

Table of Contents

EXEC	UTIVE	SUMMARY	3		
No	n-Compliance Events				
DEFIN	IITION	ıs	8		
1. I	NTROI	DUCTION	9		
1.1	. BAC	CKGROUND	9		
1.2	. Pro	OJECT DELIVERY	9		
1.3	. REP	PORTING FRAMEWORK	11		
1.4	. Mo	DNTHLY ENVIRONMENT REPORT ENDORSEMENT	11		
2. (COMPL	LIANCE REVIEW	11		
2.1	. Rel	LEVANT PROJECT WORKS	11		
2.2	. KEY	Y ENVIRONMENTAL ELEMENTS	13		
2	2.2.1.	Noise	13		
2	2.2.2.	Vibration	15		
2	2.2.3.	Air Quality	15		
2	2.2.4.	Water Quality	17		
2	2.2.5.	Erosion and Sediment Control	19		
2.3	. Con	MPLAINTS MANAGEMENT	19		
2.4	. NEV	w Upcoming Project Works	21		
2.5	Non-Compliance Events		22		
APPE	APPENDIX A RIS MONTHLY REPORT24				
A DDE	NIDIV E	T TO MONTHLY DEPORT	25		



Executive Summary

This Monthly Environmental Report (MER) has been produced for Project Works undertaken on site for July 2022 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) and the 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 – compliancewith the Project Changes relevant to the contractor's scope		The CEMP and site management plans are in accordance with the Project Changes.
Outline Environmental Management Plan – timely submission to the Coordinator- General including required sub- plans		Yes	OEMP dated June 2020 is effective for the reporting period.
3.	Design – achievement of the Environmental Design Requirements		Ongoing progress with design packages.
4.	Construction Environmental Management Plan – all relating to Relevant Project Works.	Yes	RIS – CEMP Revision 13 covering full scope of RIS works is effective from 14 March 2022. TSD – CEMP Revision 10 covering full scope of TSD works is effective from 28 June 2022.
5.	Compliance and Incident management – Non-compliance events, notifications and reporting.	Yes	There were no non-compliance events (NCEs) in July 2022. Refer to Section 2.5 of this report.



Imposed Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
6.	6. Reporting – Monthly and Annual reporting.		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.
11.	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 based on the predictive noise assessments for the relevant project works during the reporting period. TSD – Noise monitoring was undertaken to validate predicted noise modelling and for stakeholder enquiries. Noise monitoring confirmed project requirements were met. Refer to Appendix B (Table 3 and Section 3.2).
	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 Dutton Park for demolition works. The results met the requirements of the endorsed CEMP. TSD – Vibration monitoring occurred once for a controlled blast at Albert Street. The results met the requirements of the endosed CEMP.
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. Pre-condition surveys have been completed at heritage,





Imposed Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
			commercial and residential buildings at RNA, Northern Corridor and Fairfield 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. No enquiries relating to property damage were received during July.
			Air quality monitoring met Project air quality goals.
13.	Air quality – Works must aim to achieve air quality goals for human health and nuisance.	Yes	RIS – Refer to Appendix A (Tables 7, 8 and 9 and Section 3.2, plus Figures 1).
			TSD – Refer to Appendix B (Tables 4.2 and 5 plus 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.
	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 Subplans.	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 July.
			Post-rainfall monitoring occured at Breakfast Creek, Moolabin Creek and Rocky Water Hole Creek.
15.			TSD – Active discharge of groundwater occurred from Roma Street, Albert Street, Woolloongabba and Boggo Road worksites. Monitoring results of groundwater quality prior to discharge is consistent with the pre-construction water quality levels.
			Surface water discharges occurred at the Northern Portal worksite on 29 occassions. The monitoring results demonstrated the surface water discharges met project water quality discharge criteria.
			Routine in stream monthly monitoring met project water quality requirements.
			Refer to Appendix A (Tables 11) for surface water monitoring results.
			Refer to Appendix B (Table 6) for ground water monitoring results.





Imposed Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
			Refer to Appendix B (Tables 7 and 8) for surface water monitoring results.
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 continously 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 June 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	NA	N/A





	Imposed Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
commissioning, and in consultation with Brisbane City Council.				

Non-Compliance Events

There were no NCEs raised in July 2022.





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
DES	Department of Environment and Science
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.

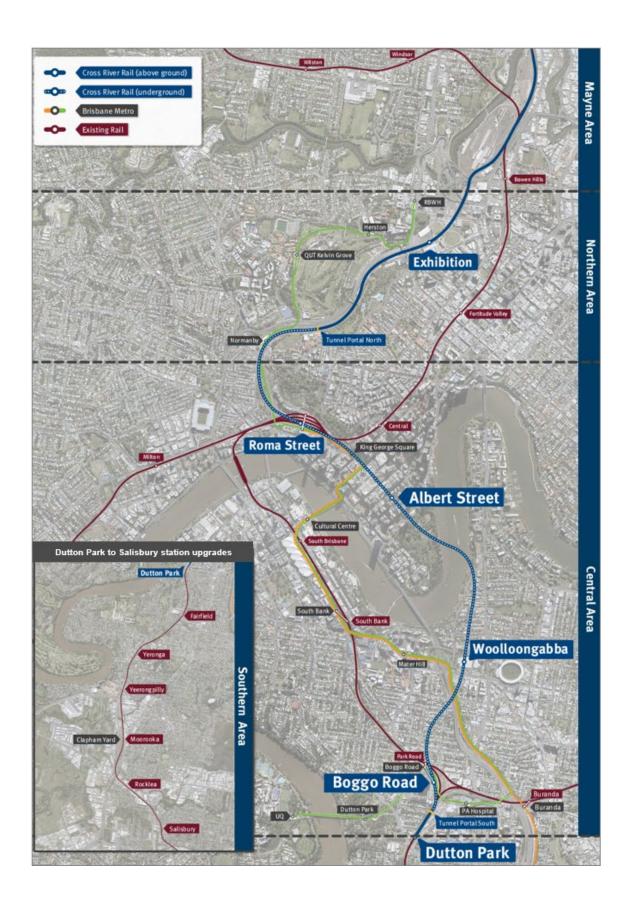
The Project is geographically divided into four areas:

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

These are shown in the figure over.









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 NCE's, 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, will be 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 July 2022:

Area	Project Works
Mayne Area	 Mayne Yard North – Mayne Yard North and associated facilities have been completed by SCAS RIS #44, awaiting QR acceptance; Graffiti Removal Facility (GRF) – completed included the flood-damaged cladding and roofing; Crew Change Building incl Car Park – completed; QR's temporary Access Road to new Yard and new facilities completed; Tripod Bridge (BR11/13) – RSS walls completed and deck units landed; Breakfast Ck Bridge (BR08) permanent piling completed for Pier 2, 3 and 4 and also the RW150 on the Northern side of BR08; Shunt Road (track) and Access Road (road) – earthworks nearing completion; CRR Lines – embankment construction including Stage 1 completed and surcharge load nearing release; RW130 – Retaining wall on Eastern side under ICB overpass continues; and BR12 – new QR pedestrian bridge from Bowen Hills, has commenced with preparation works at the Eastern abutment.
Northern Area	 RNA/ Northern Corridor – CSR scope ongoing throughout corridor; Victoria Park Feeder Station – oil separator tank placed, FRP for switch room nearing completion; Watermain underbore Bowen Bridge Road complete; CSR scope GST and on Bridge structure BR34 nearing completion; Drainage on western side of viaduct complete; and Successful handback of areas to RNA for EKKA 2022.





Area	Project Works
7.1.04	Northern Portal –
	 Base slab works in the TBM extraction box ongoing; Portal sump permanent lining FRP works nearing completion; Inner wall and liner walls commenced; Blinding, cavi drain and base slab installation in open trough section ongoing; and Intermediatory firewall works ongoing.
Central Area	Roma Street –
	 Station Building – FRP walls Front of House (FoH), Back of House (BoH) in progress for B4 to B2, and slabs to B2 Back of house and B3 FoH in progress; Arch FRP works to 3 adits in progress; Services building – B2 slabs complete, B1 1st slab in progress; Platform 2 temporary canopy column extensions in progress. 14 of 24 permanent cavern arch linings poured; and Southern cavern BoH FRP works commenced.
	Albert Street –
	 Lot 1 – B10 level base slab FRP works 100% complete, B10 perimeter walls 82% complete, and B10 internal walls 55% complete; Lot 2 – AS1 shaft and adits AA2 and AA6 ongoing excavation and controlled blasting, preparation of permanent lining of cavern ongoing with waterproofing, steel fixing works and arch form assembly; and Lot 3 – back blinding and waterproofing of pits complete and cavidrain to B4 level at 75% complete.
	Woolloongabba –
	 Running tunnel final arch pour complete, removal of falsework to follow in August; North cavern back of house construction in progress; First stage invert construction complete in TBM tunnels, Defect works substantially complete; BOH Final Jump form pour completed 13/07/2022, demobilisation of the system in progress; Upline permanent lining complete; Demobilisation of both forms in upline and downline complete; Northern cavern back of house construction continues; and Surface demobilisation of conveyor and other facilities continues.
	Tunnels –
	 TBM tunnels Low Vibration Track (LVT) blocks placed through TBM 2 and concreted in as part of stage 2 invert pours; Southern mined upline tunnel permanent lining nearing completion (~98%); Southern mined downline tunnel permanent lining nearing completion (~98%); and XP1 and XP2 walls poured and formwork stripped.
	Boggo Road –
	 Northern cavern BoH internal structures ongoing 95%; Perimeter walls continuing with some locations now completed to full height; Concrete to in-situ structure at 44% complete; Reinforcement to in-situ structure 54% complete; and Ancillary structure to southern end of station continuing, including new goods lift.
	Southern Portal –
	 Detailed excavation and shotcrete within cut and cover trough ongoing; Completed open-trough base slab draining works; Sewer and stormwater manhole construction ongoing;





Area	Project Works
Alcu	
	 Excavation works ongoing in Zone A; and Boggo Road bridge western abutment piling works ongoing.
Southern Area	Dutton Park –
	 Demolition of Cope Street properties continued throughout July with the activity nearing completion; Removal of Annerley Rd billboard completed during SCAS 23 and 24 July; and Mobilisation of the site team to office facility on Annerley Rd during the period.
	Fairfield Station –
	 Ongoing installation of inground services; water, sewer, stormwater, electrical, communications, signaling conduiting; Ongoing installation of overpass foundations including completion of Mildmay St lower-level overpass foundation, completion of tension anchors under PL1, PL 2/3; Ongoing installation of 'flowable' backfill operation throughout PL1 & PL2/3; Ongoing installation of lift sump structure and overflow pits; Completed installation of coping edge support brackets to PL 1 / 2 / 3; and Installation of the final 3 x Platform 3 precast wall units (previously providing access into central area). Yeronga Station – Continuation of building trades fit-out & rough-in throughout the platform facilities;
	 Platform 1 and 3 roofing works; Installation of canopy roofing over Platform 1; Preparation of lake Street entrance civil works; Station electrical, comms, cable pulling works ongoing; UTX Crossing North and UTX Crossing South; and Continuation of Fairfield Rd West overpass foundations, pile cap completion and preparation for column pour.
	Clapham Yard –
	 Bridges BR93 (Moolabin Ck) and BR94 (Chale St) – piling completed and FRP scope commenced; RM620 and RW635 (Retaining walls along Western Boundary and Fairfield Road) Completed; Drainage scope (Dual Gauge) nearing completion incl the Fairfield Road underbore; SEQ watermain protection works commenced; and CSR works commenced.

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.





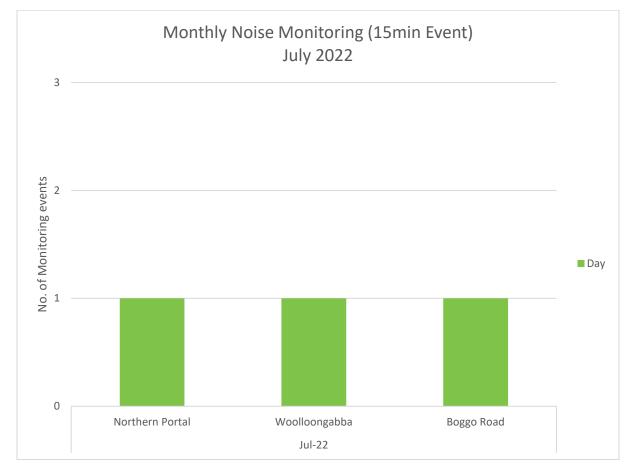
For Project Works where potential noise impacts are modelled to be above the noise goal but below the noise goal plus 20dBA, this work is authorised where the endorsed CEMP and associated Noise and Vibration Management Plan is being implemented, including communicating construction activities to potential 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 determine compliance with the project's noise requirements and to calibrate modelled predictions the project applies recommended façade attenuation corrections, which consider receiver property type.

In the Northern Area, noise monitoring was undertaken to validate predictive modelling for rail hauling and fit-out works at the Northern Portal. Monitoring results for the Northern Area are detailed in **Appendix B** (Table 3). The TSD contractor reported that the project noise requirements have been met.

In the Central Area, noise monitoring was undertaken to validate predictive modelling at Sensitive Places close to the project worksites and in response to noise complaints. 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).

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





2.2.2. Vibration

In the Central Area, vibration monitoring was triggered at Albert Street during a controlled blast. Monitoring results are detailed in **Appendix B** (Table 2). The TSD contractors reported that the project vibration requirements have been met.

In the Southern Area, vibration monitoring was triggered at Dutton Park where Cope Street properties were being demolished. Monitoring results are detailed in **Appendix A** (Table 5). The RIS contractors reported that the project vibration requirements have been met.

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.

Dust deposition results are detailed in **Appendix A** (Table 7 and figure 1) and **Appendix B** (Table 4.2).

A summary of dust deposition monitoring is provided in the table below.

Air Quality – Dust Deposition Monitoring				
Area	Worksite	Monitoring Location Comments		
Mayne Area	Mayne Yard	Mayne Yard	- Results met air quality goal	
Northern	RNA / Exhibition	RNA Showgrounds	- Results met air quality goal	
Area	Northern Portal	Northern Portal (near Brisbane Girls Grammar School)	- Results met air quality goal	
	Albert Street	Mary Street	- Results met air quality goal	
	Albert Street	Elizabeth Street	- Results met air quality goal	
	Boggo Road	Quarry Street (north of the site)	- Results met air quality goal	
		Peter Doherty Street/Leukemia Foundation	- Results met air quality goal	
Central Area	Southern Portal	Dutton Park Station	- Results met air quality goal	
		PA Hospital - Central Energy Unit along Kent Street	- Results met air quality goal	
	Roma Street	Roma Street Station	- Results met air quality goal	
	Woolloongabba	Russian Orthodox Cathedral	- Results met air quality goal	
	Woolloongabba	Woolloongabba Busway	- Results met air quality goal	
Southern Area	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 (PM_{10}) and total suspended particulates (TSP) was conducted at Northern, Central and Southern Area worksites. Results met the project goals at all active worksites except for Clapham Yard which recorded exceedances of the air quality goals on two occasions.

The RNA air quality monitor returned from undergoing its bi-annually factory calibration and was reinstalled on 29 July. The former Mayne Yard North air quality monitor was re-installed at Clapham Yard on 6 July 2022 and the former Clapham Yard monitor is still with the manufacturer undergoing further repair works. Whilst minimal data may have been recorded, the movement of the station from Mayne Yard to Clapham Yard helped ensure that monitoring was completed at the location with the higher risk activities for air quality impacts. The monitor relocation was supported by advice and based on a review carried out by the Project's Certified Air Quality Professional (CAQP) of the program lookahead and proposed scale, duration and intensity of project works which may impact air quality.

A detailed investigation into the exceedances on 7 and 9 July 2022, was completed to assess Unity's potential contribution. Both project and non-project works in the area were investigated at the time of the exceedances and the Unity Environment team confirmed that no visible dust was being generated from the Clapham Yard works. Nonetheless, the Unity team deployed additional controls including water carts to help reduce the risk of wind erosion and air quality impacts.

No air quality complaints were received by nearby sensitive receivers associated with these exceedances. Unity's investigation could not confirm the exact source of the air quality emissions and with no negative impacts (i.e., complaints) observed or made aware of.

Consistent with the CEMP, other qualitative parameters have been used to ascertain compliance with the Air Quality Project Objectives and have been achieved. This included:

- The dust deposition results recorded no exceedance of the relevant goal;
- There was no evidence of dust being generated and leaving the site boundaries when routine inspections were carried out;
- DES regional air quality monitoring demonstrated air quality levels below project goals; and
- There were no complaints received associated with air quality concerns during the reporting period across the Mayne, Northern Area and Clapham sites.

Particulates results are detailed in Appendix A (Section 3.2.2) and Appendix B (Table 5).

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

Air Quality – PM ₁₀ / TSP Monitoring					
Area Worksite		Monitoring Location	Comments		
Mayne Area	Mayne Yard	Mayne Yard North	 Monitoring unit was relocated to Clapham Yard with Clapham Yard unit still undergoing repair works. No monitoring recorded for the month 		
Northern	RNA / Exhibition	RNA showgrounds	Monitoring unit was reinstalled on site on 29 July 2022.		
Area	Northern Portal	Brisbane Girls Grammar School	- Results met air quality goals		
	Albert St	iStay River City and Capri (Corner of Mary Street and Albert Street)	- Results met air quality goals		
Central Area	Boggo Rd / Southern Portal	North-east of Boggo Road worksite	- Results met air quality goals		
	Woolloongabba	Place Park, Woolloongabba	- Results met air quality goals.		





Air Quality	Air Quality – PM ₁₀ / TSP Monitoring										
Area	Worksite	Monitoring Location	Comments								
Southern Area	Clapham Yard	Clapham Yard	 Monitoring unit was offsite undergoing further repairs. With no monitoring completed until when the Mayne Yard North monitor relocated to Clapham Yard on 6 July 2022. Exceedances recorded on 7 and 9 July, however detailed investigation could not confirm the exact cause of the exceedances and no negative impacts (i.e., complaints) were observed or made aware of. 								

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

Active surface water discharges occurred from the Northern Portal worksite through dewatering activities. Post-rainfall water quality monitoring occurred at Albert Street, Woolloongabba, Breakfast Creek, Moolabin Creek and Rocky Water Hole Creek.

In the Northern Area, water quality monitoring was triggered on 29 occasions from the Northern Portal worksite as water used for construction activities was treated and actively discharged to the stormwater network. The contractor confirmed the discharge criteria was met. See **Appendix B** (Table 7) for further details.

Post-rainfall monitoring in receiving waters occurred twice at Breakfast Creek and three times at Moolabin Creek and Rocky Water Hole Creek despite no rainfall events during the month that exceeded the trigger of 20-25mm over 24 hours. The contractor confirmed the compliance requirements were met

Post-rainfall monitoring in receiving waters of the Brisbane River occurred due to a localised rainfall event at the Albert Street and Woolloongabba worksites. Downstream locations did not exhibit an increase of more than 10% turbidity therefore there was no exceedance of the water quality investigation criteria.

Routine surface water quality monitoring was undertaken in the receiving waters of all TSD worksites in accordance with the Contractor's Water Quality Management Plan. The monitoring results reflect the condition of a broader catchment upstream from the worksites. See **Appendix B** (Table 8) for further details.

Surface water quality monitoring is summarised in the table below:





Surface W	ater Quality Monit	toring			
Area	Worksite	Discharge	Post-Rain Monitoring	Routine Monitoring	Comments
Mayne Area	Mayne Yard North	No	Yes	No	 ESC was implemented in accordance with site specific ESC Plan. Post-rainfall monitoring undertaken.
Northern	Northern Portal	Yes	No	Yes	 Active surface water discharge met water quality investigation criteria. Routine in-stream monitoring undertaken in accordance with WQMP.
Area	Northern Corridor	No	No	N/A	- ESC was implemented in accordance with site specific ESC Plan.
	RNA/Exhibition	No	No	N/A	- ESC was implemented in accordance with site specific ESC Plan.
	Albert Street	No	Yes	Yes	 Post-rainfall monitoring undertaken. Routine in-stream monitoring undertaken in accordance with WQMP.
	Boggo Road	No	No	Yes	- Routine in-stream monitoring undertaken in accordance with WQMP.
Central Area	Roma Street	No	No	Yes	- Routine in-stream monitoring undertaken in accordance with WQMP.
	Woolloongabba	No	Yes	Yes	 Post-rainfall monitoring undertaken. Routine in-stream monitoring undertaken in accordance with WQMP.
	Southern Portal	No	No	Yes	- Routine in-stream monitoring undertaken in accordance with WQMP.
Southern Area	Clapham Yard	No	Yes	No	 Post-rainfall monitoring undertaken. ESC was implemented in accordance with site specific ESC Plan.

2.2.4.2. Groundwater

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

Groundwater discharge occurred in the Central Area at Roma Street, Albert Street, Woolloongabba, and Boggo Road worksites. Groundwater discharge results exceeded relevant water quality objectives





(WQO's)² for total nitrogen, ammonia nitrogen, oxidised nitrogen and dissolved oxygen. However, these results are consistent with the receiving environment baseline monitoring pre-construction. The contractor confirmed no changes have occurred onsite to the construction methodologies that would have affected the groundwater results.

Groundwate	er Quality Monitoring	3	
Area	Worksite	Discharge	Comments
Mayne Area	Mayne Yard North	No	- No groundwater discharges.
Northern	RNA/Exhibition	No	- No groundwater discharges.
Area	Northern Portal	No	- No groundwater discharges.
	Albert Street	Yes	 Groundwater discharge (dewatering). Discharge of groundwater did not meet Project WQO's but was generally consistent with pre-construction conditions.
Central	Boggo Road / Southern Portal	Yes	 Groundwater discharge (dewatering). Discharge of groundwater did not meet Project WQO's but was generally consistent with pre-construction conditions.
Area	Roma Street	Yes	 Groundwater discharge (dewatering). Discharge of groundwater did not meet Project WQO's but was generally consistent with pre-construction conditions.
	Woolloongabba	Yes	 Groundwater discharge (dewatering). Discharge of groundwater did not meet Project WQO's but was generally consistent with pre-construction conditions
Southern Area	Clapham Yard	No	- No groundwater discharges.

2.2.5. Erosion and Sediment Control

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

2.3. Complaints Management

A total of 9 complaints were received during the month all of which were project related.

RIS works received six complaints this month related to noise, worker behaviour and vegetation clearing at the Fairfield, RNA and Dutton Park worksites. For further details refer to **Appendix A** (Table 3).

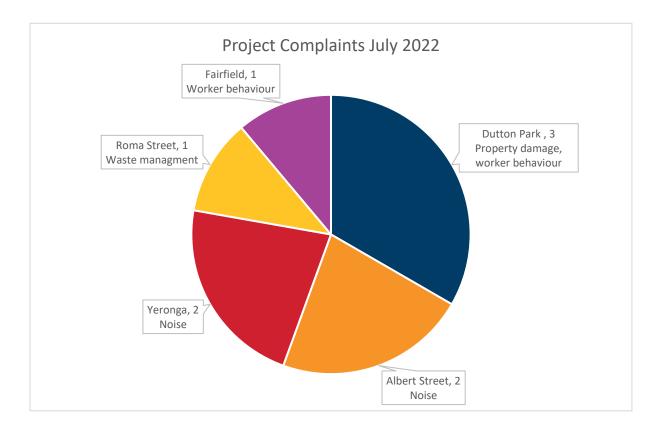
TSD activities received three complaints related noise and waste management at Albert Street and Roma Street worksites. For further details refer to **Appendix B** (Table 10).

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





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

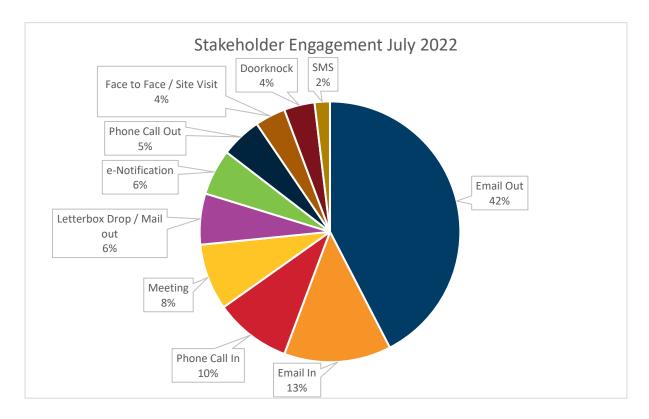


Where attended noise monitoring was undertaken in response to a complaint, the contractor confirmed on all occasions that works undertaken at the time of the complaint adhered to project requirements. In some instances, previous attended noise monitoring data, representative of the relevant construction 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 summarised 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 – DLP area (East of MY-East) commence demolition of QR facilities; Drainage and pavements of Access Road; Surcharge Load release and commence cross drainage repairs of pre-load introduction post; drainage install; Commence soil nailed wall RW115; and BR08 (Breakfast Creek Bridge) FRP Works;
Northern Area	RNA/ Northern Corridor — • Victoria Park Feeder Station piling and FRP scope; • Commence OHLE foundations through corridor; and • Ekka embargo commencing 15 July 2022. Northern Portal — • Installation of remaining deck units in September; and • 3 rd rail pulling activity in August.
Central Area	Roma Street – Cavern permanent arch pours; Station building ongoing perimeter wall and slab pours; Services building pre-cast panel installation and concrete pours; and Biscuit pour for all columns commencing in August. Albert Street – Lot 1 – Complete B9 slab and station structure FRP works;



	 Lot 2 – micro-blasting of service adit works and cavern arch lining pours to commence in August; and 							
	Lot 3 – commence capping beam and pile demolition in August.							
	Woolloongabba –							
	Commence Blockworks on B1;							
	Southern cavern mezzanine beam install continues;							
	Northern cavern arch lining contact grouting works; and							
	Continuation of back of house FRP works.							
	Boggo Road –							
	 Concrete wall steel fixing and concrete pours ongoing; and Delivery and installation of pre-cast mezzanine beams and station box culverts delivery in September. 							
	Southern Portal –							
	Base slab installation to recommence in late August;							
	Soil nail and permanent retention for 1st bench around FFO in August;							
	1 st bench breakthrough into Boggo Road station in August; and							
	Permanent commissioning of stormwater diversion to occur in August.							
Southern Area	Dutton Park –							
	 Completion of demolition of Cope Street properties; Continue site establishment and creating site access through August 2022; and Major works will commence in the Dutton Park area from October 2022 in 							
	readiness for the closure of the Up Platform in November.							
	Yeronga Station –							
	 Fairfield Overpass (over track component) – ongoing fit-out, lift installation, cladding, finishing and stairs; Station buildings – Fit out, painting, joinery, flooring; and 							
	 Station entrances – Completion of FRP, landscaping and general tidy up scope. 							
	Fairfield Station –							
	 Continue inground service installation (water, stormwater, sewer, electrical, communications and security) and commencement of structural foundations for the overpass and platform structures; 							
	 Continue structural steel element to be installed during mid-weeknight SCAS in August; and Platform slabs to commence in early August. 							
	Clapham Yard –							
	 Commence creek works for drainage outlet in Rocky Water Hole Creek; Continue CSR scope and commence pavements; Continue FRP works at Moolabin Creek Bridge (BR93) and Chale St Bridge (BR94); and Complete Retaining wall RW650. 							

2.5 Non-Compliance Events

No new NCEs have been raised this month. The summary of NCEs to date is shown in the table below.





Status	Date of event	Category	Area as on the Report	Conditions affected	Gate 1	Gate 2	Gate 3	Gate 4	Gate 5		
⊞ Open											
☐ Closed											
CRRDA-001-RIS-001	11/09/19	Noise	Yeronga Station	4, 10, 11	11/10/19	14/11/19	26/11/19	18/12/19	01/10/20		
CRRDA-002-TSD-001	27/03/20	ESC	Woolloongabba	4, 15, 18	30/03/20	31/03/20	22/04/20	06/11/20	31/05/20		
CRRDA-003-TSD-002	27/03/20	ESC	Boggo Rd	4, 15, 18	30/03/20	31/03/20	22/04/20	06/11/20	31/05/20		
CRRDA-005-TSD-004	27/03/20	Reporting	Albert St, Boggo Rd, Roma St, Woolloongabba	4, 6, 11, 13	30/03/20	31/03/20	22/04/20	06/11/20	31/05/20		
CRRDA-006-TSD-005	27/03/20	Air Quality	Albert St, Boggo Rd, Roma St, Woolloongabba	13	30/03/20	31/03/20	22/04/20	06/11/20	31/05/20		
CRRDA-004-TSD-003	28/03/20	Traffic	Boggo Rd	4, 10, 14	30/03/20	31/03/20	22/04/20	06/11/20	31/05/20		
Withdrawn ■ Withd											
CRRDA-007-RIS-002	Air Quality	Mayne Yard, Victoria Park, Yeronga, Fairfield	13	28/04/20	30/04/20	Withdrawn					
CRRDA-008-TSD-006 04/08/20 Working Roma Street 4,10 28/04/20 30/04/20 Withdrawn Hours											
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 Gate 5 - Records of mitigation / preventative measures submitted to the CG Complete											

Throughout construction activities, events and incidents are routinely investigated to verify compliance with the Imposed Conditions and to verify that management and mitigation measures are implemented in accordance with CEMP and sub-plans.





Appendix A RIS Monthly Report





Appendix B TSD Monthly Report





Monthly CGCR Report July 2022

Cross River Rail – Rail, Integration and Systems Alliance





Table of Contents

1	Progress Summary - Relevant Project Works									
2	Complaints									
3	Environr	onmental Monitoring Results								
3.1	Acoustics.	Acoustics								
3.2	Air Quality	11								
3.3	Water Qua	18								
4	Compliance Review									
4.1		pliance Events								
4.2	C-EMP Co	ompliance	22							
Atta	chment 1	CGCR Non-Compliance Event Report (if required)	24							
Atta	chment 2	Monitoring Locations - Noise and Vibration	25							
Atta	chment 3	Monitoring Locations – Air Quality	26							
	chment 4									



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
	 Mayne Yard North and associated facilities have been completed by SCAS RIS #44, awaiting QR acceptance
	Graffiti Removal Facility (GRF) – completed included the flood-damaged cladding and roofing
	Crew Change Building incl Car Park – completed
	 QR's temporary Access Road to new Yard and new facilities completed
	 Tripod Bridge (BR11/13) – RSS walls completed and deck units landed
	 Breakfast Ck Bridge (BR08) permanent piling completed for Pier 2, 3 and 4 and also the RW150 on the Northern side of BR08
	 Shunt Road (track) and Access Road (road) – earthworks nearing completion
	 CRR Lines – embankment construction including Stage 1 completed and surcharge load nearing release
	 RW130 – Retaining wall on Eastern side under ICB overpass continues
	 BR12 – new QR pedestrian bridge from Bowen Hills, has commenced with preparation works at the Eastern abutment.
Northern Area	RNA / Northern Corridor
	CSR scope ongoing throughout corridor
	 Victoria Park Feeder Station – oil separator tank placed, FRP for switch room nearing completion
	Watermain underbore at Bowen Bridge Road completed
	CSR scope GST and on Bridge structure BR43 nearing completion
	Drainage on western side of viaduct completed
	Successful handback of areas to RNA for Ekka 2022.



Area	Project Works
Southern Area	Yeronga Station
Southern Area	 Continuation of building trades fit-out & rough-in throughout the platform facilities
	 Platform 1 and 3 Roofing works
	 Installation of canopy roofing over PL1
	Preparation for Lake St entrance civil works
	Station electrical, comms, cable pulling works ongoing
	UTX Crossing North
	UTX Crossing South
	 Continuation of Fairfield Rd West overpass foundations, pile cap completion and preparation for column pour.
	Fairfield Station
	 Ongoing installation of inground services; water, sewer, stormwater, electrical, communications, signalling conduiting
	 Ongoing installation of overpass foundations including completion of Mildmay St lower-level overpass foundations PL1, PL 2/3
	Completion of building foundations for PL 2/3
	 Installation of structural steel to buildings and canopies on PL 2/3
	 Installation of structural column for the overpass central pier (PL 2/3)
	 Ongoing installation of 'flowable' backfill operation throughout PL1 & PL2/3
	Ongoing installation of lift sump structure
	 Completed installation of coping edge support brackets to PL 1 / 2 / 3
	 Installation of the final 3 x Platform 3 precast wall units (previously providing access into central area).
	Southern Portal / Dutton Park
	 Demolition of Cope St properties continued through July with the activity nearing completion
	 Removal of Annerley Rd Billboard completed during SCAS 23 and 24 July
	 Mobilisation of the site team to office facility on Annerley Rd during the period.
	Clapham Yard
	FRP scope on both Bridges BR93 and BR94 continuing
	 Earthworks to Subgrade for Dual Gauge alignment completed (excluding the section impacted by the delayed SER hut relocation)
	Drainage scope (Dual Gauge) nearing completion incl the Fairfield Road under-bore
	SEQ Watermain protection works nearing completion
	CSR works commenced
	 Remediation of areas outside the LCA has been completed and barrier removed along Fairfield Road to reinstate the pedestrian footpath connection southbound.
	Anchors for Retaining Wall RW650 (in front of Aurizon facility) have been completed.

Acronyms:

CIP – Cast in Situ Piles CSR – Combined Services Route DL – Drainage Line



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

UTX - Under Track Crossing



The following table summarises the upcoming Project Works:

Table 2: Summary of upcoming Project Works

Area	Project Works							
Mayne Area	Mayne Yard North							
	DLP area (East of MY-East) commence demolition of QR facilities							
	Drainage and pavements of Access Road							
	 Surcharge Load release and commence cross drainage repairs of pre-load introduction post drainage install 							
	Commence soil nailed wall RW115							
	BR08 (Breakfast Creek Bridge) FRP Works							
Northern Area	RNA / Northern Corridor							
	Victoria Park Feeder Station civil scope ongoing							
	Commence OHLE foundations through corridor							
	Ekka embargo continuing to 30 August 2022.							
Southern Area	Yeronga Station							
	 Fairfield Overpass (over track component) – Ongoing fit-out, lift installation, cladding, finishing, stairs 							
	Station buildings – Fit out, painting, joinery, FF&E, flooring							
	Station entrances – Completion of FRP, landscaping and general tidy up scope.							
	Fairfield Station							
	 The focus will be to continue with the inground services installation (water, stormwater, sew electrical, communications, security) and structural foundations for the overpass and platfor structures. 							
	 Continuation of structural steel elements to be installed during mid-weeknight SCAS' through August 							
	Platform slabs to commence in early August.							
	Southern Portal / Dutton Park							
	Completion of demolition of Cope Street properties in early August 2022							
	Continue site establishment and creating site access through August 2022							
	 Major works will commence in the Dutton Park area from October 2022 in readiness for the closure of the UP Platform in November 2022. 							
	Clapham Yard							
	Commence creek works for drainage outlet in Rocky Waters Hole Ck							
	Continue CSR scope and commence pavements							
	Continue of Chale St Bridge (BR94) and Moolabin Creek Bridge (BR93) FRP scope							
	Complete Retaining Wall RW650 (in front of Aurizon facility) and start concrete lined drains.							



2 Complaints

The below section summarises the complaints relating to the Project Works to be reported in accordance with condition 6(b)(iii) of the CGCR.

Table 3: Summary of Complaints

rable 3. Summary	or complai	into					
Date Received	Location	Issue	Project Works / Activity source of the concern	Reporting Period	Complaint Detail	Unity Response	Status
Friday 1 July	Southern	NBN cable strike	Vehicle movement	July 2022	Truck delivering equipment to site hit an overhead NBN cable.	The project contacted the stakeholder to inform them the subcontractor had contacted NBN to attend site and undertake repairs.	Closed
Friday 1 July	Fairfield	Worker's parking	Fairfield Station Upgrade Works	July 2022	Workers are parking in Fanny Street and restricting vehicle movement	Contacted the stakeholder and apologised. Advised that UNITY is investigating alternative parking arrangements and will continue to request workforce not to park in local streets where possible.	Closed
Saturday 2 July	Southern	Vehicles parked over driveway	Construction Team parking	July 2022	Called the team to request the two trucks parked over their driveway be removed.	Superintendent contacted and the vehicles were moved on immediately.	Closed
Sunday 3 July	Southern	Heavy vehicle movements on Sampson Street, Annerley	Equipment deliveries	July 2022	A truck delivering equipment to Sampson Street came in contact with a small over hanging tree branch and drove over the curb in front of the stakeholder house. Resident was disappointed with her interaction with the driver delivering the equipment to site.	Contacted the stakeholder and apologised for the incident. Team sent UNITY Alliances contact detail for future reference.	Closed
Thursday 21 July	Yeronga	Lack of progress at Yeronga Station	Yeronga Station Upgrade Works	July 2022	Stakeholder emailed the project to complain about the perceived lack of progress made at Yeronga station over the past few months and use of mobile phones.	Team informed stakeholder that a lot of activity in the field is conducted from phones for normal day-to-day activities (e.g., safe work method statements, inspection checklists, booking plant and deliveries). The rebuild of Yeronga station has also been affected by significant weather events and COVID-19 still adversely affecting trades and supply of materials.	Closed
Friday 22 July	Yeronga	Noise from vac truck in Dublin Street, Yeronga	Yeronga Station Upgrade Works	July 2022	Stakeholder called to inform the team that the temporary noise blankets around the vac truck in Dublin Street were not set up correctly and wanted this to be addressed. The vac truck being used appeared to be significantly louder than the vehicle previously used at the end of the street.	Team forwarded images of the vac truck to the Site Supervisor to address the temporary noise barriers in use around the vac truck.	Closed



3 Environmental Monitoring Results

The below section summarises the monitoring results to be reported in accordance with condition 6(b)(i) of the CGCR.

3.1 Acoustics

Condition 11(b) of the CGCR 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 based on the predictive noise assessments for the Relevant Project Works during the reporting period.

Complaint-based noise monitoring because of Project Works was not triggered during the reporting period.

3.1.2 Noise Monitoring Results



Table 4: Summary of Noise Monitoring Data

Location	Receiver Type Details	Type of Monitoring	Work Hours	Monitoring date and time	Noise Type	Purpose of Monitoring	Predictive model (dBA)	Performance Goal 1 (dBA) (Condition 11(a), Table 2, LA _{10/eq} noise goals)	Performance Goal 2 (dBA) – (Condition 11(c), Table 2 LA ₁₀ noise goal + 20dBA))	Measured LA ₁₀ (dBA)	Measured LA _{eq} (dBA)	DAP engagement prior to works	Is performance Goal exceeded?	Comments For interpretation, please refer to Error! Reference source not f ound.
	N/A – not triggered during monitoring period													

- Note 2 of Imposed Condition 11 Table 2 states Where internal noise levels are unable to be measured or monitored, the typical noise reductions presented in Guideline Planning for Noise Control, Ecoaccess, DEHP, January 2017 (PFNC) apply.
- The monitoring was undertaken to validate the model therefore external noise measurements are appropriate to determine the impact of construction noise.
- Note (2) Façade Attenuation
 - Note 2 of Imposed Condition 11 Table 2 states Where internal noise levels are unable to be measured or monitored, the typical noise reductions presented in Guideline Planning for Noise Control, Ecoaccess, DEHP, January 2017 (PFNC) apply.
 - The PFNC guideline can no longer be accessed. The Department of Environment and Science (DES) website still states this guideline is under review and is yet to release an alternative guideline
 - Former revisions of the PFNC table 7 stated the following regarding typical noise reductions through the building façade:
 - 5 dB Window wide open
 - 10 dB Partially closed
 - 20 dB Single glazed, closed
 - 25 dB Thermal double glazing, closed
 - The RfPC-4 Technical Report considered that all receptors had <u>closed</u> external single glazing for the assessment of construction noise impacts.
 - The Queensland Ombudsman assessed this assumption for the Airport Link Project and recommended that 10dB be adopted for major infrastructure projects in Queensland¹.
 - Additionally, several acoustic studies have shown that 10 dB is a suitable assumption for open windows. Most importantly this requirement only applies to temporary rail works within the project footprint and does not apply to long-term operational rail noise exposure.
 - Accordingly, it is considered appropriate to consider a 10 dB reduction on this basis. This assumption can be used for predictive modelling and for noise measurements, where indoor noise measurements are not practicable.

2 0

² Refer to the waterways and water quality management plan, a C-EMP sub-plan for details of derivation of the discharge criteria



3.1.3 Vibration Monitoring

There were two vibration intensive activities during the reporting period that triggered the need to undertake vibration monitoring.

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

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

3.1.4 Vibration Monitoring Results

Table 5 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	Vibration intensive equipment	Maximum predicted vibration Level (mm/s)	Shortest distance between Equipment and Sensitive Place (m) @Time of Monitoring"	Maximum recorded vibration level (mm/s)	Vibration goal for receiver (mm/s)	Exceedance of vibration limit?	Comments
Southern Cope Street, Annerley	27/06/2022 to 07/07/2022	24 hours / 7 days	211 Annerley Road, Annerley	Residential	Construction monitoring at sensitive places – model verification	25T excavator	N/A	2 metres	0.2789 mm/s	0.5mm/s – Human Comfort Night-time (sleep) 10mm/s – Human Comfort Daytime 15mm/s – Property Damage	No	Vibration monitor was placed in the yard of 211 Annerley Road, the closest sensitive receiver to demolition works. Monitor was approximately 2m away from the closest works, and less than 1m away from the façade of the property. No model was run for vibration as there was technically no 'vibration intensive' equipment in use, therefore the modelling tools would not present an accurate representation of works.
Southern Cope Street, Annerley	13/07/2022 to 20/07/2022	24 hours / 7 days	211 Annerley Road, Annerley	Residential	Construction monitoring at sensitive places – model verification	25T Excavator with 2.5T hydraulic hammer	1.4	2 metres	0.6275	0.5mm/s – Human Comfort Night-time (sleep) 10mm/s – Human Comfort Daytime 15mm/s – Property Damage	No	2.5T hammer used briefly on furthest side of 15 Cope Street lot to break footings. No ongoing use of hammer. Location of monitor was as above- monitor was removed 03/08/2022, however, the solar panel was not receiving enough light to keep the monitor charged, and recording ceased 20/07/2022.

3.1.5 Interpretation

The RIS scope of works continues to achieve the outcomes set out by the CGCR and OEMP.

3.1.6 Vibration Monitoring

The RIS scope of works continues to achieve the outcomes set out by the CGCR and OEMP.

3.2 Air Quality

Imposed Condition 13(b) of the CGCR 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 24 inspections were undertaken by the Environment Team across Mayne Yard, RNA Showgrounds, Southern Area, Fairfield Station, Yeronga Station, Clapham Yard, and the Northern Corridor.

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 6: Summary of Air Quality monitoring devices

Table 6. Garinary 617th Quality Monteling 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	Active					
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					
Dust Deposition Gauge	Dutton Park	AQ-08	8 July 2022	Partially active					
TSP / PM ₁₀ Monitor	Mayne Yard (Eastern Air Shed)	Mayne Yard	23 April 2020	Inactive CAQP confirmed that the Mayne Yard DMP can be temporarily decommissioned following the completion of Mayne Yard North earthworks. DMP to be reinstated for Mayne Yard East Works.					
TSP / PM ₁₀ Monitor	Clapham Yard (Eastern Air Shed)	Clapham Yard	9 August 2021	Partially active DMP returned from bi-annual calibration on 6 July 2022.					
TSP / PM ₁₀ Monitor	RNA (Western Air Shed)	RNA	25 August 2020	Partially active DMP returned from bi-annual calibration on 29 July 2022.					

3.2.1 Dust results

As passive dust deposition gauges (DDG) are analysed monthly, results span:

- RNA and Mayne Yard:
 - 10 June 2022 to 11 July 2022

- Clapham Yard
 - 13 June 2022 to 11 July 2022.
- Dutton Park
 - 8 July 2022 to 8 August 2022

As per AS/NZS 3580.10.1, section 7.3, for routine monitoring programs, the period of exposure is 30 ± 2 days. All of the sites met the required exposure period.

The deposited dust results are detailed below. All sites complied with Imposed Condition 13(b) of the CGCR.

Dutton Park results will be reported in the August 2022 report, as the results had not been received at the time of writing this report.

Table 7 Dust deposition gauge results for the reporting period

CGCR Goal (mg/m²/day)	AQ-01 - RNA Showgrounds (mg/m²/day)	AQ-04 Abbotsford Rd (E Mayne) (mg/m²/day)	AQ-06– Clapham Yard (mg/m²/day)	AQ-08 – Dutton Park
Monitoring Period	10 June 2022 to 11 July 2022	10 June 2022 to 11 July 2022	13 June 2022 to 11 July 2022	08 July 2022 to 08 August 2022
120	10	23	20	-
Total Rainfall during Period (mm)	49	29	29	-

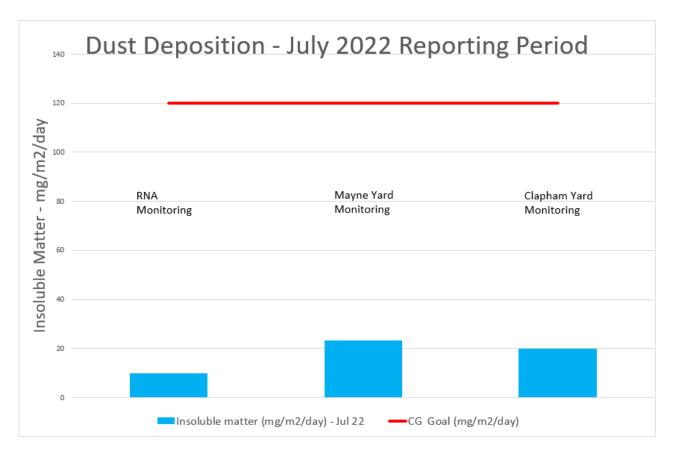


Figure 1 Air Quality Monitoring (Deposited Dust) Results

3.2.2 Particulates results

3.2.3 Air Quality Monitoring Stations

UNITY had two (2) partially active air quality monitoring stations in place for the reporting period as detailed in Table 6.

As presented in the June 2022 report, the manufacturer requested the Clapham Yard DMP be removed from site and sent for inspection to their facility in NSW, due to ongoing malfunctions despite recent factory calibration.

Mayne Yard DMP's factory calibration was completed and the DMP has been returned to site. Based on the review by the Project's CAQP, the DMP has not been re-instated at Mayne Yard (refer to the June Report for additional details).

Based on the review of program lookahead and proposed scale duration and intensity of Project Works which may impact air quality, UNITY re-instated the Mayne Yard DMP at Clapham Yard. Indeed, there are ongoing bulk earthworks at Clapham which require ongoing monitoring as per the predictive assessment.

The DMP was installed at Clapham Yard on 06 July 2022.

The Clapham Yard DMP was active for a total of 26 days during the reporting period. The Project's CAQP has advised that for data to be considered sufficiently accurate, a minimum measurement of 18 hours over a 24-hour period (or 75%) is required. Further investigation into the DMP data confirmed only five (5) days recorded data that met the minimum measurement requirement.

The RNA DMP was reinstalled on 29 July 2022. It was active for a total of three (3) days during the reporting period. Two of the three days met the minimum recording duration requirement and are considered sufficiently accurate data.

3.2.4 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/aaqprctp05datacollection200105final.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 8: 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 (Eastern Air Shed)	23 April 2020	12 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 12 May 2022) 3 days over 17 days	Period 1 98% over 365 days Period 2 99% Over 365 days Period 3 17% Over 17 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	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) 3 over 49 days	Period 1 86% over 365 days Period 2 79% Over 365 days Period 3 6% Over 49 days	Applicable for Period 1 Data capture met minimum data capture requirements Applicable for Period 2 Data capture met minimum data capture requirements Period 3 Data capture has not yet met minimum data capture requirements requirements

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	Clapham Yard (Eastern Air Shed)	1 February 2021	Not yet decommissioned	Period 1 (to 31 January 2022) 326 over 364 days Period 2 (starting 01 February 2022) 87 over 180 days	Period 1 90% over 364 days Period 2 48% Over 180 days	Applicable for Period 1 Data capture met minimum data capture requirements Not Applicable for Period 2 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 PM_{10} against the performance goals imposed under Condition 13(a). Results in italic are indicative only.

Table 9 Annual Performance Results

Air Quality Indicator	Goal	Period	Northern Corridor	Mayne Yard	RNA	Clapham Yard
TSP	90 μg/m ³	Period 1	8 μg/m³	11 μg/m³	18 μg/m³	8 μg/m³
		Period 2	-	10 μg/m³	15 μg/m³	Not applicable
		Period 3	-	Not yet applicable	12 μg/m ³	-
PM ₁₀	25 μg/m³	Period 1	5 μg/m³	7 μg/m³	11 μg/m³	5 μg/m³
		Period 2	-	7 μg/m³	10 μg/m ³	Not applicable
		Period 3	-	Not yet applicable	7 μg/m³	-

3.2.5 Interpretation

3.2.5.1 Monitoring Results – Reporting Period

External ambient air quality data 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 $80\mu\text{m/m}^3$ (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 $50\mu\text{m/m}^3$ (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).

The results are represented in Table 10 below.

Table 10 Air Quality Monitoring Results (TSP and PM₁₀)

Air Quality Indicator	Goal	DMP Location	7 July 2022	8 July 2022	9 July 2022	27 July 2022	30 July 2022	31 July 2022
TSP	80 μg/m³ / 24 hours	RNA	-	-	-	-	13µg/m³	7μg/m³
		Clapham Yard	122µg/m³	33µg/m ³	183µg/m³	10µg/m³	5µg/m³	-
PM ₁₀	50 μg/m³ / 24 hours	RNA	-	-	-	-	9µg/m³	5µg/m³
		Clapham Yard	149µg/m ³	40μg/m ³	222µg/m³	12µg/m³	7µg/m³	-

Note: Red indicates an exceedance of the 24-hour goal

3.2.5.2 Clapham Yard Exceedances

A detailed investigation into the exceedances recorded at Clapham Yard has been completed to assess Unity's potential contribution.

3.2.5.2.1 Unity and Non-Unity Works

The DMP has been set up to send real-time text message alerts to the Unity Environment Team when the air quality exceeds the Coordinator General 24-hour goals for each particulate (TSP and PM₁₀).

During the exceedances' measurement period, the Unity Environment Team received alerts and deployed to Clapham Yard to investigate potential Works that could have been contributing to the exceedances.

A member of the Unity Environment Team confirmed in real-time that no visible dust was being generated from the Clapham Yard Works. A water cart was deployed to reduce potential wind erosion. The water cart continued spraying Clapham Yard periodically during the period when the exceedances were recorded.

The Unity Environment Team member confirmed there were no non-Unity Works in the vicinity of the DMP during the exceedances' measurement period that may have potentially contributed to the exceedances.

3.2.5.2.1 DMP Siting

The Clapham Yard DMP is located within the rail corridor east of the Clapham Yard Works area in front of a noise wall directly adjacent to sensitive receivers on Ipswich Road (refer to Attachment 3 Monitoring Locations – Air Quality).

The Project CAQP recommended this location based on its proximity to sensitive receivers, ability to be readily accessed by the Unity Environment Team and reduced risk of vandalism.

However, as the noise wall is several metres in height, it has the potential to block a substantial volume of air emissions generated from Unity's Works. Therefore, it cannot be accurately confirmed that the air quality goal exceedances negatively impacted the adjacent sensitive receivers.

During the exceedances' measurement period a member of the Unity Environment Team inspected the DMP and confirmed there was no presence of mould build up from previous wet weather, nor was there any identifiable pollen in the vicinity that could have contributed to the exceedances.

3.2.5.2.2 Meteorological Conditions

The Clapham Yard Unity weather station was active during the exceedances' measurement period.

Figure 2 below shows the wind conditions during the exceedances' measurement period.

The wind rose indicates that the air emissions generated during the exceedances' measurement period were travelling from the west towards the DMP.

The air quality of the Greater South-East Queensland region during the exceedances' measurement period was also assessed to determine if a regional weather event occurred during this period.

The Bureau of Meteorology's 24-hour $PM_{10} \mu g/m^3$ data (refer to Figures 3 and 4) during the exceedances' measurement period indicates that no regional weather event occurred.

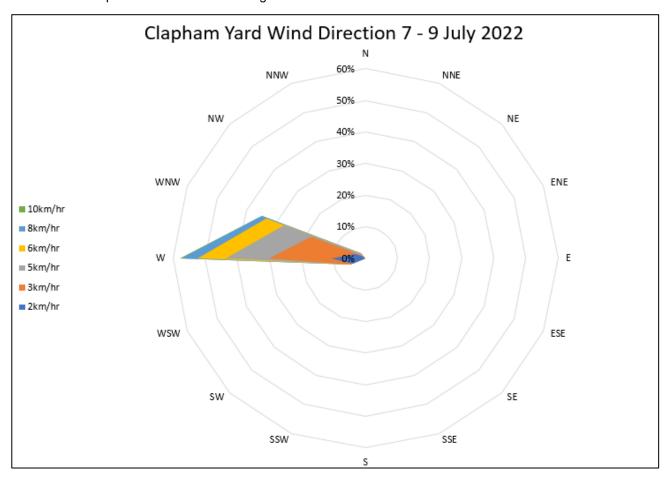


Figure 2 Clapham Yard Wind Direction During Exceedances' Measurement Period

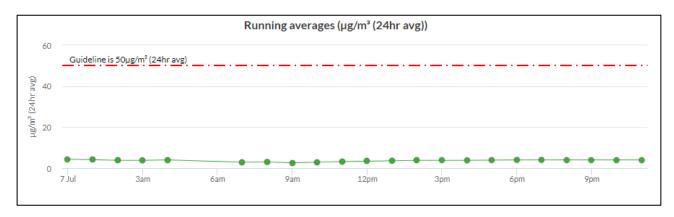


Figure 3 Bureau of Meteorology Rocklea 7 July 2022 $PM_{10} \mu g/m^3$ 24-hour Average

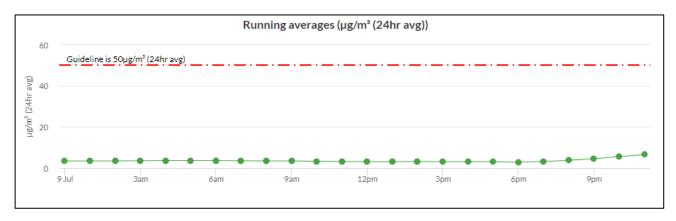


Figure 4 Bureau of Meteorology Rocklea 9 July 2022 PM₁₀ µg/m³ 24-hour Average

3.2.5.2.3 Air Quality Complaints

During the exceedances' measurement period there were no air quality complaints received from nearby sensitive receivers.

This suggests that despite the level of exceedances recorded during the measurement period, nearby sensitive receivers were not negatively impacted by the increased volume of particulates (TSP and PM₁₀).

As Unity's investigation could not confirm the exact source of the air quality emissions exceedances and no negative impacts (i.e. complaints) were recorded during the exceedances' measurement period, the RIS scope of works has met the project outcomes set out by the CGCR and OEMP.

3.3 Water Quality

Condition 15(b) of the CGCR 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.

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*.

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 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 not triggered during the reporting period. However, the following monitoring was conducted during the reporting period:

Post rainfall monitoring

3.3.1 Rainfall Records

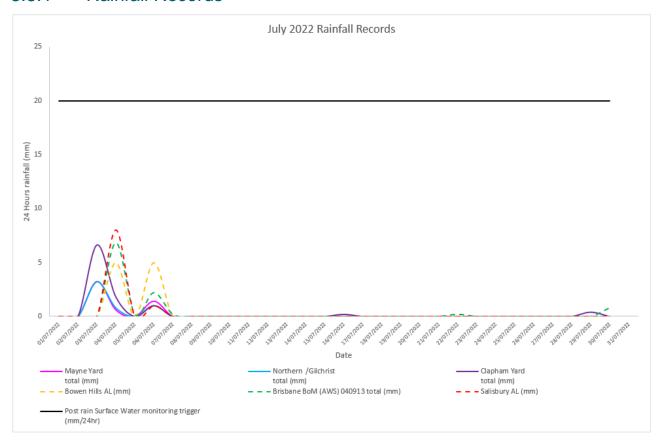


Figure 5: July 2022 Rainfall Records

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 not triggered as per Condition 15(b) and Condition 18, however, there were two (2) monitoring events undertaken at Breakfast Creek and three (3) monitoring events at Moolabin Creek and Rocky Waters Hole Creek during the reporting period. Refer to Table 11 below for results.

Table 11 Surface Water Post Rainfall Monitoring Results

Date	Location	Waterway	Tide	Discharge Crite	eria ²			TSS Delta
				Turbidity (NTU) Nil until Turbidity / TSS correlation achieved ³	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	change of 5mg/L or 10% increase (whichever is the greatest)
2 July 2022	Breakfast Creek	SW-1 (upstream)	Medium flow	Field: 17.57 Lab: N/A	N/A	84	7.1	No
2 July 2022	Breakfast Creek	SW-3 (downstream)	Medium flow	Field: 2.07 Lab: N/A	N/A	84	7.0	
2 July 2022	Moolabin Creek	SW-5 (upstream)	N/A	Field: 3.93 Lab: N/A	N/A	84	7.0	Yes (NTU) Difference between upstream and
2 July 2022	Moolabin Creek	SW-6 (downstream)	N/A	Field:7.47 Lab: N/A	N/A	82	7.8	downstream NTU is very minor. NTU measurements are both below 10NTU.
2 July 2022	Rocky Water Hole	SW-7 (upstream)	N/A	Field: 11.76 Lab: N/A	N/A	84	7.1	Yes (NTU) No Project Works appear to have
2 July 2022	Rocky Water Hole	SW-8 (midstream)	N/A	Field: 8.73 Lab: N/A	N/A	83.4	7.32	contributed (stormwater outlet from RIS Worksite is blocked off). Low flow, existing
2 July 2022	Rocky Water Hole	SW-8A (downstream)	N/A	Field: 10.11 Lab: N/A	N/A	78.5	7.54	sediment in creek line at SW-7 (upstream).
6 July 2022	Moolabin Creek	SW-5 (upstream)	N/A	Field: 14.08 Lab: N/A	N/A	N/A	7.3	Yes (NTU) Difference between SW- 5 and SW-6 (up and
6 July 2022	Moolabin Creek	SW-6 (downstream)	N/A	Field:16.45 Lab: N/A	N/A	N/A	7.7	downstream of project boundary) is very minor. Potential external
6 July 2022	Moolabin Creek	SW-6A (downstream)	N/A	Field: 37.1 Lab: N/A	N/A	N/A	7.8	contribution to catchment at SW-6A (cannot be identified due to stormwater system underneath main road). Approx. distance downstream from SW-6 to SW-6A is approximately 240m.
23 July 2022	Moolabin Creek	SW-5 (upstream)	N/A	Field: 16.71 Lab: 13.4	<5	88	7.1	Very low flow, no connectivity to SW-5
23 July 2022	Moolabin Creek	SW-6 (downstream)	N/A	Field: 19.5 Lab: 21.9	20	80	7.5	upstream (isolated pool of water). SW-6 pool depth
23 July 2022	Moolabin Creek	SW-6A (downstream)	N/A	Field: 27.63 Lab: 46.7	54	77	7.8	approximately 100ml.
23 July 2022	Rocky Waters Hole	SW-7 (upstream)	N/A	Field: 4.62 Lab: 15.1	6	94	7.0	No

23 July	Rocky Waters	SW-8 (downstream)	N/A	Field: 13.82 Lab: 19.1	12	75.4	7.37	No Project Works appear to have
2022	Hole							contributed (stormwater outlet from RIS Worksite
23	Rocky	SW-8A	N/A	Field: 14.15 Lab: 16.6	9	69.2	7.43	is blocked off).
July	Waters	(downstream)		Lab. 10.0				
2022	Hole							

3.3.3 Routine Surface Water Monitoring Results

During the reporting period, UNITY did not undertake 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 the dry season monitoring completed in June 2022. This was due to the unseasonal precipitation experience at the start of the dry season (April to September).

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

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.

² Refer to the waterways and water quality management plan, a C-EMP sub-plan for details of derivation of the discharge criteria

³ 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.

4 Compliance Review

4.1 Non-Compliance Events

The below section summarises the events to be reported in accordance with Condition 5 and Condition 6(b)(ii) of the CGCR. 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 12 Summary of Non-Compliance Events

Event	Location, Date, and time of event	Date the Event was Formally	Conditions	Date the Event Report	Status of	
Title		Notified to CG/IEM	Affected	Formally Sent to CG/IEM	Event	
None for t	None for this reporting period					

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 13 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 albeit in a reduced manner TSP, PM ₁₀ monitoring was carried out for only two active Worksites for the reasons stated in the	Compliant	Not Applicable
Air Quality	Complaint's response	Moderate to High	Not triggered No complaints	Compliant	Not Applicable
Noise	Buffer distance tests based on the outcomes of the predictive assessment based / risk profile of activities	Moderate to High	Not triggered	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	One complaint Community and Stakeholder Engagement Team responded, and stakeholder satisfied with outcome. Attended noise monitoring was therefore not carried out.	Compliant	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	Not triggered	Compliant	Not Applicable
Vibration	Complaint's response	Moderate to High	Not triggered No complaints	Compliant	Not Applicable

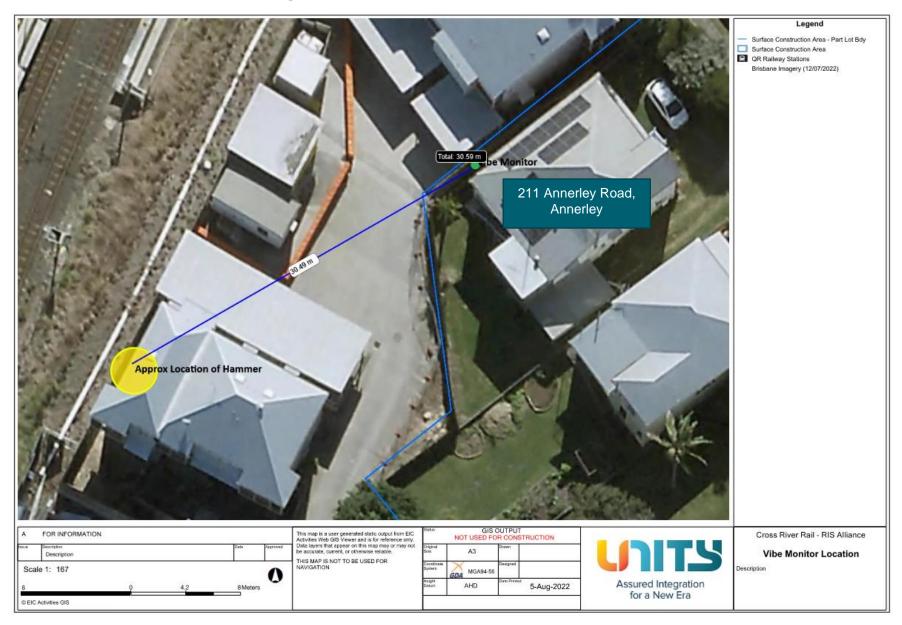
Aspect	Monitoring requirement	Activities risk profile	Monitoring undertaken	Compliance status with C- EMP / Subplan	Effect of the non-compliance
Water Quality	Bi-Annual monitoring	N/A	Wet season monitoring completed in January 2022 Dry Season monitoring completed in June 2022	Compliant	Not Applicable
Water Quality	Post Rainfall	Moderate to High	Two monitoring events at Breakfast Creek Three monitoring events at Moolabin Creek and Rocky Waters Hole Creek All events confirmed compliance	Compliant	Not Applicable
Water Quality	Dewatering	Moderate to High	Not triggered	N/A	Not Applicable

Attachment 1 CGCR Non-Compliance Event Report (if required)

None for this reporting period.



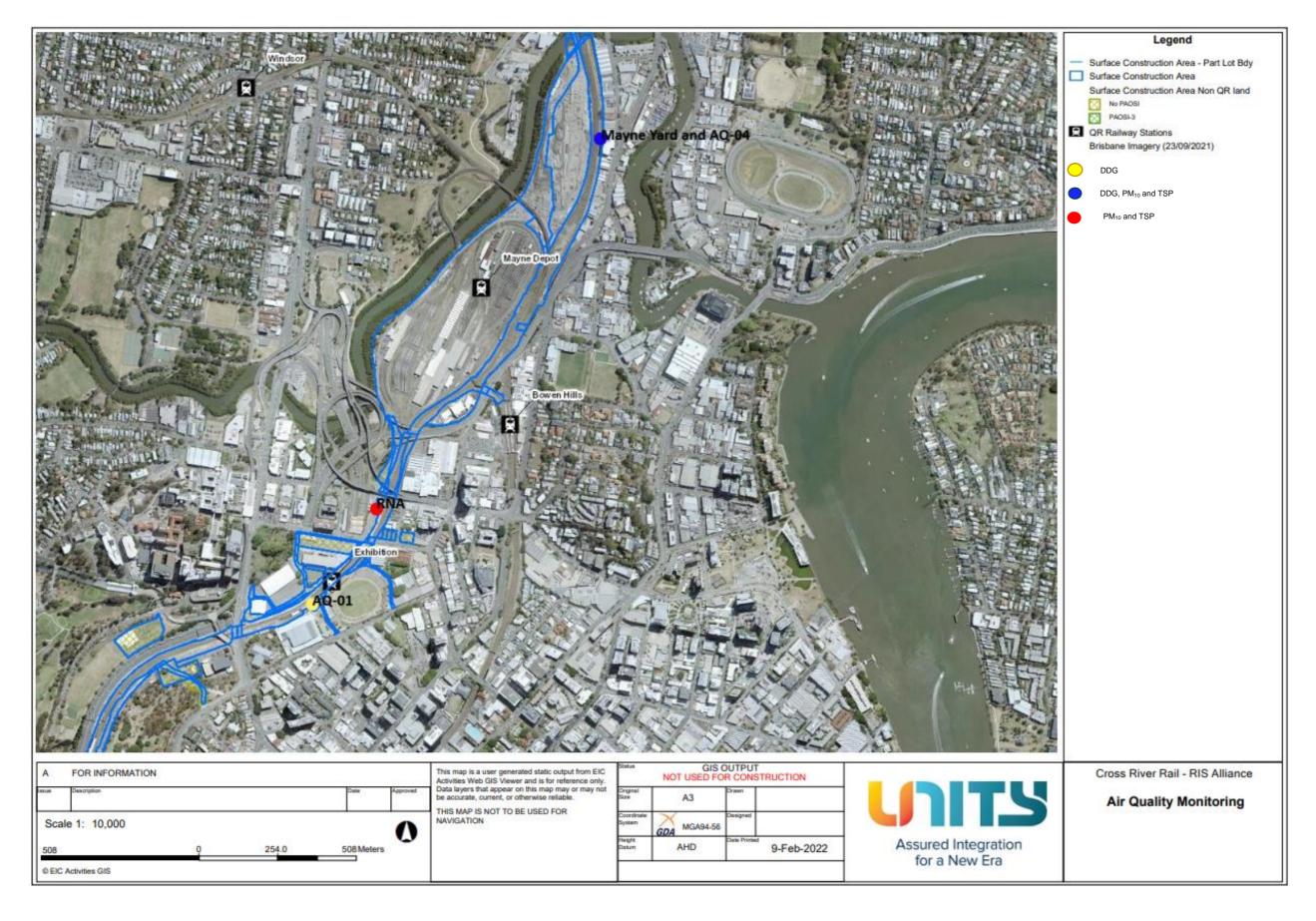
Attachment 2 Monitoring Locations – Noise and Vibrattion



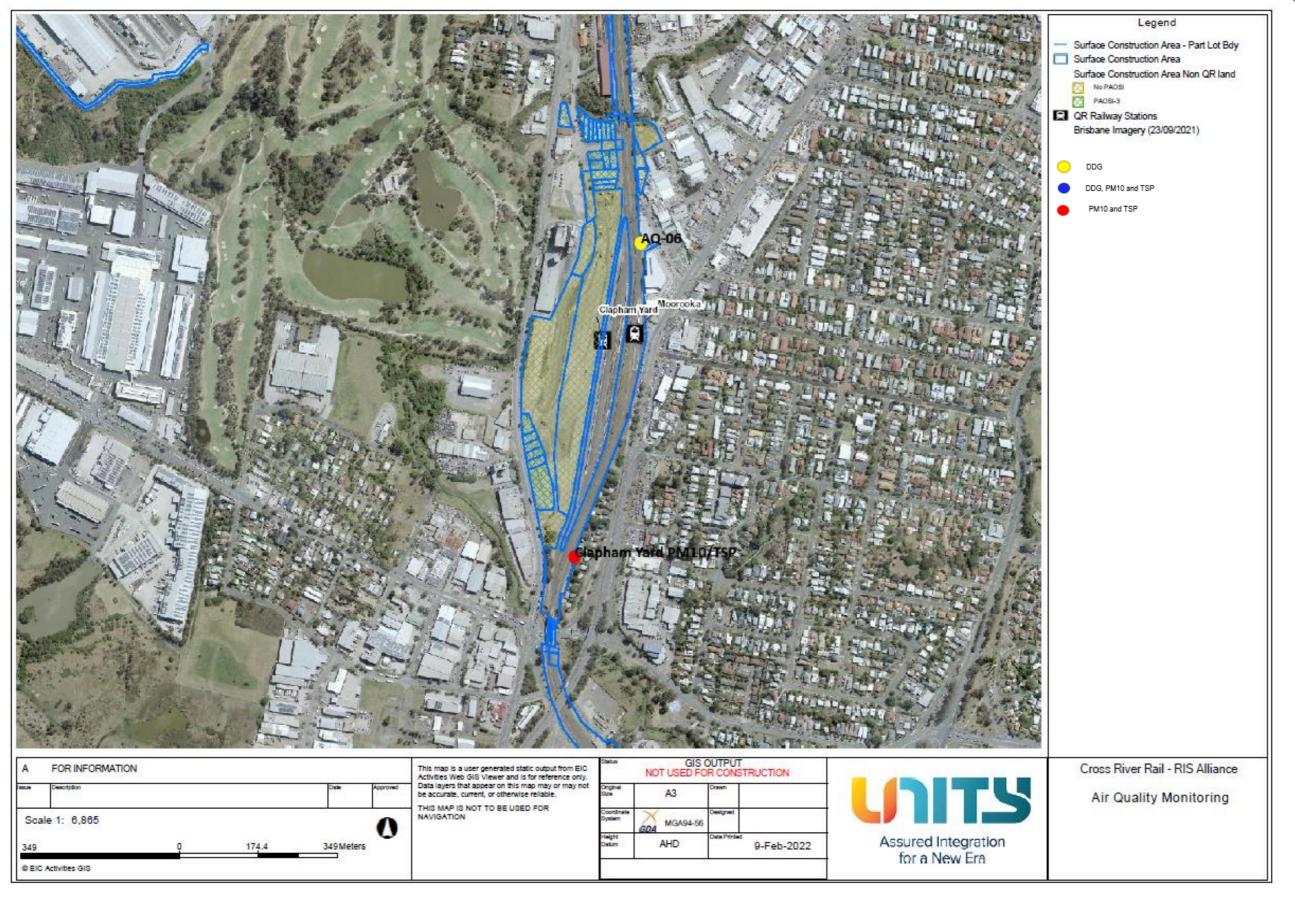


Attachment 3 Monitoring Locations – Air Quality





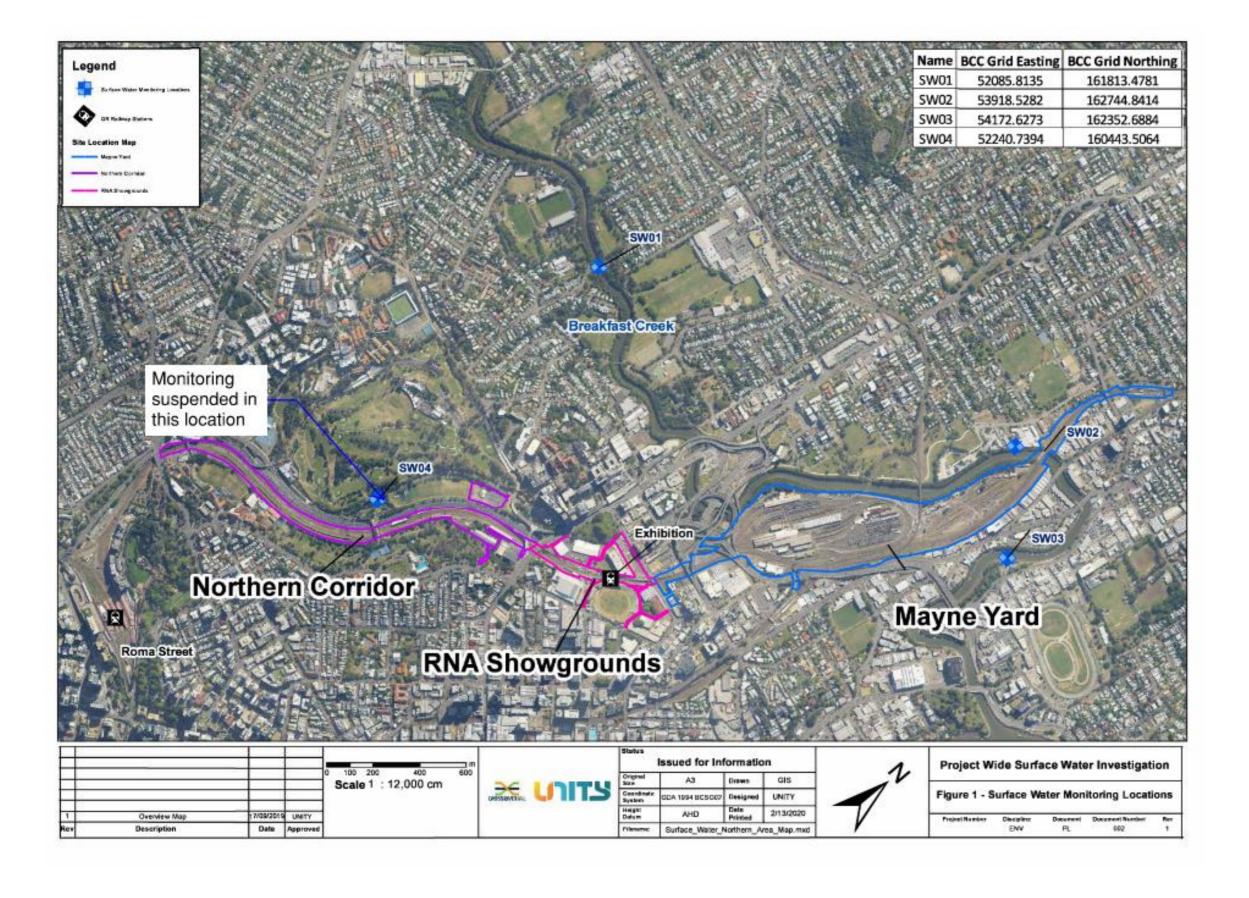




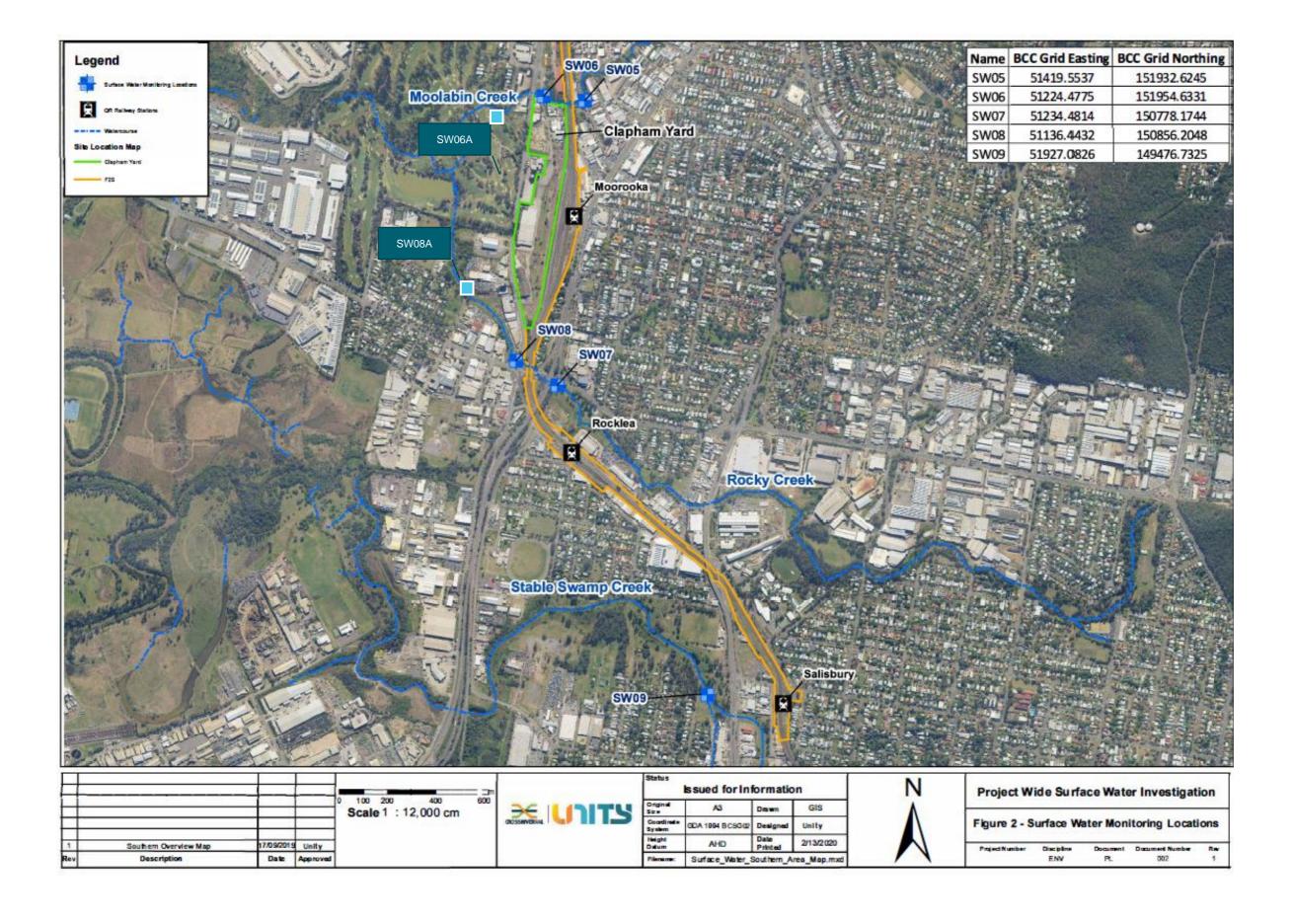


Attachment 4 Monitoring Locations – Surface Water











COORDINATOR-GENERAL'S MONTHLY REPORT: July 2022

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 one (1) occasion, noise monitoring was conducted on three (3) occasions during July 2022. Each noise and vibration 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, Southern Portal and Northern Portal precinct sites during July 2022. 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 project requirements were adhered to. One (1) round of surface water quality monitoring was conducted; the monitoring events confirmed no impacts were generated by the Project.

Cross River Rail – Tunnel and Stations

Document Number: CRR-TSD-RPT-CG-202204









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 8).
5.	Compliance and Incident management – Non-compliance events, notifications, and reporting.	Yes	Nil non-compliances occurred during the monitoring period (refer to Section 0).
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	Comment
		(Yes/No/NA)	
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 Change Report acknowledges instances that exist that these goals may not be achieved.

One (1) vibration monitoring session was conducted during July 2022. 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.	27/07/2022	16:00	27/07/2022	Mary Street (Albert Street Precinct)	-	0.55	10	Commercial Structure (Controlled Blast)	Yes

Cross River Rail – Tunnel and Stations









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 exist that these goals may not be achieved.

Noise monitoring was conducted on three (3) occasions during July 2022. All noise monitoring data adhered to project requirements and is provided 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 LAeq	Adhered to Project Requirements (Yes / No)
1.	12/07/2022	12:00:00 PM	Gregory Terrace (Northern Portal Precinct)	Construction Monitoring at Sensitive Places	External	Rail fit-out	Road Traffic	62	65.2	52	63.5	Yes
2.	13/07/2022	18:17:00 PM	Peter Doherty Street (Boggo Road Precinct)	Construction Monitoring at Sensitive Places	External	Clearing	Construction	59	66.7	57	63.8	Yes
3.	19/07/2022	10:22:00 AM	Mark Lane (Woolloongabba Precinct)	Construction Monitoring at Sensitive Places	External	Concrete Works	Construction and Road Traffic	62	63.3	52	61.4	Yes

^{- [1]} Intermittent noise goal (LA10)

Cross River Rail – Tunnel and Stations

^{- [2]} Continuous noise goal (LAeq)

⁻ Note: 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.









3.3 Air Quality

3.3.1 Deposited Dust Results

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 that these goals may not be achieved. Dust deposition monitoring was performed in July 2022. The dust deposition gauges result for the reporting period are detailed below, and all monitoring data adhered to project requirements.

Table 4.2: April Air Quality Monitoring – 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
Northern Portal				17.24	
Roma Street Precinct				10.00	
Albert Street Precinct (North)	1			110.34	
Albert Street Precinct (South)				27.59	
Woolloongabba Precinct (North)	Nuissass	Danasita dalam	420	25.00	Air quality monitoring was performed during
Woolloongabba Precinct (South)	- Nuisance	Deposited dust	120	25.00	the reporting period. All results adhered to project requirements.
Boggo Road Precinct (North)				7.41	
Boggo Road Precinct (South)	1			55.56	
Southern Portal (South)	1			22.22	
Southern Portal (East)				18.52	

Cross River Rail – Tunnel and Stations









3.3.2 Particulates and Ambient Air Quality Results

Total Suspended Particles (TSP) and particulate matter less than 10µm (PM10) monitoring was conducted during July 2022.

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, Boggo Road and Northern Portal Precincts during July 2022. 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

	TSP	PM10	Woolld	ongabba	Alb	ert	Boggo	Road	Northern	Portal
Date	Project Goal ^[1]	Project Goal	TSP	PM 10	TSP	PM 10	TSP	PM 10	TSP	PM 10
					(μg/m3/24	hr)				
01-Jul-22	80	50	9.49	9.48	25.42	25.14	9.81	9.80	15.43	15.39
02-Jul-22	80	50	7.25	7.25	9.74	9.70	5.64	5.64	11.21	11.19
03-Jul-22	80	50	5.31	5.29	7.68	7.64	5.41	5.39	5.54	5.48
04-Jul-22	80	50	6.23	6.22	16.83	16.71	9.00	8.99	8.74	8.66
05-Jul-22	80	50	9.40	9.39	19.53	19.45	13.02	13.02	12.98	12.95
06-Jul-22	80	50	5.62	5.61	14.28	14.17	4.41	4.39	7.87	7.83
07-Jul-22	80	50	3.35	3.33	19.32	19.10	3.42	3.41	4.35	4.28
08-Jul-22	80	50	1.79	1.77	19.44	19.13	1.62	1.62	2.92	2.79
09-Jul-22	80	50	8.01	8.00	16.65	16.51	9.84	9.84	7.96	7.91
10-Jul-22	80	50	9.20	9.17	10.61	10.57	11.82	11.82	14.37	14.29
11-Jul-22	80	50	5.99	5.98	17.85	17.68	7.82	7.82	10.70	10.65
12-Jul-22	80	50	7.73	7.71	15.29	15.10	9.42	9.42	13.98	13.93
13-Jul-22	80	50	3.07	3.04	13.18	12.93	4.39	4.39	13.18	13.05
14-Jul-22	80	50	3.07	3.05	15.26	15.12	3.57	3.56	4.40	4.31
15-Jul-22	80	50	5.18	5.16	23.02	22.93	6.07	6.07	7.96	7.90
16-Jul-22	80	50	12.78	12.76	13.03	13.00	17.26	17.26	18.31	18.26
17-Jul-22	80	50	7.58	7.58	5.25	5.25	10.40	10.39	11.74	11.70
18-Jul-22	80	50	5.69	5.66	22.46	22.18	6.20	6.20	7.06	6.96









	TSP	PM10	Woolld	ongabba	Albe	ert	Boggo	Road	Norther	n Portal
Date	Project Goal ^[1]	Project Goal	TSP	PM 10	TSP	PM 10	TSP	PM 10	TSP	PM 10
					(μg/m3/24	hr)				
19-Jul-22	80	50	4.49	4.46	11.21	11.03	4.82	4.80	6.64	6.55
20-Jul-22	80	50	4.21	4.19	10.84	10.73	3.67	3.66	7.07	7.02
21-Jul-22	80	50	3.92	3.92	12.15	12.05	4.12	4.12	7.94	7.90
22-Jul-22	80	50	3.95	3.95	10.72	10.68	3.26	3.26	8.56	8.54
23-Jul-22	80	50	3.06	3.04	6.13	6.08	2.04	2.04	6.80	6.75
24-Jul-22	80	50	3.63	3.62	6.63	6.57	4.08	4.07	7.58	7.55
25-Jul-22	80	50	6.91	6.89	14.68	14.52	8.65	8.64	11.64	11.59
26-Jul-22	80	50	8.59	8.56	18.09	17.81	10.73	10.72	15.21	15.05
27-Jul-22	80	50	2.51	2.47	11.64	11.35	2.24	2.23	4.73	4.53
28-Jul-22	80	50	6.59	6.55	15.30	15.05	8.62	8.61	9.85	9.75
29-Jul-22	80	50	8.04	8.01	22.46	22.24	10.16	10.16	14.10	13.97
30-Jul-22	80	50	5.54	5.53	11.65	11.55	7.20	7.20	9.40	9.35
31-Jul-22	80	50	5.73	5.72	10.17	10.11	8.09	8.08	9.97	9.94

^[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.



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: **21.2 µg/m3/24 hr** (https://apps.des.qld.gov.au/air-quality/chart/?station=cbd¶meter=18&date=1/07/2022&timeframe=month)
- South Brisbane: PM10 daily Maximum average: **27.4 µg/m3/24 hr** (https://apps.des.qld.gov.au/air-quality/chart/?station=sbr¶meter=18&date=1/07/2022&timeframe=month)
- Woolloongabba: PM10 daily Maximum average: **40.1** µg/m3/24 hr (https://apps.des.qld.gov.au/air-quality/chart/?station=woo¶meter=18&date=1/07/2022&timeframe=month)

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

Cross River Rail – Tunnel and Stations

Document Number: CRR-TSD-RPT-CG-202204









Particle PM₁₀ at Brisbane CBD, 1-31 July 2022 @ about Particle PM₁₀

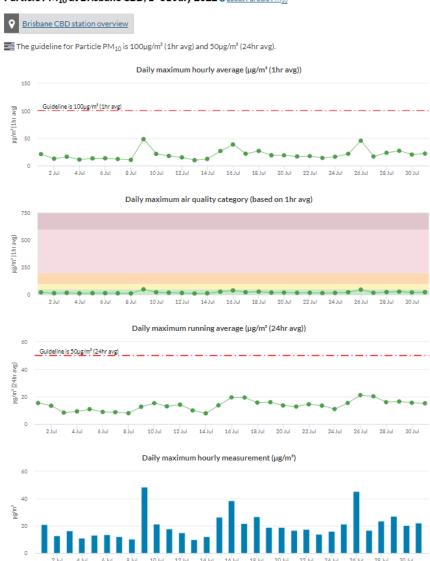


Figure 1: Brisbane CBD – DES Station - PM10 graph for July 2022 (reproduction from the DES website).









Particle PM₁₀ at South Brisbane, 1-31 July 2022 @ about Particle PM₁₀

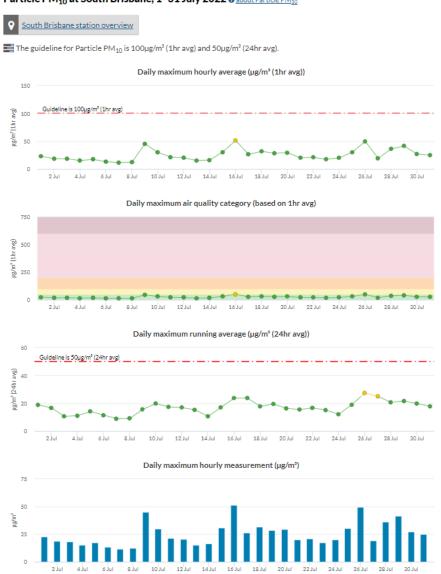


Figure 2: South Brisbane - DES Station - PM10 graph for July 2022 (reproduction from the DES website).









Particle PM₁₀ at Woolloongabba, 1-31 July 2022 @ about Particle PM₁₀



Figure 3: Woolloongabba – DES Station - PM10 graph for July 2022 (reproduction from the DES website).

Cross River Rail – Tunnel and Stations

Document Number: CRR-TSD-RPT-CG-202204









3.4 Water Quality – Discharge

CBGU undertook four (4) water quality monitoring events prior to the release (groundwater and surface water) 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

						Testing of	Water Qual	ity Objectives	[1]				Adhered to
Location	Date	Н	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 (FRP) (µg/L)	phy g/∟)	Dissolved oxygen (%) [2]	Project Requirements (Yes / No)
Woolloongabba	12/07/2022	7.84	6	1.13	80.00	620.00	1000.00	1700.00	300.00	<10	<1	84.80	Yes
Roma Street	14/07/2022	7.63	<5	0.23	110.00	520.00	500.00	1100.00	300.00	<10	<1	81.01	Yes
Albert Street	12/07/2022	7.53	<5	0.01	690.00	1760.00	500.00	3000.00	10.00	<10	<1	60.76	Yes
Boggo Road	13/07/2022	7.23	<5	3.20	60.00	680.00	458.00	1000.00	30.00	<10	<1	111.35	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.

- 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

Document Number: CRR-TSD-RPT-CG-202204

^{- [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 prior to 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

			Testing of Water (Quality Objectives [1]	Adhered to Project
No.	Location	Date	рН	Turbidity (NTU)	Requirements (Yes / No)
1.	Northern Portal	27/06/2022	8.31	2.60	Yes
2.	Northern Portal	28/06/2022	8.41	10.38	Yes
3.	Northern Portal	29/06/2022	8.29	9.62	Yes
4.	Northern Portal	30/06/2022	8.33	1.55	Yes
5.	Northern Portal	1/07/2022	8.36	2.32	Yes
6.	Northern Portal	2/07/2022	8.46	28.90	Yes
7.	Northern Portal	4/07/2022	8.27	6.80	Yes
8.	Northern Portal	5/07/2022	8.35	16.14	Yes
9.	Northern Portal	6/07/2022	8.33	28.60	Yes
10.	Northern Portal	7/07/2022	8.37	12.54	Yes
11.	Northern Portal	8/07/2022	8.41	3.40	Yes
12.	Northern Portal	9/07/2022	8.28	6.40	Yes
13.	Northern Portal	11/07/2022	8.40	2.63	Yes
14.	Northern Portal	12/07/2022	8.41	5.25	Yes
15.	Northern Portal	13/07/2022	8.42	7.80	Yes









16.	Northern Portal	14/07/2022	8.42	2.25	Yes
17.	Northern Portal	15/07/2022	8.32	2.07	Yes
18.	Northern Portal	16/07/2022	8.38	4.73	Yes
19.	Northern Portal	18/07/2022	8.24	5.48	Yes
20.	Northern Portal	19/07/2022	8.31	12.42	Yes
21.	Northern Portal	20/07/2022	8.40	6.80	Yes
22.	Northern Portal	21/07/2022	8.41	5.43	Yes
23.	Northern Portal	22/07/2022	8.43	28.90	Yes
24.	Northern Portal	23/07/2022	8.42	15.12	Yes
25.	Northern Portal	25/07/2022	8.37	1.92	Yes
26.	Northern Portal	26/07/2022	8.43	2.10	Yes
27.	Northern Portal	27/07/2022	8.41	3.43	Yes
28.	Northern Portal	28/07/2022	8.20	4.10	Yes
29.	Northern Portal	29/07/2022	7.90	11.20	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.









3.5 Water Quality – Surface Water

During July 2022, CBGU JV undertook one (1) round of surface water sampling at five (5) site locations (upstream and downstream). A localised rain-event occurred on 4th July 2022 that resulted in a round of post rainfall sampling being performed at Albert Street and Woolloongabba. The Roma Street and Boggo Road sites did not experience as much rainfall and therefore surface water quality monitor was not necessary in these locations.

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)	EC (μS/cm)	Dissolved oxygen (%)	рН
Albert Street	Upstream	4/07/2022	Monthly/Post Rain	8.75	16300	71.9	7.7
Albert Street	Downstream	4/07/2022	Monthly/Post Rain	9.35	16300	72.91	7.59
Woolloongabba	Upstream	4/07/2022	Monthly/Post Rain	9.5	15600	75.95	7.65
Woolloongabba	Downstream	4/07/2022	Monthly/Post Rain	8.81	14900	74.94	7.66
Boggo Road ^[1]	Downstream	4/07/2022	Monthly	6.41	4210	54.68	7.23
Northern Portal	Downstream	13/07/2022	Monthly	6.1	560	53.25	7.52
Roma Street	Upstream	14/07/2022	Monthly	11.08	17200	77.97	7.89
Roma Street	Downstream	14/07/2022	Monthly	12.96	17600	80	7.89

^[1] Monitoring at the Boggo Rd site occurs at a pipe outlet at the beginning of the surface catchment. There is no upstream/downstream monitoring point as such. The pipe outlet receives water released from the site, as well as a broader stormwater catchment.

Cross River Rail - Tunnel and Stations









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				

Cross River Rail – Tunnel and Stations









Complaints

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

During July 2022, 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.	7 Jul 22	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.	14 Jul 22	Parkland Boulevard (Roma Street Precinct)	Spill	A stakeholder contacted the Project regarding a minor concrete spill on Parklands Boulevard. CBGU reviewed the circumstances and cleaned up the spilt material.	Closed
3.	17 Jul 22	Mary Street (Albert Street Precinct)	Noise	A stakeholder contacted the Project regarding noise generated from the Albert Street Precinct. 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

Cross River Rail – Tunnel and Stations

Document Number: CRR-TSD-RPT-CG-202204



6 September 2022

Cross River Rail Delivery Authority

Attention: Peter Silvester Assistant Program Director Level 6, 123 Albert Street Brisbane QLD 4000

Review of Cross River Rail Project Monthly Environmental Report July 2022

Peter

Pursuant to Cross River Rail Project Independent Certifier Deed, Schedule 2 – Services, Part 3 Environmental Monitor under the current Coordinator-General's CRR Project-wide Imposed Conditions – Condition 7 [c] [iv], I confirm that I have reviewed the Cross River Rail Delivery Authority's July monthly environmental report (MER) for consistency with the requirements of the Imposed Conditions (Part A-General) Condition 6 (a) (b) (c) and Condition 7 (c) [iv].

In my opinion the aforementioned document (July 2022 MER), as prepared by the Cross River Rail Delivery Authority, is generally consistent with the Imposed Conditions reporting requirements including Condition 6 (a) (b) and (c).

Yours sincerely,

Brett O'Donovan

Cross River Rail - Environmental Monitor Representative