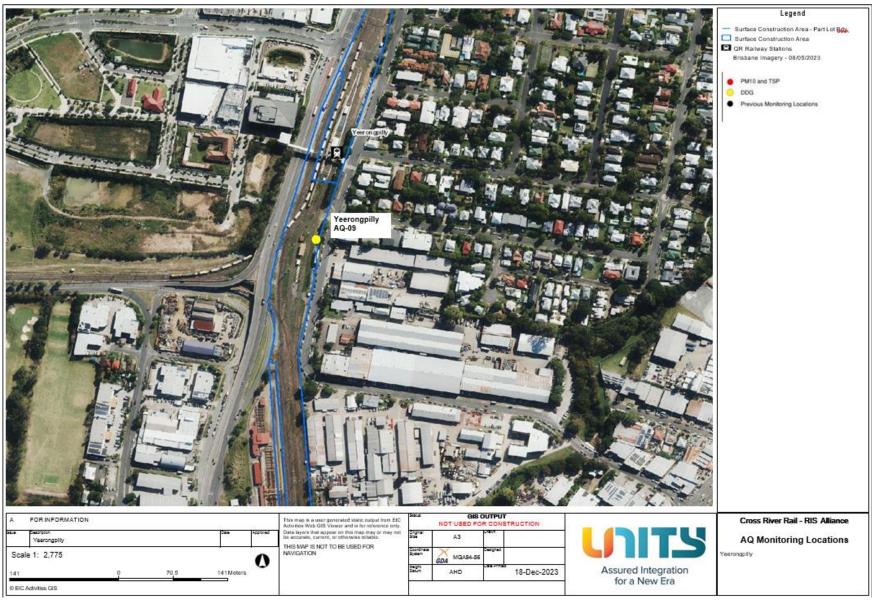


Figure 9: Yeerongpilly AQ locations



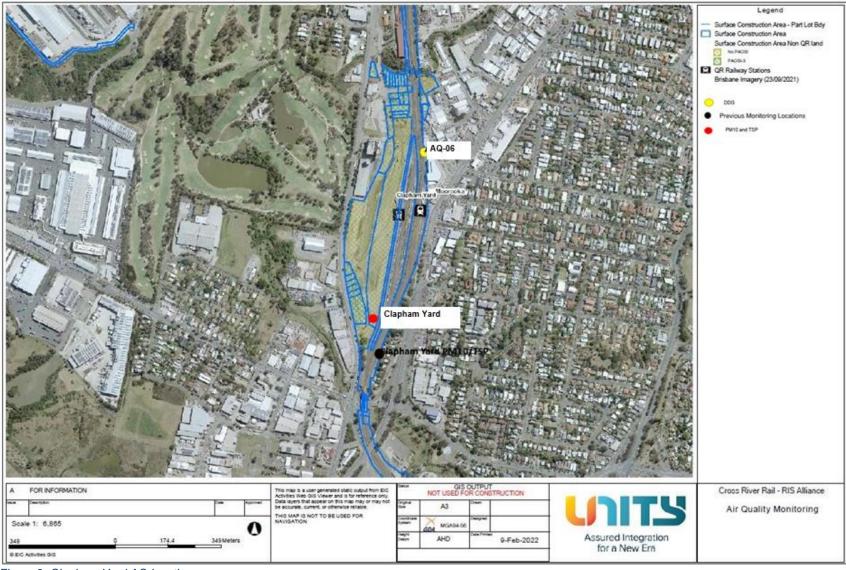


Figure 2: Clapham Yard AQ locations



Attachment 4 Monitoring Locations – Surface Water



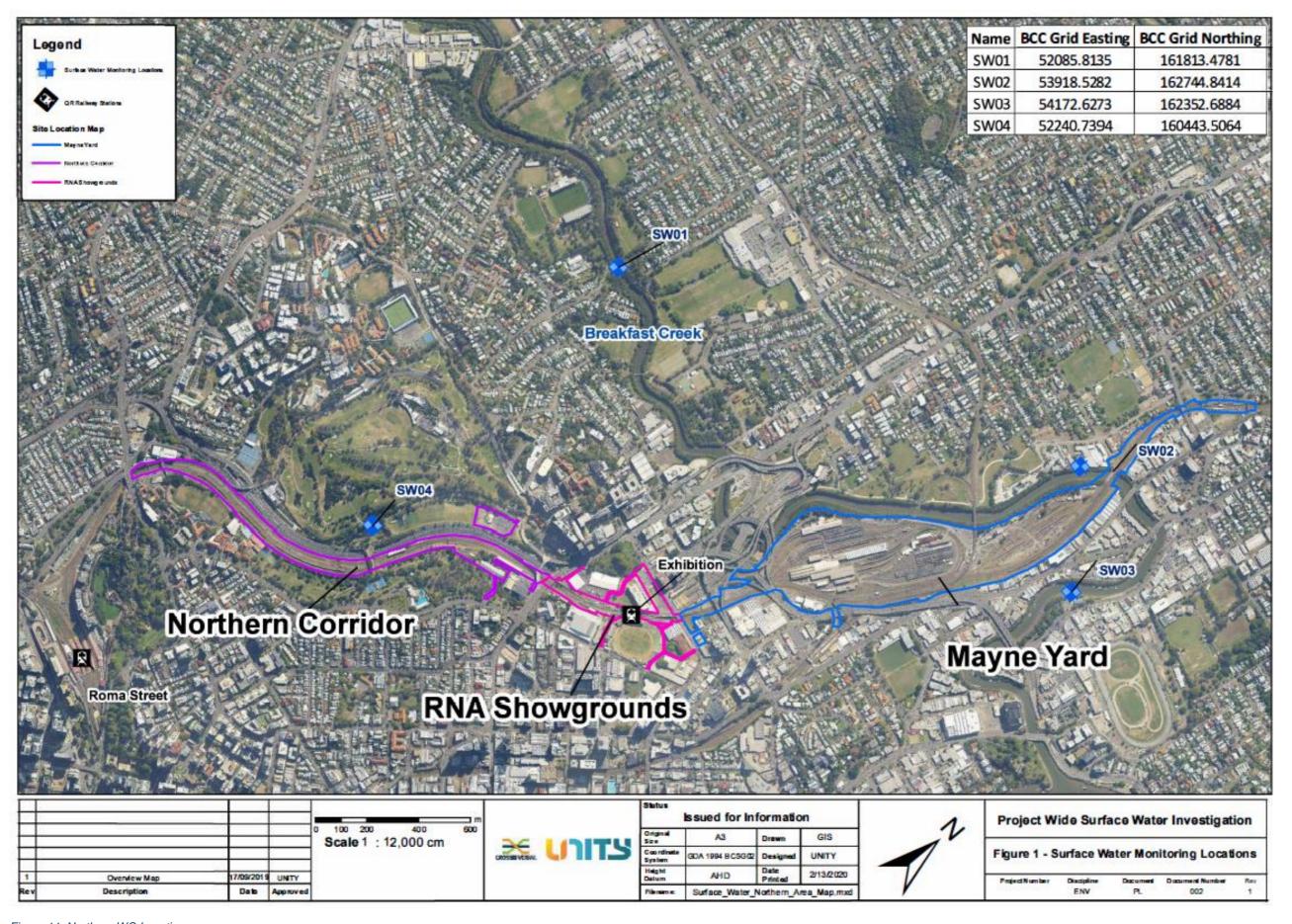


Figure 11: Northern WQ Locations



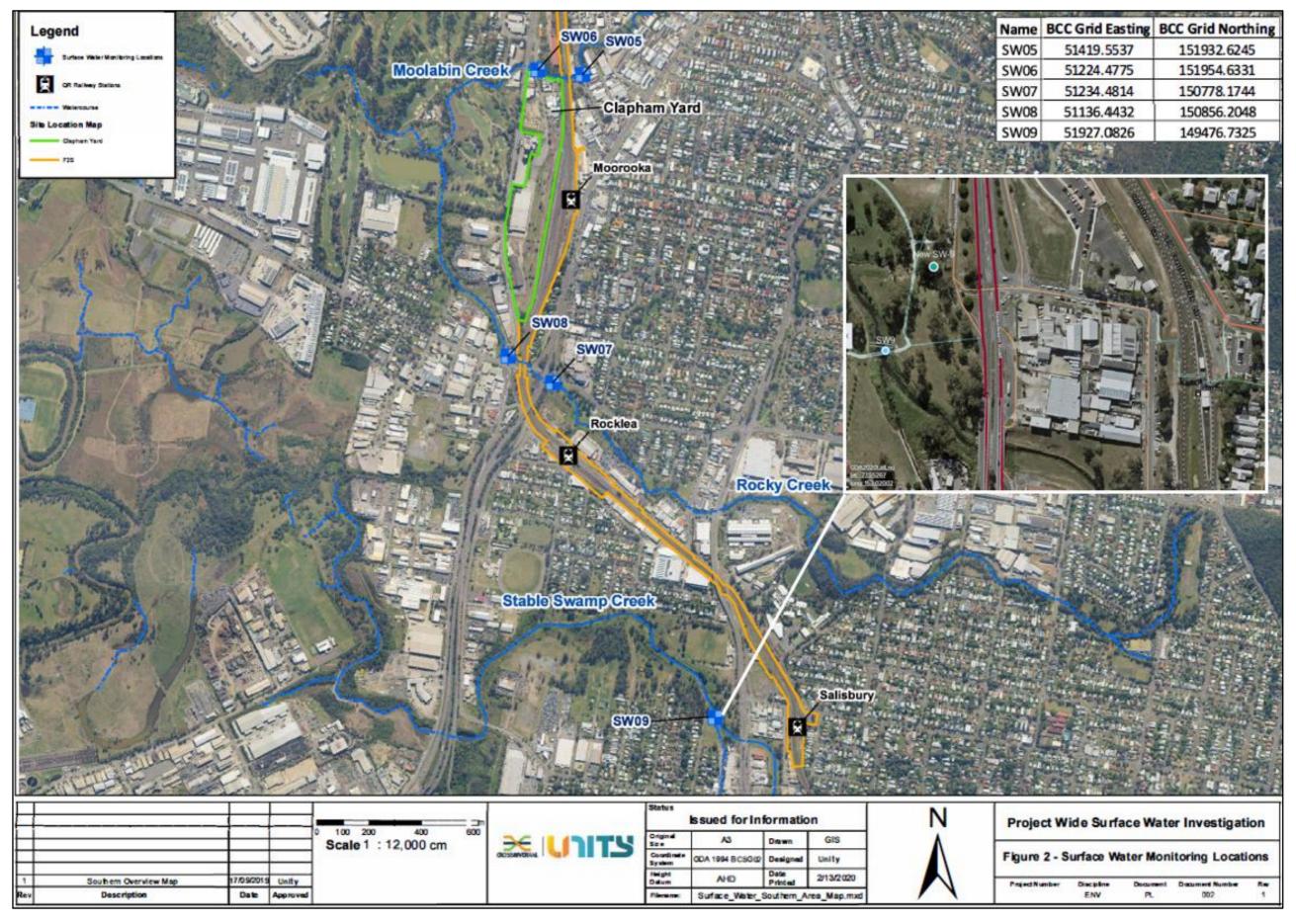


Figure 12: Southern WQ Locations

Appendix B TSD Monthly Report







COORDINATOR-GENERAL'S MONTHLY REPORT: JANUARY 2024

Prepared in accordance with Coordinator-General Imposed Condition 6 - Reporting.

1. Monthly Monitoring Summary

It is CBGU Joint Venture's intent to aim for the Goals and Objectives relevant to vibration, noise, air quality and water monitoring within the practical extent of delivering the Project.

Vibration monitoring was conducted on three (3) occasions during January 2024. Noise monitoring was conducted on seven (7) in January 2024. Each monitoring event that was undertaken confirmed works adhered to Project requirements.

Ambient air quality monitoring was conducted at Roma Street, Albert Street, Woolloongabba, Boggo Road and Southern Portal precinct sites during January 2024. Air quality monitoring confirmed works adhered to Project requirements.

Water quality monitoring was conducted before the release of water from the site on twenty-nine (29) occasions. Each monitoring event confirmed that Project requirements were adhered to. Four (4) rounds of surface water quality monitoring were conducted; the monitoring events confirmed no impacts were generated by the Project.

Cross River Rail – Tunnel and Stations

Document Number: CRR-TSD-RPT-CG-202401









2. CG Monthly Report – Compliance Assessment Against Imposed Conditions

Whilst not a requirement of Imposed Condition 6, CBGU offers the below Compliance Status Table as a good-will gesture to demonstrate the Project's ongoing environmental performance.

Table 1: Compliance Status – CG Imposed Conditions

CG Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
1.	General Conditions – compliance with the Project Changes relevant to the Contractor's scope.	Yes	CBGU Project works have been conducted in compliance with the Imposed Conditions.
2.	Outline Environmental Management Plan – timely submission to the Coordinator-General, including required sub-plans.	N/A	The OEMP is not an obligation of the CBGU Joint Venture.
3.	Design – the achievement of the Environmental Design Requirements.	Yes	Design and implementation proceeded in accordance with the Environmental Design Requirements.
4.	Construction Environmental Management Plan – all relating to Relevant Project Works.	Yes	All CBGU works were conducted in accordance with the Construction Environmental Management Plan (CEMP) (Rev 11).
5.	Compliance and Incident Management – Non-compliance events, notifications, and reporting.	Yes	Nil non-compliances occurred during the monitoring period (refer to Section 4).
6.	Reporting – Monthly and Annual reporting.	Yes	All reporting requirements are completed in accordance with Imposed Condition 6.
7.	Environmental Monitor – engaged and functions resumed.	Yes	An Environmental Monitor (EM) is appointed to the Project, and CBGU is committed to working collaboratively to aid the EM's functions under Imposed Condition 7.
8.	Community Relations Monitor – engaged and functions resumed.	Yes	A Community Relations Monitor (CRM) is appointed to the Project, and CBGU is committed to working collaboratively to aid the CRM's functions under Imposed Condition 8.
9.	Community Engagement Plan – developed and endorsed by Environmental Monitor.	Yes	A Community Engagement Plan (CEP) has been developed and implemented in accordance with Imposed Condition 9. The CEMP has been endorsed with the CEP.
10.	Hours of Work – works undertaken during approved hours.	Yes	CBGU Project works have been conducted in accordance with the approved hours of work.









CG Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
11.	Noise – Work must aim to achieve internal noise goals for human health and well-being.	Yes	CBGU Project work has aimed to achieve internal noise goals for human health and well-being. Where internal noise levels have been unable to be measured, suitable noise reductions have been applied in accordance with Imposed Condition 11. Noise monitoring data is provided within Section 3.2.
	Vibration – Works must aim to achieve vibration goals for cosmetic damage, human comfort and sensitive building contents.	Yes	CBGU Project work has aimed to achieve vibration goals for cosmetic damage, human comfort and sensitive buildings. Vibration monitoring data is provided within Section 3.1.
12.	Property Damage relating to ground movement	Yes	The management of potential impacts relating to property damage has been completed in accordance with Imposed Condition 12.
13.	Air Quality – Works must aim to achieve air quality goals for human health and nuisance.	Yes	CBGU Project works have aimed to achieve air quality goals. Air quality monitoring data is provided within Section 3.3.
14.	Traffic and Transport – Works must minimise adverse impacts on road safety and traffic flow.	Yes	CBGU Project works have been conducted in a manner that has minimised adverse impacts on road safety and traffic flow.
15.	Water Quality – Works must not discharge surface water and groundwater from the construction site above the relevant environmental values and water quality objectives.	Yes	CBGU has prepared and manages processes to ensure water quality is managed in accordance with Imposed Condition 15.
16.	Water Resources – evaluate potential impact, plan works, implement controls and monitor the inflow of groundwater associated with drawdown.	Yes	CBGU Project works are managed in accordance with Imposed Condition 16.
17.	Surface Water – Must be designed to avoid inundation from stormwater due to a 2-year (6hr) ARI rainfall event and flood waters due to a 5-year ARI rainfall event and constructed to avoid afflux or cause the redirection of uncontrolled surface water flows, including stormwater flows, outside of worksites.	Yes	Design of the CBGU Project works considers the requirements of Imposed Condition 17.
18.	Erosion and Sediment Control – Provisions for erosion and sediment control must be consistent with the Guidelines for Best Practice Erosion and Sediment Control (International Erosion Control Association, 2008) and the Department of Transport and Main Roads' Technical Standard MRTS52.	Yes	CBGU has prepared and manages processes to ensure erosion & sediment control is managed in accordance with Imposed Condition 18.









CG Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
19.	Acid Sulfate Soils managed as per the Queensland Acid Sulfate Soil Technical Manual.	Yes	CBGU has prepared and manages processes to ensure acid sulphate soils are managed in accordance with Imposed Condition 19.
20.	Landscape and Open Space – general requirement to minimise impacts on landscapes and open space values and specific requirements around Victoria Park	Yes	CBGU Project works are designed and implemented in accordance with Condition 20.
21.	Worksite Rehabilitation – worksites rehabilitated as soon as practicable upon completion of works or commissioning, and in consultation with Brisbane City Council.	Yes	CBGU Project works are designed and implemented in accordance with Condition 21.
22.	Flood Water – Temporary emission to allow the release of Flood Waters to high flow receiving waters.	Yes	CBGU Project works have been conducted in accordance with the provisions available to manage floodwaters.









3. Environmental Monitoring Results

Monitoring data is provided below in accordance with Imposed Condition 6(b)(i).

3.1 Vibration

Vibration requirements (levels) are defined as goals within Imposed Condition 11. The goals are to be aimed for.

The Coordinator-General's Change Reports acknowledges instances where these goals may not be achieved.

Vibration monitoring was conducted on three (3) occasions during January 2024. All vibration monitoring adhered to project requirements and is detailed in the table below.

Table 2: Vibration Monitoring Data

No.	Start Date	Time (AM/PM)	Finish Date	Location	Average Vibration level (mm/s)	Max Vibration Level (mm/s)	Vibration Goal (mm/s)	Receiver / Goal Type	Adhered to Project Requirements (Yes / No)
1.	15/01/2024	1:09 PM	18/01/2024	Main Street (Woolloongabba Precinct)	0.11	0.29	2	Heritage	Yes
2.	18/01/2024	6:30 AM	19/01/2024	Main Street (Woolloongabba Precinct)	0.11	0.39	2	Heritage	Yes
3.	22/01/2024	10:03 AM	22/01/2024	Railway Terrace (Southern Portal Precinct)	0.15	1.04	50	Residential	Yes

Cross River Rail – Tunnel and Stations

Document Number: CRR-TSD-RPT-CG-202401

Page 5









3.2 Noise

Noise requirements (levels) are defined as goals within Imposed Condition 11. The goals are to be aimed for.

The Coordinator-General Change Reports acknowledge instances where these goals may not be achieved.

Noise monitoring was conducted on seven (7) occasions during January 2024. All noise monitoring adhered to project requirements and is detailed in the table below.

Table 3: Noise Monitoring Data

No.	Date	Time (AM / PM)	Location (Street Name) (Construction Precinct)	Purpose of Monitoring	Internal or External [3] Monitoring	Activity	Dominant Noise Source	Noise Goal LA10 ^[1]	Noise level LA10	Noise Goal LAeq ^[2]	Noise level	Adhered to Project Requirements (Yes / No)
1.	17/01/2024	1:32 PM	Albert Street (Albert Street Precinct)	Construction Monitoring at Sensitive Places	External	Station build	Construction and road traffic	72	71.2	62	68.2	Yes
2.	18/01/2024	10:01 AM	Stanley Street (Woolloongabba Precinct)	Construction Monitoring at Sensitive Places	External	Earthworks	Road traffic	72	72.6	62	71.1	Yes
3.	18/01/2024	11:12 AM	Stanley Street (Woolloongabba Precinct)	Model Verification	External	Ground retention works	Constriction and road traffic	72	72.8	62	70.6	Yes
4.	19/01/2024	5:25 PM	Albert Street (Albert Street Precinct)	Model Verification	Internal	Emergency System	Construction works	55	35.6	45	34.6	Yes
5.	22/01/2024	9:31 AM	Railway Terrace (Southern Portal Precinct)	Construction Monitoring at Sensitive Places	External	Utilities works	Construction works	57	66	47	61	Yes
6.	23/01/2024	10:15 PM	Albert Street (Albert Street Precinct)	Construction Monitoring at Sensitive Places	External	Concrete works	Construction and non-project related construction	59	65.5	52	62.7	Yes
7.	23/01/2024	10:37 PM	Albert Street (Albert Street Precinct)	Construction Monitoring at Sensitive Places	External	Concrete works	Construction and non-project related construction	59	65	52	63.2	Yes

Cross River Rail – Tunnel and Stations

Document Number: CRR-TSD-RPT-CG-202401

Page 6









- [1] Intermittent noise goal (LA10)
- [2] Continuous noise goal (LAeq)
- [3] In accordance with Imposed Condition 11, where internal noise levels were unable to be measured, external noise goals were developed by an acoustic specialist using the following standards: ISO 140-5:1998 Acoustics – Measurement of Sound Insulation in Buildings and of Building Elements, Part 5: Field measurements of airborne sound insulation of façade elements and facades and ISO 354:1985 Acoustics – Measurement of sound absorption in a reverberation room.

Cross River Rail – Tunnel and Stations









Air Quality

Deposited Dust Results 3.3.1

Air quality requirements (levels) are defined as goals within Imposed Condition 13. The goals are to be aimed for. The Coordinator-General Change Report acknowledges instances that exist when these goals may not be achieved. Dust deposition monitoring was performed in January 2024. The dust deposition gauge results for the reporting period are detailed below, and all monitoring data adhered to Project requirements.

Table 4.2.2: Air Quality Monitoring – January Deposited Dust Data

	Proj	ect Wide Air Quality	Goals ^[1]		
Location	Criterion	Air Quality Indicator	Goal (mg/m²/day)	Monitoring results (mg/m²/day)	Comments
Roma Street Precinct				16.67	
Albert Street Precinct (North)		Deposited dust	120	37.5	
Albert Street Precinct (South)	- Nuisance			31.25	
Woolloongabba Precinct (North)				26.67	Air quality monitoring was performed during the reporting period. All results adhered to Project
Woolloongabba Precinct (South)	- Nuisance	Deposited dust		_ [2]	requirements.
Boggo Road Precinct (North)				93.33	
Boggo Road Precinct (South)				76.67	
Southern Portal (East)				23.33	

^[1] Project works must aim to achieve construction air quality goals. The Coordinator-General Change Report – Whole of Project Refinements 2019 acknowledges instances exist that these goals may not be achieved.

Cross River Rail - Tunnel and Stations

Page 8

^[2] The Woolloongabba (South) Dust Deposition Gauge was stolen during the reporting period. No sample was available for collection/analysis. The dust deposition gauge and bottle were reinstated.









3.3.2 Ambient Air Quality Results

Total Suspended Particles (TSP) and particulate matter less than 10µm (PM10) monitoring were conducted during January 2024.

TSP and PM10 are monitored using portable air quality units and nearby Government air quality stations. Targeted monitoring of potential dust-generating activities is conducted by the mobile air quality units and was completed at Albert Street, Woolloongabba and Boggo Road Precincts during January 2024. Three (3) Government air quality stations near the Construction Precincts are also utilised.

Table 5: Targeted Air Quality Monitoring – Total Suspended Particles and PM10 Data

Quality Monitoring	rotar Gaoperiae							
	TSP	PM10	Woolld	ongabba	Albe	ert	Boggo	Road
Date	Project Goal [1]	Project Goal	TSP	PM 10	TSP	PM 10	TSP	PM 10
				(μg/m³/24	hr)			
01-Jan-24	80	50	6.56	6.50	20.69	20.66	_ [2]	_ [2]
02-Jan-24	80	50	8.81	8.78	14.25	14.23	_ [2]	_ [2]
03-Jan-24	80	50	8.25	8.15	13.69	13.63	5.15	5.13
04-Jan-24	80	50	5.47	5.41	10.11	10.06	3.59	3.58
05-Jan-24	80	50	6.87	6.81	13.23	13.16	3.56	3.56
06-Jan-24	80	50	6.31	6.24	10.69	10.65	_ [2]	_ [2]
07-Jan-24	80	50	9.54	9.44	11.20	11.18	_ [2]	_ [2]
08-Jan-24	80	50	7.18	7.15	11.31	11.27	_ [2]	_ [2]
09-Jan-24	80	50	7.29	7.27	13.17	13.13	4.67	4.64
10-Jan-24	80	50	11.34	11.27	12.72	12.67	5.99	5.97
11-Jan-24	80	50	7.76	7.73	13.06	13.01	4.71	4.70
12-Jan-24	80	50	9.09	9.06	15.87	15.81	5.53	5.51
13-Jan-24	80	50	9.34	9.31	15.02	14.97	3.53	3.53
14-Jan-24	80	50	7.08	7.03	10.22	10.16	3.47	3.43
15-Jan-24	80	50	4.75	4.72	10.56	10.49	4.11	4.08
16-Jan-24	80	50	5.36	5.32	11.59	11.54	3.49	3.48
17-Jan-24	80	50	6.67	6.62	10.81	10.75	4.57	4.56
18-Jan-24	80	50	6.79	6.70	11.11	11.03	2.94	2.94









	TSP	PM10	Woolld	oongabba	Alb	ert	Boggo	Road
Date	Project Goal [1]	Project Goal	TSP	PM 10	TSP	PM 10	TSP	PM 10
				μg/m³/24	hr)			
19-Jan-24	80	50	7.82	7.74	13.96	13.89	5.75	5.74
20-Jan-24	80	50	5.86	5.83	9.65	9.60	4.01	4.00
21-Jan-24	80	50	7.12	7.08	9.42	9.40	6.08	6.07
22-Jan-24	80	50	12.35	12.21	15.55	15.49	8.36	8.34
23-Jan-24	80	50	11.36	11.31	16.17	16.11	7.50	7.49
24-Jan-24	80	50	_ [3]	_ [3]	13.85	13.77	4.32	4.30
25-Jan-24	80	50	9.68	9.43	11.51	11.44	4.32	4.31
26-Jan-24	80	50	9.44	9.39	10.64	10.62	5.57	5.55
27-Jan-24	80	50	12.64	12.51	15.11	15.06	8.62	8.62
28-Jan-24	80	50	4.98	4.96	9.37	9.35	3.66	3.64
29-Jan-24	80	50	4.42	4.38	9.64	9.59	_ [2]	_ [2]
30-Jan-24	80	50	_ [3]	_ [3]	14.12	14.07	_ [2]	_ [2]
31-Jan-24	80	50	6.85	6.75	13.55	13.49	4.15	4.11

^[1] Project works must aim to achieve construction air quality goals. The Coordinator-General Change Report – Whole of Project Refinements 2019 acknowledges instances that exist that these goals may not be

^[2] The Boggo Road air quality unit experienced technical difficulties on the 1st - 2nd, 6th - 8th, and 29th - 30th of January 2024. As soon as practicable, the unit was inspected, and the issue was resolved. A nearby (Woolloongabba) DES Air Quality Station demonstrated compliant air quality during this outage period.

^[3] The Woolloongabba air quality unit experienced technical difficulties on the 24th and 30th of January. As soon as practicable, the unit was inspected, and the issue was resolved. A nearby (South Brisbane) DES Air Quality Station demonstrated compliant air quality during this outage period.



CBGU also utilises three (3) Government air quality monitoring stations to monitor PM10 near the Project sites. The results during this reporting period were as follows:

- Brisbane CBD: PM10 daily maximum average: **29.4 µg/m3/24 hr** (https://apps.des.qld.gov.au/air-quality/chart/?station=cbd¶meter=18&date=1/1/2024&timeframe=month)
- South Brisbane: PM10 daily maximum average: **29.1 µg/m3/24 hr** (https://apps.des.qld.gov.au/airquality/chart/?station=sbr¶meter=18&date=1/1/2024&timeframe=month)
- Woolloongabba: PM10 daily maximum average: **26.7 µg/m3/24 hr** (https://apps.des.qld.gov.au/air-quality/chart/?station=woo¶meter=18&date=1/1/2024&timeframe=month).

The graphical representation of the Government air quality data is presented in the below charts (refer to Figure 1-3).

Cross River Rail - Tunnel and Stations

Document Number: CRR-TSD-RPT-CG-202401









Particle PM₁₀ at Brisbane CBD, 1-31 January 2024 @ about Particle PM₁₀

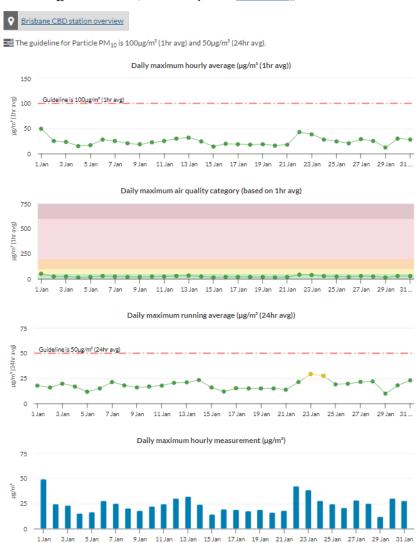


Figure 1: Brisbane CBD - DES Station - PM10 graph for January 2024 (reproduction from the DES website).









Particle PM₁₀ at South Brisbane, 1-31 January 2024 @ about Particle PM₁₀ South Brisbane station overview The guideline for Particle PM₁₀ is 100μg/m³ (1hr avg) and 50μg/m³ (24hr avg). Daily maximum hourly average (µg/m3 (1hr avg)) Daily maximum air quality category (based on 1hr avg) (T) (W/S) 250 Daily maximum running average (µg/m³ (24hr avg)) 3 Jan 5 Jan 7 Jan 9 Jan 11 Jan 13 Jan 15 Jan 17 Jan 19 Jan 21 Jan 23 Jan 25 Jan 27 Jan 29 Jan 31. Daily maximum hourly measurement (µg/m³)

Figure 2: South Brisbane – DES Station - PM10 graph for January 2024 (reproduction from the DES website).

Cross River Rail – Tunnel and Stations

Document Number: CRR-TSD-RPT-CG-202401









Particle PM₁₀ at Woolloongabba, 1-31 January 2024 @ about Particle PM₁₀



Figure 3: Woolloongabba - DES Station - PM10 graph for January 2024 (reproduction from the DES website).









3.4 Water Quality – Discharge

CBGU undertook twenty-nine (29) water quality monitoring events (groundwater and surface water) before the release from the site.

3.4.1 Groundwater Discharge

Water quality monitoring data is provided in the table below.

Table 6: Groundwater Discharge – Water Quality Monitoring Data

	Date		Testing of Water Quality Objectives [1]								Adhered to		
Location		Нd	Suspended solids (mg/L)	Turbidity (NTU)	Ammonia N (µg/L) ^[3]	Oxidised N (µg/L) [3]	Organic N (µg/L) [3]	Total nitrogen (µg/L) [4]	Total phosphorus (µg/L)	Filterable Reactive phosphorus (µg/L) [3]	Chlorophyll a (µg/L)	Dissolved oxygen (%) [2]	Project Requirements (Yes / No)
Boggo Road ^[5]	16/01/2024	7.41	19.00	5.95	<10	1010	300	1300	150	<10	<1	111.56	Yes
Albert Street ^[5]	23/01/2024	7.52	14.00	0.20	120	480	600	1200	190	30	<1	81.09	Yes

^{- [1]} The Project's discharge procedure is designed to minimise environmental impact and aim to achieve the water quality objectives. Water quality objectives are defined as goals within the Brisbane River estuary environmental values and water quality objectives document.

- [5] The Water Treatment Sampling regime has been reduced to be consistent with the Project requirements. Water treatment plant results will be reported quarterly.
- Note: Testing of EPP (Water) Quality Objectives are analysed at a NATA accredited laboratory each month (results provided above). Field testing (turbidity, pH) is done regularly during ongoing discharge.

Cross River Rail - Tunnel and Stations

Page 15

^{- [2]} All results adhere to Project requirements in that site practices are designed to aim to achieve the water quality objectives. The dissolved oxygen samples were acquired before discharge from the site. Pumping of the water will have inadvertently aerated the water, thus influencing the dissolved oxygen level.

^{- [3]} All results adhere to Project requirements in that site practices aim to achieve the water quality objectives. These samples identified results generally consistent with pre-construction conditions, and no external influences were introduced by construction activity.

^{- [4]} Total nitrogen levels adhered to Project requirements in that site practices are designed to aim to achieve the water quality objectives. The results are mostly below that of the receiving environment. They are also considered abnormal compared to results from previous months, and are influenced by external factors (e.g., high rainfall events, overloaded sewage systems, fertilising natural areas, etc.) rather than related to construction activities.









3.4.2 Ponded/Surface Water Discharge

Discharged ponded/Surface water quality monitoring data is provided in the table below.

Table 7: Surface Water Discharge - Water Quality Monitoring Data

	dee vater bisonarge vvater quality mornion		Testing of Water (Quality Objectives [1]	Adhered to Project
No.	Location ^[2]	Date	resting or truter		Requirements
			рН	Turbidity (NTU)	(Yes / No)
1.	Northern Portal	20/12/2023	7.88	4.64	Yes
2.	Northern Portal	21/12/2023	7.82	1.98	Yes
3.	Boggo Road	22/12/2023	7.10	4.69	Yes
4.	Northern Portal	22/12/2023	7.88	37.30	Yes
5.	Boggo Road	24/12/2023	7.65	7.41	Yes
6.	Northern Portal	24/12/2023	7.70	32.10	Yes
7.	Boggo Road	26/12/2023	7.47	3.29	Yes
8.	Northern Portal	26/12/2023	7.67	14.31	Yes
9.	Northern Portal	28/12/2023	7.88	4.17	Yes
10.	Northern Portal	30/12/2023	7.99	1.39	Yes
11.	Northern Portal	1/01/2024	8.17	34.90	Yes
12.	Northern Portal	3/01/2024	7.60	3.34	Yes
13.	Northern Portal	4/01/2024	7.77	2.34	Yes
14.	Northern Portal	5/01/2024	7.71	0.92	Yes
15.	Northern Portal	8/01/2024	7.76	10.41	Yes









16.	Northern Portal	9/01/2024	7.62	3.48	Yes
17.	Northern Portal	10/01/2024	7.63	0.29	Yes
18.	Northern Portal	11/01/2024	7.73	0.75	Yes
19.	Northern Portal	12/01/2024	7.77	3.82	Yes
20.	Northern Portal	15/01/2024	7.68	4.16	Yes
21.	Boggo Road	16/01/2024	7.34	2.15	Yes
22.	Boggo Road	16/01/2024	7.56	5.91	Yes
23.	Northern Portal	16/01/2024	7.68	8.90	Yes
24.	Northern Portal	17/01/2024	7.53	13.24	Yes
25.	Northern Portal	18/01/2024	7.55	4.36	Yes
26.	Northern Portal	19/01/2024	7.22	40.70	Yes
27.	Northern Portal	22/01/2024	7.62	2.24	Yes

^[1] The Project's discharge procedure is designed to minimise environmental impact and aim to achieve the water quality objectives. All discharges were compliant with Guidelines for Best Practice Erosion and Sediment Control (IECA, 2008) and the Department of Transport and Main Roads' Technical Standard MRTS 52 - Erosion and Sediment Control.

^[2] For the Northern Portal worksite, water quality data from the 22nd until the 31st of January 2024 were not able to be retrieved in time for inclusion in this report due to site access. The water quality data from these dates will be included in the February 2024 reporting period.









3.5 Water Quality – Surface Water

During January 2024, CBGU JV undertook four (4) rounds of surface water sampling at five (5) site locations (upstream and downstream).

Results from the below-monitoring locations reflect the condition of the broader catchment (not just the influence of the Project). Water quality generally appears good, and water discharge from the Project would not have had an impact on the catchment, considering the results also provided within section 3.4 above.

Table 8: Offsite Upstream & Downstream Water Quality Data

Location	Upstream / Downstream	Date	Purpose of Monitoring	Turbidity (NTU)	Dissolved oxygen (%)	рН
Northern Portal	Upstream	3/01/2024	Monthly/Post rainfall	7.62	89.25	7.58
Northern Portal	Downstream	3/01/2024	Monthly/Post rainfall	10.61	65.72	7.2
Roma Street	Upstream	3/01/2024	Monthly/Post rainfall	9.93	75.4	7.65
Roma Street	Downstream	3/01/2024	Monthly/Post rainfall	11.22	74.65	7.69
Albert Street	Upstream	3/01/2024	Monthly/Post rainfall	9.88	76.21	7.6
Albert Street	Downstream	3/01/2024	Monthly/Post rainfall	10.44	74.01	7.46
Boggo Road ^[1]	Downstream	3/01/2024	Monthly/Post rainfall	22.3	80.03	7.9
Woolloongabba	Upstream	3/01/2024	Monthly/Post rainfall	7.54	84.11	7.88
Woolloongabba	Downstream	3/01/2024	Monthly/Post rainfall	7.19	91.06	7.93
Albert Street	Upstream	19/01/2024	Post Rainfall	35.4	85.93	7.65
Albert Street	Downstream	19/01/2024	Post Rainfall	43.3	77.46	7.53
Northern Portal	Upstream	19/01/2024	Post Rainfall	12.9	68.52	7.51

Cross River Rail – Tunnel and Stations

Document Number: CRR-TSD-RPT-CG-202401









Location	Upstream / Downstream	Date	Purpose of Monitoring	Turbidity (NTU)	Dissolved oxygen (%)	рН
Northern Portal	Downstream	19/01/2024	Post Rainfall	66.8	59.82	7.2
Roma Street	Upstream	19/01/2024	Post Rainfall	23.5	79.24	7.27
Roma Street	Downstream	19/01/2024	Post Rainfall	23.9	74.13	7.33
Woolloongabba	Upstream	19/01/2024	Post Rainfall	54.6	96.09	7.96
Woolloongabba	Downstream	19/01/2024	Post Rainfall	15.25	107.37	8.11
Boggo Road [1]	Downstream	19/01/2024	Post Rainfall	54.6	96.09	7.96
Albert Street	Upstream	29/01/2024	Post Rainfall	_[2]	_[2]	_[2]
Albert Street	Downstream	29/01/2024	Post Rainfall	_[2]	_[2]	_[2]
Woolloongabba	Upstream	29/01/2024	Post Rainfall	_[2]	_[2]	_[2]
Woolloongabba	Downstream	29/01/2024	Post Rainfall	_[2]	_[2]	_[2]
Boggo Road ^[1]	Downstream	29/01/2024	Post Rainfall	_[2]	_[2]	_[2]
Roma Street	Upstream	29/01/2024	Post Rainfall	_[2]	_[2]	_[2]
Roma Street	Downstream	29/01/2024	Post Rainfall	_[2]	_[2]	_[2]
Northern Portal	Upstream	29/01/2024	Post Rainfall	_[2]	_[2]	_[2]
Northern Portal	Downstream	29/01/2024	Post Rainfall	_[2]	_[2]	_[2]
Albert Street	Upstream	31/01/2024	Post Rainfall	_[2]	_[2]	_[2]









Location	Upstream / Downstream	Date	Purpose of Monitoring	Turbidity (NTU)	Dissolved oxygen (%)	рН
Albert Street	Downstream	31/01/2024	Post Rainfall	_[2]	_[2]	_[2]
Woolloongabba	Upstream	31/01/2024	Post Rainfall	_[2]	_[2]	_[2]
Woolloongabba	Downstream	31/01/2024	Post Rainfall	_[2]	_[2]	_[2]
Boggo Road ^[1]	Downstream	31/01/2024	Post Rainfall	_[2]	_[2]	_[2]
Roma Street	Upstream	31/01/2024	Post Rainfall	_[2]	_[2]	_[2]
Roma Street	Downstream	31/01/2024	Post Rainfall	_[2]	_[2]	_[2]
Northern Portal	Upstream	31/01/2024	Post Rainfall	_[2]	_[2]	_[2]
Northern Portal	Downstream	31/01/2024	Post Rainfall	_[2]	_[2]	_[2]

^{- [1]} Monitoring at the Boggo Road site occurs at a culvert outlet at the beginning of the surface catchment. There is no upstream/downstream monitoring point as such. The culvert outlet receives water released from the site and a broader stormwater catchment.

^{- [2]} At the time of the completion of this report, the water quality results had not been received from the laboratory. The water quality results will be reported in next month's report.









4 Non-Compliances

Details of non-compliances are provided in accordance with Imposed Condition 6(b)(ii).

A Non-Compliance Event is defined as Project works that do not comply with the Imposed Conditions. Nil non-compliances occurred during the monitoring period.

Table 9: Non-Compliance Events this Month

Event Title	Location, Date, and time of the event	Date the Event was Formally Notified to CG/IEM	Conditions Affected	Date the Event Report Formally Sent to CG/IEM	Status of Event
		Nil			









5 Complaints

Reporting of complaints is provided below in accordance with Imposed Condition 6(b)(iii).

During January 2024, three (3) complaints relating to the Project were received, as detailed in

Table 10 below.

Table 10: Summary of Complaints

No.	Date	Location	Description of Issue	Responses	Status of Event
1.	8/01/2024	Mary Street (Albert Street Precinct)	Noise	A stakeholder contacted the Project regarding noise generated from the Albert Street worksite. CBGU provided the stakeholder with an overview of the works occurring and their duration. CBGU also outlined the mitigation measures used to alleviate potential impacts and ensure compliance. CBGU reviewed the circumstances and monitoring confirmed works adhered to the Project's noise requirements, and the works undertaken were consistent with the community notification.	Closed
2.	10/01/2024	Albert Street (Albert Street Precinct)	Noise	A stakeholder contacted the Project regarding noise generated from the Albert Street worksite. CBGU provided the stakeholder with an overview of the works occurring and their duration. CBGU also outlined the mitigation measures used to alleviate potential impacts and ensure compliance. CBGU reviewed the circumstances and monitoring confirmed works adhered to the Project's noise requirements, and the works undertaken were consistent with the community notification.	Closed
3.	29/01/2024	Boggo Road (Boggo Road Precinct)	Traffic Management	A stakeholder contacted the Project regarding workforce parking. CBGU investigated and informed the workforce about parking requirements via a toolbox talk.	Closed

Cross River Rail – Tunnel and Stations

Page 22