Cross River Rail Project

Monthly Environmental Report

February 2024

Table of Contents

| Mont | hly Environmental Report | 1 | | |
|---------|--|------|--|--|
| Execut | ive Summary | 3 | | |
| Non- | Compliance Events | 7 | | |
| Definit | ions | 8 | | |
| 1. | Introduction | 9 | | |
| 1.1. | Background | 9 | | |
| 1.2. | Project Delivery | 9 | | |
| 1.3. | Reporting Framework | . 11 | | |
| 1.4. | Monthly Environment Report Endorsement | . 11 | | |
| 2. | Compliance Review | 11 | | |
| 2.1. | Relevant Project Works | . 11 | | |
| 2.2. | Key Environmental Elements | . 13 | | |
| 2.2. | 1. Noise | 13 | | |
| 2.2. | 2. Vibration | 14 | | |
| 2.2. | 3. Air Quality | 14 | | |
| 2.2. | 4. Water Quality | 16 | | |
| 2.2. | 5. Erosion and Sediment Control | 19 | | |
| 2.3. | Complaints Management | . 19 | | |
| 2.4. | 2.4. New Upcoming Project Works | | | |
| 2.5 | 5 Non-Compliance Events | | | |
| Appen | dix A RIS Monthly Report | 25 | | |
| Appen | Appendix B TSD Monthly Report | | | |





Executive Summary

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

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

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

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

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

| Imposed Condition | nposed Condition Requirement Summary | | Comment |
|---|--|-----|---|
| 1. | General conditions – compliance with the Project Changes relevant to the contractor's scope | Yes | The CEMP and site management plans are in accordance with the Project Changes. |
| 2. Outline Environmental Management Plan – timely submission to the Coordinator- General including required sub- plans | | 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. | 4. Construction Environmental Management Plan – all relating to Relevant Project Works. | | RIS – CEMP Revision 13 covering full scope of RIS works is effective from 14 March 2022. TSD – CEMP Revision 11 covering full scope of TSD works is effective from 24 November 2022. |
| 5. | Compliance and Incident management – Non-compliance events, notifications and reporting. | Yes | No Non-Compliance Event (NCE) were reported in February 2024. |





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





| Imposed Condition | Requirement Summary | Compliance Met (Yes/No/NA) | Comment |
|----------------------|---|----------------------------------|---|
| 12. | Property damage – relating to ground movement. | Yes | RIS – Vibration modelling has been undertaken for Relevant Project Works, and Property Damage Sub-plans have been developed and implemented. Pre- condition surveys have been completed at heritage, commercial and residential buildings at RNA, Northern Corridor and Dutton Park to Salisbury stations. TSD – Vibration modelling has been prepared and is ongoing. Where required, building condition survey reports are completed for heritage and residential buildings. |
| 13. | Air quality – Works must aim to achieve air quality goals for human health and nuisance. | Yes | Air quality monitoring met Project air quality requirements. RIS – Contractor confirmed they continued to meet the requirements under Condition 13 and the OEMP. Refer to Appendix A (Tables 5, 6, 7 and 8 and Section 3.2, plus Figures 1, 2, and 3). Data gaps were experienced at RNA Showgrounds and Mayne Yard, however, the Contractor confirmed they continued to meet the requirements under Condition 13 and the OEMP. Refer to section 2.2.3 below and Appendix A (figures 2 and 3 and Section 3.2.2). TSD – Contractor confirmed they continued to meet the requirements under Condition 13 and the OEMP. Data gaps were experienced at Woolloongabba and Boggo Road, however, the Contractor confirmed they continued to meet the requirements under Condition 13 and the OEMP. Refer to Section 2.2.3 below and Appendix B (Table 4.2.2 and 5 and Section 3.3). |
| 14. | Traffic and transport – Works must minimise adverse impacts on road safety and traffic flow. | Yes | Traffic Management Plans are covered in the CEMPs. Sub-plans for all active worksites have been reviewed by the EM. |



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





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

Non-Compliance Events

There were no NCE raised in February 2024.





Definitions

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





1. Introduction

1.1. Background

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

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

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

1.2. Project Delivery

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

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

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

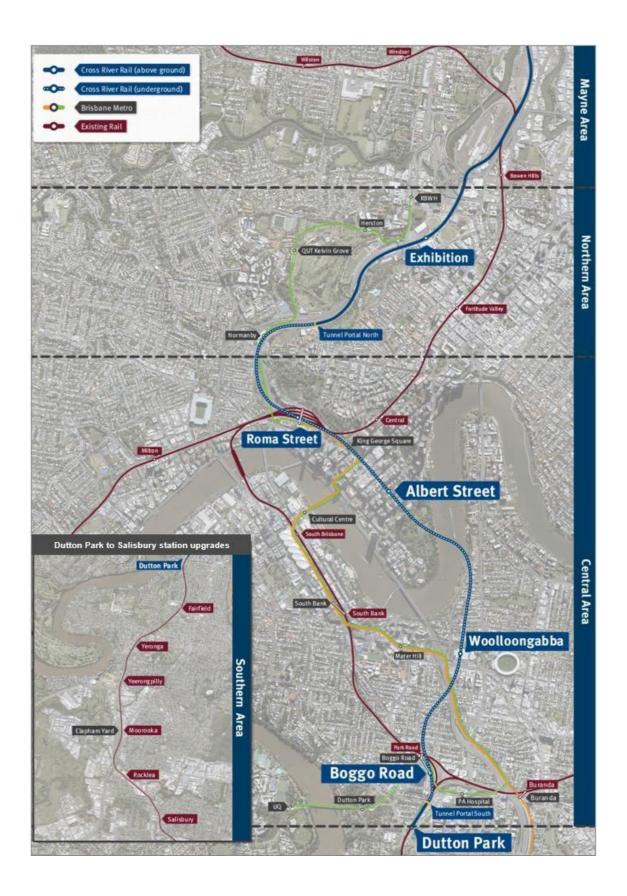
The Project is geographically divided into four areas:

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

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











1.3. Reporting Framework

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

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

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

1.4. Monthly Environment Report Endorsement

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

2. Compliance Review

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

2.1. Relevant Project Works

The following Project Works were undertaken in February 2024:

| Area | Project Works |
|---------------|---|
| Mayne Area | Mayne Yard North – Schedule 18, Part 1 ALT Notice issued for SP1 on 10-Jan '24; and Anticipate achieving Practical Completion of SP1 by 31 Mar 2024. Mayne Yard East / West – |
| | Mayne East entry road reconfiguration on schedule with drainage, CSR, hydraulics and bulk earthworks ongoing as planned; Auxiliary Building nearing completion with internal fitout progressing to schedule; and Compressor Building construction commenced. |
| Northern Area | RNA / Exhibition – BR44 viaduct completed; Station scope continuing with platform tiling/coping stones and safety step progressing to schedule, services rough-in, block work and plaza level building fit-out; RSS wall 220 completed; and SUP commenced. Northern Corridor – Auxiliary Road Hand-over to Rail Systems Teams. Track installation commenced completed on Auxiliary and Holding Roads. Up CRR installation ongoing towards Exhibition Station; VP Feeder Station Handed over to TP&C Team, Earth Injection Test & HV Audit completed; Soil nails between BB Road to Exhibition Station commenced; ERS Civil and CSR scope completed; Soil nails between BB Road to Exhibition Station commenced; ERS Civil scope completed installed at Northern Portal; DRS piling and CSR scope completed; Victoria Park ROS installation ongoing, Energex VPFS pre-commissioning (75% complete); Traction Power cabling from VPFS to Roma St installed, all but 2 terminated including all 36 in line cable joints; and Traction Power pit earthing and cable supports complete. |

11





| Central Area | Roma Street – Main Station Building B1 to B4 service installation and passenger lift RFP |
|---------------|---|
| | construction ongoing; |
| | M&E Building services installation and fit-out continues and LV sub route cabling ongoing; and |
| | Cavern PSD flame and door installation ongoing. |
| | Albert Street – |
| | Lot 1 – continuing ongoing internal jump form cycle pours and B4 suspended slab formwork installed; |
| | Lot 2 – mass fill in MC01 and MC02 and continuing PSD header frame steel install; and |
| | Lot 3 – concrete structure concrete pours nearing completion, continuing lift core 1 install and continued M&E fit out install on B4. |
| | Woolloongabba – |
| | External wall pours continue to progress; |
| | L0 Station box precast 62% complete; |
| | Mezzanine spans 5-7 continuing; |
| | Blockworks continues; |
| | Escalator installation ongoing; |
| | PSD installation ongoing; and |
| | M&E building services ongoing in South Cavern Back of House and platform culverts ongoing installation. |
| | Tunnel fit-out – |
| | Fit out work ongoing in SP2B, B2G, G2A, A2R and R2NP in MC01 and MC02; |
| | Southern Portal M&E activities are ongoing; |
| | Boggo Road to Southern Portal track activities ongoing; and |
| | Ongoing M&E fit-out works in the cross passages. |
| | Boggo Road – |
| | Concrete to insitu structure ongoing; |
| | Reinforcement to insitu structure ongoing; |
| | Buttress plank – 29 of 34 installed; |
| | Deck units install – 82 of 119 complete; |
| | HV Room 1 commissioning continues; |
| | M&E fit-out continuing in northern and southern Back of House; and DOD stack installation superior. |
| | PSD steel installation ongoing. Southern Portal |
| | Southern Portal – |
| | Continue FRP works to Eastern and Western Approach Bridges substructures; |
| | Post frames and screens install ongoing; |
| | Relieving slab works ongoing; |
| | MC01 and MC02 in-situ slab tie in ongoing; and |
| | Shaft 3 finishes and repair ongoing. |
| Southern Area | Southern / Dutton Park – |
| | Progressed work on PL1, PL2, Kent St entry, and Noble St entry. |
| | Predominantly inground services, platform slabs, soil nailing, retaining walls, |
| | blockwork, piling, structural concrete, structural steel, building & soffit |
| | framing, roofing, cable rough-in and roofing; |
| | Kent St works on hold for the month of Feb-24 as requested due to potential |
| | incoming change to add an RMAR not included in the design; |
| | Continued fit out of overpass modules, stair 1 & stair 2 installed; |
| | Progressed work external to the station including drainage CSR / TFR |
| | progress throughout the corridor; and |
| | Completed TtO stage RIS-S-11A (Up Sub onto final alignment & install portal turpout) |
| | turnout). Fairfield station – |
| | Minor defect closeout; |
| | Closeout of emergency egress lighting control design changes; |
| | Closeout of final electrical items to enable handover of PCEE and |
| | |





| Mildmay Street light pole and zebra crossing installation planned in February SCAS |
|--|
| Yeronga station – |
| Completion of QR feedback items and finalising completion documentation for Practical Completion; |
| Closeout of final electrical items to enable handover of PCEE; and |
| Closeout of emergency egress lighting control design changes. |
| Yeerongpilly station – |
| • Platform 1: Progressed installation of Northern half of the platform (Southern half waiting for cable cutovers to occur) remaining platform walls to the southern end of platform 1; |
| Platform 2/3: Progressed lower-level services, bulk backfill, conduits installation, structural foundations; |
| Temporary Gantry: Energisation and commissioning completed; and |
| Reefnet relocation completed from Park Road to Yeerongpilly. Defect rectified. Waiting for QR to issue SCA to put the gantry into use. |
| Clapham Yard – |
| Muriel Avenue Bridge Maintenance Access Walkway installation continues. |
| Open v-drains commenced. |
| BR94 (Chale Street) structure completed. |
| Completed critical OHLE foundations. |
| Electrical / Comms – Installation. |
| Rocklea station – |
| Continued fit-out of overpass, stairs 01, 02, 03. |
| Installation and termination of circuits to switchboards and distribution boards. |
| Installation of platform canopy soffit framing, sheeting, painting. |
| Platform canopy cable rough-in and lighting / camera / speaker fit out. |
| Brookes Street asphalt, roadworks, paths, kerbing etc. |
| Energex connection completed mid-February. |
| Salisbury – |
| Piling path for gantry |
| Services location |
| Drainage works. |
| |
| |

2.2. Key Environmental Elements

2.2.1. Noise

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

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

Where internal monitoring was not possible, contractors have undertaken external monitoring at nominated locations. To assess external monitoring and determine compliance with the project's noise

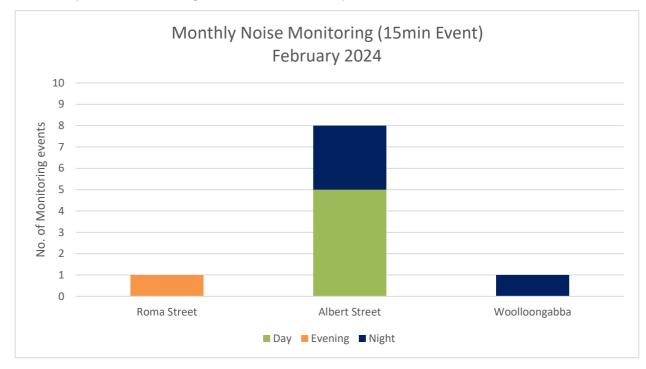




requirements, the project applies recommended façade attenuation corrections, which considers receiver property type.

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

For all other areas, no noise monitoring sessions occurred during the reporting period. All works including the Out of Hours works have been previously assessed and monitored for similar activities. Subsequently these works and their potential noise levels were deemed consistent with previous monitoring undertaken for the project across the relevant locations.



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

2.2.2. Vibration

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

In the Central area, vibration monitoring occurred at Roma Street, Albert Street and Woolloongabba worksites. The TSD contractor reported the vibration requirements have been met, monitoring results are detailed in **Appendix B** (Table 2).

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

2.2.3. Air Quality

2.2.3.1. Dust Deposition

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

Monthly Environmental Report – February 2024





In the Southern Area, the Yeerongpilly Dust deposition gauge was temporarily removed during station works and was reinstated in a new location on 2 February 2024. Lab results for this gauge were not available at the time of this report and will be reported in the March 2024 Report.

| Air Quality – Dust Deposition Monitoring | | | | |
|--|-----------------|---|--|--|
| Area | Worksite | Monitoring Location | Comments | |
| Mayne Area | Mayne Yard | Mayne Yard North | - Results met air quality goal | |
| Northern RNA / Area Exhibition | | RNA Showgrounds | - Results met air quality goal | |
| | Northern Portal | Northern Portal (near Brisbane Girls Grammar School) | - Results met air quality goal | |
| Central Area | Albert Street | Mary Street | - Results met air quality goal | |
| Altu | 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 | |
| | Southern Portal | PA Hospital - Central Energy Unit along Kent Street | - Results met air quality goal | |
| | Roma Street | Roma Street station | - Results met air quality goal | |
| | Woolloongabba | Russian Orthodox Cathedral | - Results met air quality goal | |
| | vvoonoongabba | Woolloongabba Busway | - Results met air quality goal | |
| Southern Area | Dutton Park | Dutton Park | - Results met air quality goal | |
| | | Railway Terrace | - Results met air quality goal | |
| | Yeerongpilly | Yeerongpilly | - Results to be reported in March Report | |
| | Clapham Yard | Clapham Yard | - Results met air quality goal | |

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

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

2.2.3.2. Particulate Matter and Total Suspended Particulates

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

In the Mayne Area, the active rental monitor at Mayne Yard East experienced data transmission issues and was swapped back to the UNITY owned monitor. Days of invalid data was captured between 1-7 February 2024.

In the Northern Area, the active rental monitor at RNA also experienced data transmission issues and was swapped back to a UNITY owned monitor. Days of invalid data was captured between 6-29 February 2024.

UNITY confirmed the outage periods mentioned above from Mayne Yard and RNA was due to data





download and transmission issues experienced by the Airmet rental monitors. UNITY were able to solve this issue by reinstating the UNITY air quality monitors following calibration. However, due to the lag in switching the monitors, data gaps were experienced.

UNITY undertook investigations to confirm the project requirements were still being met during the reporting period where valid data was not captured and reported. The investigations considered a range of factors including current works on site and staging, implemented mitigation measures, meteorological conditions and if there were any air quality related complaints. The investigations confirmed that despite the absence of particulate data across both sites, UNITY's scope of works and implementation of their Air Quality Management Plan has met the project outcomes set out by the Imposed Conditions. Additionally, investigations and air quality modelling will be undertaken at RNA to determine if monitoring of particulates is required for current and future works.

In the Central Area, the TSD contractor confirmed that the Boggo Road air quality monitoring unit experienced technical difficulties between 4-5 February 2024. As soon as practicable, the unit was inspected, and the issue was resolved. The nearby (Woolloongabba) DESI air quality monitoring station confirmed air quality levels were below the air quality goals during these outage periods. The Woolloongabba air quality monitoring unit also experienced technical difficulties between 8-10, 16-19 and 25-27 February 2024. As soon as practicable, the unit was inspected, and the issue was resolved. The nearby (Brisbane South) DESI air quality monitoring station confirmed air quality levels were below the air quality confirmed air quality levels were below the air quality and the issue was resolved. The nearby (Brisbane South) DESI air quality monitoring station confirmed air quality levels were below the air quality goals during these outage periods. Refer to **Appendix B** (Table 5 and Section 3.3.2).

| Air Quality | Air Quality – PM ₁₀ / TSP Monitoring | | | | |
|------------------|---|---|--|--|--|
| Area | Worksite | Monitoring Location | Comments | | |
| Mayne Area | Mayne Yard | Mayne Yard East | Results met air quality goals. Data gaps between 1-7 February 2024 due to switching of monitors. | | |
| Northern Area | RNA / Exhibition | RNA showgrounds | Results met air quality goals. Data gaps between 6-29 February 2024 due to technical difficulties. | | |
| | Albert Street | iStay River City and Capri (Corner of Mary Street and Albert Street) | - Results met air quality goals. | | |
| Central Area | Boggo Road / Southern Portal | North-east of Boggo Road worksite | Results met air quality goals. Data gaps between 4-5 of February 2024 due to technical difficulties. | | |
| | Woolloongabba | Place Park, Woolloongabba | Results met air quality goals. Data gaps between 8-10, 16-19 and 25-27 February 2024 due to technical difficulties. | | |
| Southern Area | Clapham Yard | Clapham Yard | - Results met air quality goals. | | |

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

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

Monthly Environmental Report - February 2024





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

In the Northern Area, active surface water discharge monitoring occurred on 21 occasions at Northern Portal. The monitoring results demonstrated active surface water discharges met project water quality discharge criteria. Refer to **Appendix B** (Table 7) for further details. Post rainfall monitoring was triggered in receiving waters of Mayne Yard, RNA and Northern Corridor sites.

In the Central Area, active surface water discharge monitoring was triggered at Albert Street, Boggo Road and Southern Portal. The monitoring results demonstrated active surface water discharges met project water quality discharge criteria. Refer to **Appendix B** (Table 7) for further details. Post rainfall monitoring was triggered in receiving waters of all central worksites.

In the Southern Area, post rainfall monitoring was triggered in receiving waters of Clapham Yard, Rocklea and Salisbury including Moolabin Creek, Rocky Waterholes Creek and Stable Swamp Creek. Refer to **Appendix A** (Table 9 and Section 3.3.2) for more details.

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

| Surface W | Surface Water Quality Monitoring | | | | | |
|------------------|----------------------------------|-----------|-------------------------|-----------------------|--|--|
| 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. | |
| | Exhibition/ RNA | No | Yes | No | ESC was implemented in accordance with site specific ESC Plan. Post-rainfall monitoring undertaken. | |
| Northern Area | Northern Portal | Yes | Yes | Yes | Active surface water discharge met water quality investigation criteria. Post-rainfall monitoring undertaken.Routine in-stream monitoring undertaken in accordance with WQMP. | |
| | Northern Corridor | No | Yes | No | ESC was implemented in accordance with site specific ESC Plan. Post-rainfall monitoring undertaken. | |
| Central Area | Albert Street | Yes | Yes | Yes | Active surface water discharge met water quality investigation criteria. Routine in-stream monitoring undertaken in accordance with WQMP. Post-rainfall monitoring undertaken. | |

Surface water quality monitoring is summarised in the table below:





| | | 1 | | | A otivo ourfese weter dis de ser |
|------------------|-------------------|-----|-----|-----|--|
| | Boggo Road | Yes | Yes | Yes | Active surface water discharge met water quality investigation criteria. Routine in-stream monitoring undertaken in accordance with WQMP. Post-rainfall monitoring undertaken. |
| | Roma Street | No | Yes | Yes | Routine in-stream routine monitoring undertaken in accordance with WQMP. Post-rainfall monitoring |
| | Woolloongabba | No | Yes | Yes | undertaken. Routine in-stream monitoring undertaken in accordance with WQMP. Post-rainfall monitoring |
| | Southern Portal | Yes | Yes | Yes | undertaken. Active surface water discharge met water quality investigation criteria. Routine in-stream monitoring undertaken in accordance with WQMP. |
| | | | | | Post-rainfall monitoring undertaken. |
| | Dutton Park | No | No | No | ESC was implemented in accordance with site specific ESC Plan. |
| | Fairfield station | No | No | No | ESC was implemented in accordance with site specific ESC Plan. |
| | Yeronga | No | No | No | ESC was implemented in accordance with site specific ESC Plan. |
| Southern Area | Clapham Yard | No | Yes | No | ESC was implemented in accordance with site specific ESC Plan. Post-rainfall monitoring undertaken. |
| | Rocklea No | | Yes | No | ESC was implemented in accordance with site specific ESC Plan. Post-rainfall monitoring |
| | | | | | - ESC was implemented |
| | Salisbury | No | Yes | No | in accordance with site specific ESC Plan. Post-rainfall monitoring |
| | | | | | undertaken. |





2.2.4.2. Groundwater

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

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

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

Groundwater quality monitoring is summarised in the table below:

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

2.2.5. Erosion and Sediment Control

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





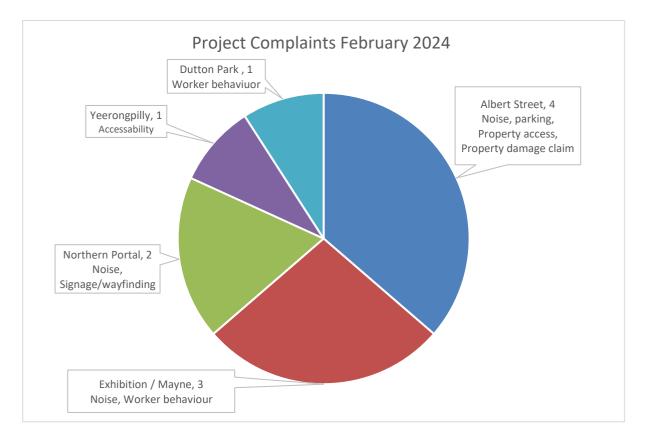
2.3. Complaints Management

A total of fourteen (14) complaints were received during the month, of which eleven (11) were project related.

RIS works received seven (7) complaints related to project works in February 2024 relating to noise and worker behaviour at Mayne Yard, noise and worker behaviour at Northern Portal, parking at Dutton Park and accessibility impacts at Yeerongpilly. For further details and breakdown of complaints, refer to **Appendix A** (Table 3).

TSD works received four (4) project related complaints related to noise, parking, property access and business claim at Albert Street. TSD received an additional three (3) complaints. However, upon further investigation into the complaints, it was confirmed the complaints were not related to Project Works. For further details and a breakdown of complaints, refer to **Appendix B** (Table 10).

Of the three (3) complaints that were received and not project related, two (2) were noise complaints at Albert Street due to saw cutting works but confirmed as not being project related. One (1) complaint was initially a property damage claim at Woolloongabba that was raised in December 2023. The claim was investigated and found to be not likely related to project works. The contractor categorised the claim as a non-project related complaint in the reporting period.



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

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

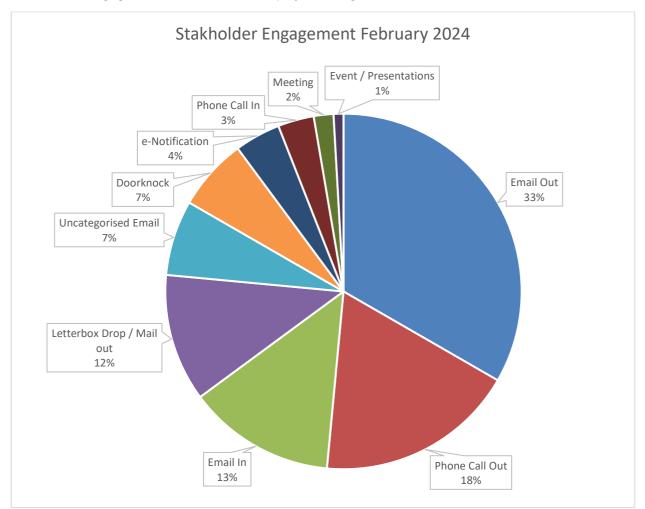
To close out a complaint, the monitoring data is reviewed (where applicable) against compliance with the CEMP, site environmental management plans and permits, and checks that required community notification has taken place. Contractors have also confirmed that planned mitigation to reduce the impact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

Monthly Environmental Report - February 2024





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



2.4. New Upcoming Project Works

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

| Area | New planned works in the coming months |
|---------------|--|
| Mayne Area | Mayne Yard North – |
| | Remaining minor T&C defects are being addressed as access becomes available during Q1 '24. Mayne Yard East / West – N-18 MY-E Shunter Shed commissioning 5th March; |
| | RIS-N-7A2 (Road 40 realignment South end wheel lathe) in EXT-26 (March 2024); Air-Compressor foundations and structural steel erecting; and BR16 piling (ped bridge at MY-E) commencing early March. |
| Northern Area | RNA / Exhibition – Platform paving to continue; Lift installation to commence; Painting to commence; CSR connectivity on BR44 to CER for handover to Comms Team; Energex permanent power connection on 12 March; BR44 handover to Track on 18 March; and FRP final platform slab. Northern Corridor – SCAS EXT-26 (1-10 March) includes Auxiliary Road tie-ins, CRR-Up connection, final formation either side of Ekka Station BR44 viaduct including CSR connectivity, track installation over BR44 from 19th March; |





| | Completion of TFR scope entirely north of VPFS ongoing (pits & conduits); Continue Commence road furniture, height gauges, footpaths etc; Track commenced 18 January 2024; Vic Park Feeder Station Civils fully completed by 28th Jan for Injection Test Now delayed to 12 February due to heavy rain on the first date; HV Audit to follow February 2024; VPFS Energisation 11 March 2024; DRS mast installation 11/12th March 2024; Ground retention works at Ekka Station future UP-CRR Line; and Holding road driver platform installation. |
|--------------|---|
| Central Area | Roma Street – Escalator steel installation in cavern; Level B4 partition walls, fan cure units and fit-out installation; Services installation and fitout on mezzanine; External wall cladding bracket installation in Station box; L3 water proofing at M&E building; and B1 and B4 service installation and cable tray installation at M&E building. Albert Street – Lot 1 – Commence Jump Form cycle 6; Lot 2 – Complete stage 1 mass fill for MC01 and MC02; and Lot 3 – Commence canopy/roof structural steel install and complete lift 1 install including testing and commissioning. Woolloongabba – Platform screen door steel support install ongoing in Southern cavern; Topping slab in Southern cavern mezzanine; Span 8 install; Saccardo Nozzle install; TVS fans installation following installation of attenuators; and Escalator delivery and ongoing M&E fit-out works. Boggo Road – Ongoing perimeter / internal wall and topping slab pours; Recommence station box deck units and buttress planks installation; Ongoing M&E fit-out works in RIS rooms; and RIS SPER Comms and Control cabling. Southern Portal – CSR, bridge works, Freight flyover works and drainage works in upcoming SCAS; EG1 lift; Bridge casting; Bridge eastern approach infill pours; Bridge western approach deck FRP for topping slabs; and Land last deck units and close roof on Southern Portal. |





| Southern Area | Southern / Dutton Park – March will see further progress of the station construction including retaining walls, soil nails, structural nails, structural concrete for pier protection, structural steel elements, roofing, platform slabs, cable rough-in, building & soffit fit-out; TFR pit cable supports, cables and earthing installation and Park Road TSC early works & preparation for temp power for Pre-Commissioning, preservation and SAT. |
|---------------|---|
| | Fairfield Station – |
| | Minor defect closeout; Closeout of emergency egress lighting control design changes; Closeout of final electrical items to enable handover of PCEE; and Mildmay Street light pole and zebra crossing installation planned in February SCAS QR_S_WE24021 (request from local councillor). |
| | Yeerongpilly Station – |
| | Platform 1: Continue lower-level services, structural foundations, install remaining platform precast walls; |
| | Platform 2/3: Roofing to canopies and blockwork to the station buildings. Progress preparation for platform slabs to commence in February 2024; and Wilkie Street Entrance: Progress the staged construction of the Wilkie Street entrance area to ensure either stairs or lifts always remain open. |
| | Yeronga Station – |
| | Completion of QR critical defects and finalising completion documentation for PC; Closeout of final electrical items to enable handover of PCEE; and Closeout of emergency egress lighting control design changes. |
| | Moorooka – |
| | • Nil. |
| | Clapham Yard – |
| | BR94 throw-screens commencing; Aurizon reinstatement and return of works, shunter walkways, driveways and stone pitching along Fairfield Road; Civil Works, CSR works ongoing, commence driver pathways; and |
| | Procurement and Planning stage for Electrical / Comms. |
| | Rocklea Station – |
| | Fitout of stairs 01, 02, 03; Continue installation of lifts: |
| | Continue Installation of Ints, Continue platform canopy and buildings lining; |
| | End of platform egress pathing; |
| | Landscaping; Station signage: and |
| | Station signage; andFencing. |
| | Salisbury – |
| | Installation of gantry crane piles; |
| | Excavation of platform 3; Services road location; and |
| | Piling path for platform 3 piles |

2.5 Non-Compliance Events

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





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

Gate 1 - EM notification to contractor. NCE confirmed

Gate 2 - 48 hour NCE notification submitted to CG

Gate 3 - 14 day report submitted

Gate 4 - 14 day report uploaded to CRR website





Appendix A RIS Monthly Report





Monthly CGCR Report – February 2024

Cross River Rail – Rail, Integration and Systems Alliance

| Project number: | Q01080 | | |
|------------------|---------------------------|--|--|
| Document number: | RIS-UNA-ENV-MRP-06610-046 | | |
| Revision date: | 28 March 2024 | | |
| Revision number: | A | | |

Document Approval

| Rev | Date | Prepared By | Reviewed By | Approved By | Remarks |
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Table of Contents

| 1 | Progress | s Summary - Relevant Project Works | 3 |
|------|-------------|--|----|
| 2 | Complai | nts | 7 |
| 3 | Environn | nental Monitoring Results | 9 |
| 3.1 | | - | |
| 3.2 | Air Quality | ۱ | |
| 3.3 | Water Qua | ality | |
| 4 | Complia | nce Review | 23 |
| 4.1 | Non-Comp | pliance Events | |
| 4.2 | C-EMP Co | ompliance | |
| Atta | chment 1 | Imposed Conditions Non-Compliance Event Report (if required) | 25 |
| | chment 2 | Monitoring Locations – Noise and Vibration (if required) | |
| Atta | chment 3 | Monitoring Locations – Air Quality | 28 |
| Atta | chment 4 | Monitoring Locations – Surface Water | 34 |



1 Progress Summary - Relevant Project Works

The following Project Works were undertaken during the reporting period:

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

| Area | Project Works |
|---------------|---|
| Mayne Area | Mayne Yard North Schedule 18, Part 1 ALT Notice issued for SP1 on 10 January 2024 Anticipated SP1 PC date 31 Mar 2024. Mayne Yard East / West N-18 MY-E Shunter Shed commissioning (15 February 2024) was delayed due to QR User Groups not accepting the facilities. Delayed to 5th Mar. Mayne East entry road reconfiguration on schedule with drainage, CSR, hydraulics, and bulk earthworks ongoing as planned. Auxiliary Building nearing completion with internal fitout progressing to schedule. Compressor Building construction commenced. |
| Northern Area | RNA / Exhibition BR44 viaduct completed. Station scope continuing with platform tiling/coping stones and safety step progressing to schedule, services rough-in, block work and plaza level building fit-out. RSS wall 220 completed. SUP commenced. Northern Corridor Auxiliary Road Hand-over to Rail Systems Teams. Track installation commenced completed on Auxiliary and Holding Roads. Up CRR installation ongoing towards Exhibition Station. VP Feeder Station Handed over to TP&C Team, Earth Injection Test & HV Audit completed. Soil nails between BB Road to Exhibition Station commenced. ERS Civil and CSR scope completed. Soil nails between BB Road to Exhibition Station commenced. ERS Civil scope completed installed at Northern Portal. DRS piling and CSR scope completed. Victoria Park ROS installation ongoing, Energex VPFS pre-commissioning (75% complete). Traction Power cabling from VPFS to Roma St installed, all but 2 terminated including all 36 in line cable joints. Traction Power pit earthing & cable supports complete. |
| Southern Area | Southern Portal / Dutton Park Progressed work on PL1, PL2, Kent St entry, and Noble St entry. Predominantly inground services, platform slabs, soil nailing, retaining walls, blockwork, piling, structural concrete, structural steel, building and soffit framing, roofing, cable rough-in and roofing. Kent St works on hold for the month of Feb-24 as requested due to potential incoming change to add an RMAR not included in the design. Continued fit out of overpass modules, stair 1 and stair 2 installed. Progressed work external to the station including drainage CSR / TFR progress throughout the corridor. |



| Area | Project Works |
|---------------|---|
| | Completed TtO stage RIS-S-11A (Up Sub onto final alignment & install portal turnout). |
| Southern Area | Fairfield Station Minor defect rectification and close-out. Subcontractor completed detailed design for end of platform egress lighting issues and platform lighting control. CPS design review completed end of Feb. With subcontractor for final update. Mildmay St light pole and installation completed in February SCAS QR_S_WE2402. |
| Southern Area | Yeronga Station Progressed remaining minor defect / punch list items. |
| Southern Area | Yeerongpilly Station Platform 1: Progressed installation of Northern half of the platform (Southern half waiting for cable cutovers to occur) remaining platform walls to the southern end of platform 1. Works progressed include installation of low-level services, drainage, earthworks, and structural foundations. Platform 2/3: Progressed lower-level services, bulk backfill, conduits installation, structural foundations. Temporary Gantry: Energisation and commissioning completed. Reefnet relocation completed from Park Road to Yeerongpilly. Defect rectified. Waiting for QR to issue SCA to put the gantry into use. |
| Southern Area | Clapham Yard Muriel Avenue Bridge Maintenance Access Walkway installation continues. Open v-drains commenced. BR94 (Chale Street) structure completed. Completed critical OHLE foundations. Electrical / Comms – Installation. |
| Southern Area | Rocklea Station Continued fit-out of overpass, stairs 01, 02, 03. Installation and termination of circuits to switchboards and distribution boards. Installation of platform canopy soffit framing, sheeting, painting. Platform canopy cable rough-in and lighting / camera / speaker fit out. Brookes Street asphalt, roadworks, paths, kerbing etc. Energex connection completed mid-February. |
| Southern Area | Salisbury Station Piling path for gantry Drainage works. Services location. |

The following table summarises the upcoming Project Works:

Table 2: Summary of upcoming Project Works

| Area | Project Works |
|------------|------------------|
| Mayne Area | Mayne Yard North |



| Area | Project Works | | | | | | | | |
|---------------|--|--|--|--|--|--|--|--|--|
| | Remaining minor T&C defects are being addressed as access becomes available during Q1/24 | | | | | | | | |
| | during Q1 '24. | | | | | | | | |
| | Mayne Yard East / West | | | | | | | | |
| | N-18 MY-E Shunter Shed commissioning 5th March. | | | | | | | | |
| | • RIS-N-7A2 (Road 40 realignment South end wheel lathe) in EXT-26 (March 2024). | | | | | | | | |
| | Air-Compressor foundations and structural steel erecting. | | | | | | | | |
| | BR16 piling (ped bridge at MY-E) commencing early March. | | | | | | | | |
| Northern Area | RNA / Exhibition Station | | | | | | | | |
| | Platform paving to continue. | | | | | | | | |
| | Lift installation to commence. | | | | | | | | |
| | Painting to commence. | | | | | | | | |
| | CSR connectivity on BR44 to CER for handover to Comms Team. | | | | | | | | |
| | Energex permanent power connection on 12 March. | | | | | | | | |
| | BR44 handover to Track on 18 March. | | | | | | | | |
| | FRP final platform slab. | | | | | | | | |
| | Northern Corridor | | | | | | | | |
| | SCAS EXT-26 (1-10 March) includes Auxiliary Road tie-ins, CRR-Up connection, final formation either side of Ekka Station BR44 viaduct including CSR connectivity, track installation over BR44 from 19th March. | | | | | | | | |
| | Completion of TFR scope entirely north of VPFS ongoing (pits and conduits). | | | | | | | | |
| | Continue road furniture, height gauges, footpaths etc. | | | | | | | | |
| | Track commenced 18 January 2024. | | | | | | | | |
| | Vic Park Feeder Station Civils fully completed by 28 Jan for Injection Test Now delayed to 12 February due to heavy rain on the first date. | | | | | | | | |
| | HV Audit to follow February 2024. | | | | | | | | |
| | VPFS Energisation 11 March 2024. | | | | | | | | |
| | DRS mast installation 11/12 March 2024. | | | | | | | | |
| | Ground retention works at Ekka Station future UP-CRR Line. | | | | | | | | |
| | Holding road driver platform installation. | | | | | | | | |
| | • Ext-257 02 – 26 April 2024. | | | | | | | | |
| Southern Area | Southern Portal / Dutton Park | | | | | | | | |
| | March will see further progress of the station construction including retaining walls, soil nails, structural nails, structural concrete for pier protection, structural steel elements, roofing, platform slabs, cable rough-in, building and soffit fit-out. | | | | | | | | |
| | TFR pit cable supports, cables & earthing installation. | | | | | | | | |
| | Park Road TSC early works and preparation for temp power for Pre-Commissioning, preservation, and SAT. | | | | | | | | |
| Southern Area | Fairfield Station | | | | | | | | |
| | Minor defect closeout. | | | | | | | | |
| | Closeout of emergency egress lighting control design changes. | | | | | | | | |
| | Closeout of final electrical items to enable handover of PCEE. | | | | | | | | |
| | Mildmay Street light pole and zebra crossing installation planned in February SCAS QR_S_WE24021 (request from local councillor). | | | | | | | | |
| Southern Area | Yeerongpilly Station | | | | | | | | |
| | Platform 1: Continue lower-level services, structural foundations, install remaining platform precast walls. | | | | | | | | |
| | Platform 2/3: Roofing to canopies and blockwork to the station buildings. Progress preparation for platform slabs to commence in February. | | | | | | | | |
| | Wilkie Street Entrance: Progress the staged construction of the Wilkie Street entrance area to ensure either stairs or lifts always remain open. | | | | | | | | |
| Southern Area | Yeronga Station | | | | | | | | |
| | Completion of QR critical defects and finalising completion documentation for PC. | | | | | | | | |
| | | | | | | | | | |



| Area | Project Works | | | | | | | | |
|---------------|--|--|--|--|--|--|--|--|--|
| | Closeout of final electrical items to enable handover of PCEE. | | | | | | | | |
| | Closeout of emergency egress lighting control design changes. | | | | | | | | |
| Southern Area | Moorooka Station | | | | | | | | |
| | Nil Specific. | | | | | | | | |
| Southern Area | Rocklea Station | | | | | | | | |
| | • Fitout of stairs 01, 02, 03. | | | | | | | | |
| | Continue installation of lifts. | | | | | | | | |
| | Continue platform canopy and buildings lining. | | | | | | | | |
| | End of platform egress pathing. | | | | | | | | |
| | Landscaping. | | | | | | | | |
| | Station signage. | | | | | | | | |
| | Fencing. | | | | | | | | |
| Southern Area | Clapham Yard | | | | | | | | |
| | BR94 throw-screens commencing. | | | | | | | | |
| | Shunter walkways, driveways, and stone pitching along Fairfield Road. | | | | | | | | |
| | Civil Works, CSR works ongoing, commence driver pathways. | | | | | | | | |
| | Electrical / Comms – Procurement and Planning stage. | | | | | | | | |
| | Aurizon reinstatement and return of works, shunter walkways, driveways, and stone pitching along Fairfield Road. | | | | | | | | |
| Southern Area | Salisbury Station | | | | | | | | |
| | Installation of gantry crane piles. | | | | | | | | |
| | Excavation of platform 3. | | | | | | | | |
| | Services road location. | | | | | | | | |
| | Piling path for platform 3 piles. | | | | | | | | |

Acronyms:

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



2 Complaints

Table 3: Summary of Complaints

| Date Received | Location | Issue | Project Works / Activity source of the concern | Reporting Period | Complaint Detail | Unity Response | Status |
|-------------------------|-----------------------|--------------|--|---|--|---|--------|
| Friday 2 February | Exhibition station | Noise | Workers in overflow car park | complain about workers t gathering and making noise in the overflow car park on the | | borkers king noise in ark on the Street and e, Bowen provided a | |
| Friday 16 February | Mayne Yard | Noise | Rock breaking | February | Stakeholder who lives near Mayne Road, Bowen Hills messaged the CRRDA Facebook page to complain about noise coming from Mayne Yard wheel lathe works – rock breaking of an evening. | As stakeholder has not reached out directly to UNITY, the team is unable to respond due to absence of contact details. | Open |
| Saturday 17 February | Mayne Yard | Noise | Night works. | February | Stakeholder who lives on Mayne Road, Bowen Hills emailed to complain about noise coming from Mayne Yard works of an evening. | Team informed the stakeholder that due to localised flooding in the rail corridor on Friday recovery works were required in Mayne Yard in vicinity of apartments located on Mayne Road. | Closed |
| Saturday 17 February | Normanby | Noise/ Light | Night works. | February | Stakeholder complained about noise and light coming from the Normanby rail corridor. Couldn't believe the project was able to work at this time of night. This stakeholder lives approximately 500 metres. | The team is currently investigating work activities occurring in the Normanby rail corridor on Saturday evening and will respond via email as requested. | Closed |



| | | | | | away from the rail corridor in Herston Village. | | |
|--------------------------|---------------|-------------------------|----------------------------------|----------|---|---|--------|
| Wednesday 21 February | Victoria Park | Traffic | Signage and traffic controllers. | February | Cyclist emailed to complain about the increased heavy vehicle use on the Victoria Park access Road to gate 3. No signage to direct cyclists to use the shared path diversion or to warn cyclists of trucks using the access road. Also complained about the behaviour of traffic control holding cyclists and pedestrians. | Team emailed the stakeholder back and provided further details on the upcoming use of the Victoria Park access road. Site inspection signage will be undertaken. Team pre-started on expected behaviours of works while working on the project. | Closed |
| Saturday 24 February | Yeerongpilly | Construction Closure | Wilkie Street lift. | February | Stakeholder emailed to complain about the three- month closure of the Wilkie Street lift at Yeerongpilly. He is concerned that the closure is too long. | Stakeholder provided information about the (significant) amount of works to be performed in that area during the temporary lift closure. Unity offered to add Stakeholder to the database for regular updates, and provided UNITY contact information should he require further assistance. | Closed |
| Tuesday 27 February | Dutton Park | Traffic | Workforce Parking | February | Stakeholder complaint about ongoing workforce parking in residential streets (Sampson and Tamar streets). | The project would look at implementing some no workforce parking signage in the area. Happy for residents to contact council if workers continue to ignore project direction and BCC parking restrictions. | Closed |



3 Environmental Monitoring Results

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

3.1 Acoustics

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

3.1.1 Noise Monitoring

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

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

3.1.2 Noise Monitoring Results

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

3.1.3 Vibration Monitoring

Vibration monitoring to validate the predictive model was triggered for:

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

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

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

3.1.4 Vibration Monitoring Results

Table 4: Summary of Vibration Data

| Location | Date (Start and Finish) | Time of day | Closest DAP / Sensitive Place | Receiver Type (table 3 – | Purpose of Monitoring | Vibration intensive | Maximum predicted | | Maximum recorded | Vibration goal for | Exceedance of vibration limit? | Comments |
|----------------------|-------------------------|-------------|----------------------------------|----------------------------------|--|----------------------|-------------------|--|---------------------------|--------------------------------------|--------------------------------|--|
| | | | | Imposed Condition 11(e)) | | equipment | level | between Equipment and Sensitive Place @Time of Monitoring" | vibration level (mm/s) | receiver | | |
| John MacDonald Stand | 1/02/24 - 1/03/24 | 24hrs/7days | John MacDonald Stand | Heritage - DIN4150 Group 1 | Construction Monitoring at Sensitive Places - Model Verification | 2.5T rock breaker | 1.8mm/s | 25m | 0.009 | 3mm/s Prop damage> Heritage | No Exceedance | 2.5T rock breaker used at RNA for works, closest distance was 25m to JMS. Peak vibration recorded was 0.009mm/s, did not exceed predicted vibration levels or 3mm/s property damage goal. |





3.1.5 Interpretation

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

3.1.6 Noise Monitoring

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

3.1.7 Vibration Monitoring

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

Vibration monitoring was undertaken during the reporting period.

3.2 Air Quality

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

Visual monitoring was undertaken during routine environmental inspections. A total of 26 inspections were undertaken by the Environment Team across Mayne Yard, RNA Showgrounds, Northern Corridor, Southern Area, Yeerongpilly station, Clapham Yard, and Rocklea and Salisbury stations.

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

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

Table 5: Summary of Air Quality monitoring devices



| Monitoring Device Installed by UNITY | Area | Name | Date Installed | Status for the Reporting Period |
|---|---------------------------------------|--------------------|----------------|--|
| TSP / PM ₁₀ Monitor | Mayne Yard East (Eastern Air Shed) | Mayne Yard East | 26 August 2022 | Partially active during reporting period. No data between 01/02 and 08/02 as DMP was sent out for calibration. |
| TSP / PM ₁₀ Monitor | Clapham Yard (Eastern Air Shed) | Clapham Yard | 9 August 2021 | Active |
| TSP / PM ₁₀ Monitor | RNA (Western Air Shed) | RNA | 25 August 2020 | Partially active during reporting period. No data between 06/02 and 29/02 as DMP was sent out for calibration. |

3.2.1 Dust results

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

The results are detailed below and compared against Imposed Condition 13(b). The monitoring results show no exceedances of the CGCR Goal of $120 \text{mg/m}^2/\text{day}$.

The Yeerongpilly DDG was removed during station works, and was reinstated at a new location on 02/02/2024, UNITY is still waiting for lab results for AQ-09.

| CGCR Goal (mg/m2/day) | AQ-01 - RNA Showground (mg/m2/day) | AQ-04 Grafton Street (E Mayne) (mg/m2/day) | AQ-06– Clapham Yard (mg/m2/day) | AQ-08 – Dutton Park (mg/m2/day) | Station | Portal | AQ-11 Railway Terrace (mg/m2/day) |
|--------------------------------------|--|---|---------------------------------------|---------------------------------------|---------|--------|--|
| 120 | 23 | 10 | 27 | 47 | | 13 | 13 |
| Total Rainfall during Period (mm) | 129 | 129 | 180 | 105 | 180 | 129 | 105 |

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



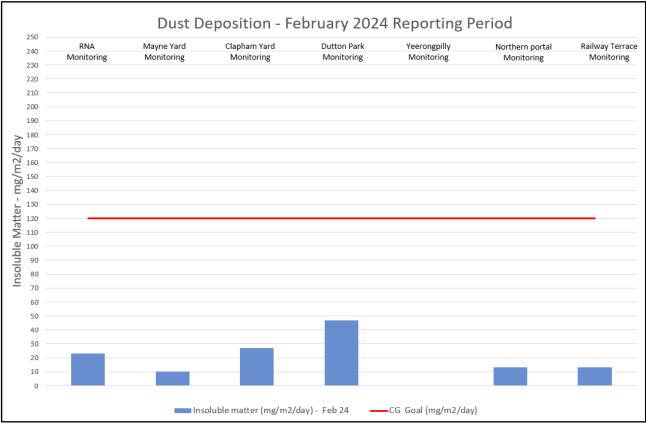


Figure 1: Air Quality Monitoring (Deposited Dust) Results

No exceedances of the Dust Deposition goal were recorded during the reporting period. There is no data for Yeerongpilly as UNITY is still awaiting lab results. The Yeerongpilly DDG was moved from the original location and reinstated in a position approved by the project CAQP.

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

3.2.2 Particulates Results

UNITY had three (3) active/ partially active air quality monitoring stations in place for the reporting period as detailed in Table 5. The rental monitor at RNA was removed during this reporting period and the UNITY DMP has since been reinstated. However, due to issues with the rental monitor, no valid data was recorded for most of the month. Similar issues with the rental monitor Mayne Yard account for the data gaps.

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

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

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

3.2.2.1 Monitoring Results – Reporting Period

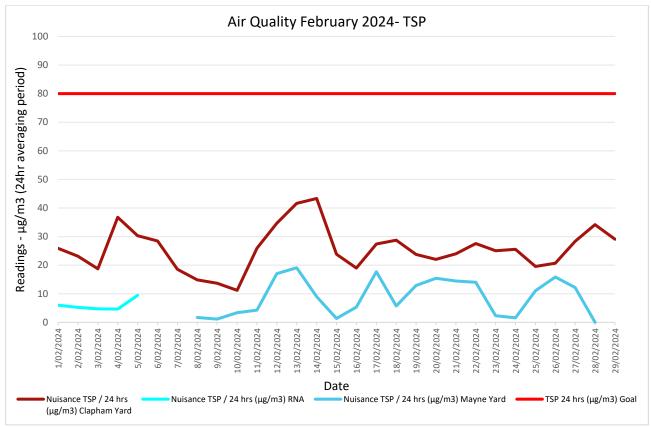
External ambient air quality data was collected for total suspended particles (TSP), and particulate matter less than 10 μ m (PM₁₀).

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

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

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





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

Figure 2: Air Quality Monitoring (TSP) Results

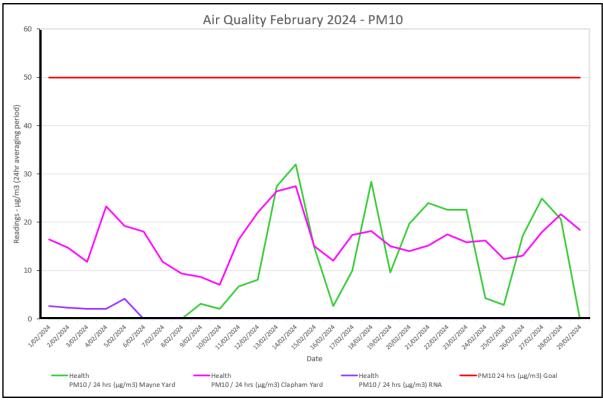


Figure 3: Air Quality Monitoring (PM10) Results



3.2.3 Monitoring Results – Annual Averaging

Imposed Condition 13 (a) sets annual average air quality goals for TSP (Human health) and PM_{10} (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. (<u>https://www.nepc.gov.au/system/files/resources/9947318f-af8c-0b24-d92804e4d3a4b25c/files/aaqprctp05datacollection200105final.pdf).</u>

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

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

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

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

| Monitoring Device Installed by UNITY | Area | Date Installed | Date Decommissioned | Number of days data was captured over 365 days period | Data capture over an annual period | Annual performance reporting |
|---|---|-----------------|---------------------------|---|--|--|
| TSP / PM ₁₀ Monitor | Northern Corridor (Eastern Air Shed) | 23 April 2020 | 13 January 2021 | 260 over 365 days | 71% over 365 days | Indicative only Data capture did not meet the minimum data capture requirements. |
| TSP / PM ₁₀ Monitor | Mayne Yard North (Eastern Air Shed) | 23 April 2020 | 11 May 2022 | Period 1 (to 23 April 2021) 358 over 365 days Period 2 (24 April 2021 to 25 April 2022) 364 over 365 days Period 3 (26 April 2022 to 11 May 2022) 3 days over 47 days | Period 1 98% over 365 days Period 2 99% Over 365 days Period 3 17% Over 47 days | Applicable for Period 1 Data capture met minimum data capture requirements. Applicable for Period 2 Data capture has met minimum data capture requirements Applicable for Period 3 Data capture has not met minimum data capture requirements |
| TSP / PM₁₀ Monitor | Mayne Yard East (Eastern Air Shed) | 26 August 2022 | Not yet decommissioned | Period 1 (Started 26 August 2022) 211 days over 280 days Period 2 (Started 27 August 2023) 107 days over 118 days | Period 1 75% Over 280 days Period 2 90% over 118 days | Applicable for Period 1 Data capture has not yet met minimum data capture requirements. Applicable for Period 2 Data capture has not yet met minimum data capture requirements. |
| rsp / PM ₁₀ Monitor | RNA (Western Air Shed) | 11 June 2020 | Not yet decommissioned | Period 1 (to 11 June 2021) 314 over 365 days Period 2 (12 June 2021 to 12 June 2022) 290 over 365 days Period 3 (Started 13 June 2022) 310 over 365 days Period 4 (Started 14 June 2023) 151 over 230 days. | Period 1 86% over 365 days Period 2 79% Over 365 days Period 3 85% Over 350 days Period 4 65% over 230 days. | Applicable for Period 1 Data capture met minimum data capture requirements. Applicable for Period 2 Data capture met minimum data capture requirements. Applicable for Period 3 Data capture met minimum data capture requirements. Not yet applicable for Period 4 Data capture has not yet met minimum data capture requirements. |
| TSP / PM₁₀ Monitor | Clapham Yard (Eastern Air Shed) | 1 February 2021 | 286 | Period 1 (to 31 January 2022) 326 over 364 days Period 2 (01 February 2022 to 31 January 2023) 190 over 365 days Period 3 (Started 01 February 2023) 315 over 363 days | Period 1 90% over 364 days Period 2 57% Over 365 days Period 3 87% over 363 days | Applicable for Period 1 Data capture met minimum data capture requirements. Applicable for Period 2 Data capture did not meet the minimum data capture requirements. Not yet applicable for Period 3 Data capture has not yet met the minimum data capture requirements. |



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

| Air Quality Indicator | Goal | Period | Northern Corridor | Mayne Yard North | Mayne Yard East | RNA | Clapham Yard |
|--------------------------|----------------------|----------|----------------------|-----------------------|--------------------|-----------------------|--------------------|
| TSP | 90 µg/m ³ | Period 1 | 8 µg/m³ | 11 µg/m³ | 9 µg/m³ | 18 µg/m³ | 8 µg/m³ |
| | | Period 2 | - | 10 µg/m³ | - | 15 µg/m³ | 16 µg/m³ |
| | | Period 3 | - | Not applicable | - | 13 µg/m ³ | Not yet applicable |
| | | Period 4 | - | Not applicable | - | Not yet applicable | - |
| PM10 | 25 µg/m ³ | Period 1 | 5 µg/m³ | 7 µg/m³ | 11 µg/m³ | 11 µg/m³ | 5 µg/m³ |
| | | Period 2 | - | 7 µg/m³ | - | 10 µg/m³ | 14 µg/m³ |
| | | Period 3 | - | Not yet applicable | - | 10 µg/m³ | Not yet applicable |
| | | Period 4 | - | Not yet applicable | - | Not yet applicable | - |

Table 8: Annual Performance Results

3.2.4 Interpretation

3.2.4.1 Particulates Results

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

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

PM₁₀ is one of the indicators for which the Coordinator-General has imposed a goal of 50µg/m³ (over an averaging period of 24 hours) the project must aim to achieve under Imposed Condition 13(a).

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

During the reporting period:

- No particulate results exceeded their relevant goals for PM₁₀.
- There were zero (0) complaints received associated with air quality at Mayne Yard, RNA and Clapham Yard.
- During the reporting period rental monitors were in place for the RNA and Mayne Yard DMPs as while UNITY monitors were out for calibration. During the switching out of the rental monitors with the UNITY monitors the RNA and Mayne Yard DMPs had days of inactivity. Accordingly, there no data is available for these time periods.

3.2.4.1.1 RNA and Mayne Yard DMPs

Due to issues with the rental DMPs that were in place while UNITY DMPs were out for calibration, there is not full sets of data for Mayne Yard and RNA for this reporting period. The rental DMPs were not transmitting data to be downloaded, and the issue was not identified immediately leading to gaps in the data. Previously, rental units have had issues with their batteries losing charge and these intermittent losses of charge have resulted in data loses for the respective reporting periods.

UNITY previously has undertaken an investigation to provide supplementary information to confirm the RIS scope of works has met the project outcomes.



UNITY Works

During the reporting period, RNA works consisted of station fit out and installation of services, while Normanby works consisted of OHLE works and track laying. Both RNA and Normanby are contained worksites, almost entirely capped, or covered with ballast and no major earthworks occurring. Stockpiles and batters at both sites are secured using geofabric or soil binder to reduce dust emitted from site.

Meteorological Conditions

As shown in the wind rose below (Figure 4) the predominant winds in the area during the reporting period were from a South easterly and North Westerly direction, meaning dust would be blown north-west. There were DDGs in place at RNA and Normanby throughout the reporting period which would have captured any dust blown from RNA and Normanby. The Mayne Yard DDG is located Northwest of the site, meaning it also would have captured any dust blown off site. There were no exceedances in DDG results.

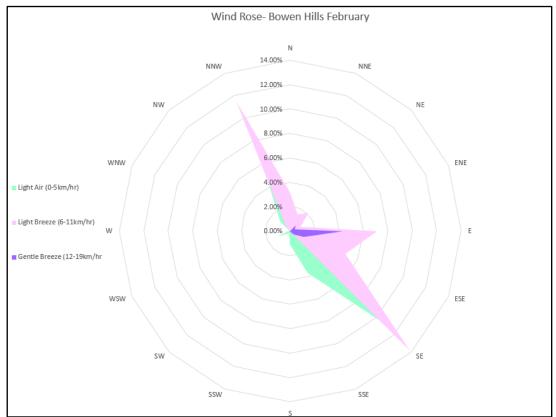


Figure 4 Bowen Hills Wind Rose February 2024

Air quality complaints

During the reporting period, no air quality complaints were received for works associated with RNA, Normanby, or Mayne Yard.

The UNITY DMPs have been reinstated and to date have not had any days of insufficient data or any exceedances in data. The project will continue to meet their requirements under imposed condition 13 and the OEMP.

3.3 Water Quality

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

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



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

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

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

3.3.1 Rainfall Records

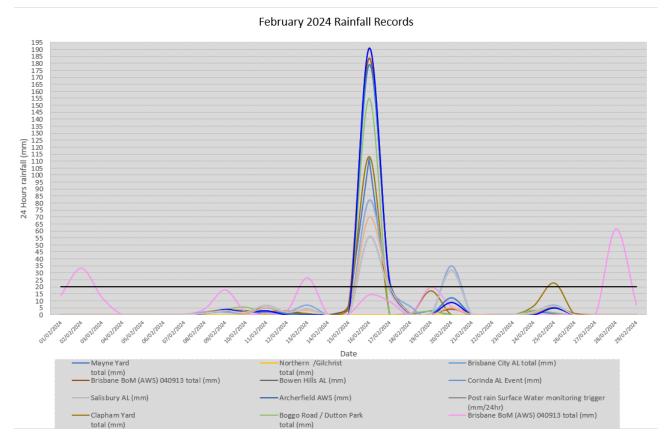


Figure 5: February 2024 Rainfall Records

3.3.2 Post Rainfall Monitoring Results

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

Post rainfall monitoring was triggered as per Condition 15(b) and Condition 18 and undertaken on the 17 and 26 February and reported on below in Table 9 with the RIS scope of works remaining compliant with Imposed Conditions 15 and 18.



| | | | Discharge Criteria ¹ | | | |
|-----------|--------------------------------|------------------|--|----------------------|---------------|---|
| Date | Location | Waterway | Turbidity (NTU) Nil until Turbidity / TSS correlation achieved ² | TSS (mg/L) <50 | DO (%) Nil | pH (pH Unit) Stable pH reading; and General sites: $6.5 - 8.5$, or Wallum/Acidic Ecosystems: $5.0 - 7.0$ 7.72 7.99 7.58 7.91 7.69 7.5 7.6 6.89 7.8 6.7 6.8 6.9 |
| 17-Feb-24 | SW1 (Upstream / Downstream) | Breakfast Creek | 29.8 | 35 | 99.3 | 7.72 |
| 17-Feb-24 | SW2 (Downstream / Upstream) | Breakfast Creek | 30.2 | 33 | 96.7 | 7.99 |
| 17-Feb-24 | SW3 (Downstream/ Upstream) | Breakfast Creek | 35 | 29.8 | 97.8 | 7.58 |
| 17-Feb-24 | SW5 (Upstream) | Moolabin Creek | 18.66 (field) | n/a | 97.45 | 7.91 |
| 17-Feb-24 | SW6 (Downstream) | Moolabin Creek | 18.9 | 10 | 66 | 7.69 |
| 17-Feb-24 | SW7 (Midstream) | Rocky waterholes | 45 | 39.8 | 85 | 7.5 |
| 17-Feb-24 | SW7a (Upstream) | Rocky waterholes | 45.2 | 16 | 90 | 7.6 |
| 17-Feb-24 | SW9 (Downstream) | Stable Swamp | 17.3 | 19 | 95.3 | 6.89 |
| 17-Feb-24 | SW9a (Upstream) | Stable Swamp | 16.8 | 13 | 85 | 7.8 |
| 26-Feb-24 | SW5 (Upstream) | Moolabin Creek | 4.9 | <5 | 67 | 6.83 |
| 26-Feb-24 | SW6 (Downstream) | Moolabin Creek | 5 | <5 | 66 | 6.7 |
| 26-Feb-24 | SW7 (Midstream) | Rocky waterholes | 8.8 | <5 | 67 | 6.8 |
| 26-Feb-24 | SW7a (Midstream) | Rocky waterholes | <5 | 7.9 | 66 | 6.9 |
| 26-Feb-24 | SW9 (Downstream) | Stable Swamp | 5.7 | <5 | 66 | 6.89 |
| 26-Feb-24 | SW9a (Upstream) | Stable Swamp | 11.6 | <5 | 85 | 6.88 |

Table 9: Summary of Post Rainfall Monitoring Results

There were no exceedances in water quality for this reporting period. Note that lab results were not provided for SW-5 from monitoring on 17th of February as no sample could be collected as there was no safe access to the site. Field results have been provided.

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 dry season (April to August) and wet season (November to March) monitoring to be completed when scheduled.

The wet season bi-annual monitoring was undertaken during the last reporting period on the 23 January 2024.

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

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

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



3.3.4 Groundwater Discharge Monitoring Results

Groundwater discharge monitoring was not triggered during the reporting period.

3.3.5 Surface Water Discharge Monitoring

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



4 Compliance Review

4.1 Non-Compliance Events

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

4.1.1 Non-Compliance Events Summary

Table 10: Summary of Non-Compliance Events

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

4.2 C-EMP Compliance

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

Table 11: C-EMP and relevant Subplans monitoring requirements – Compliance Status for the reporting period.

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



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



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



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



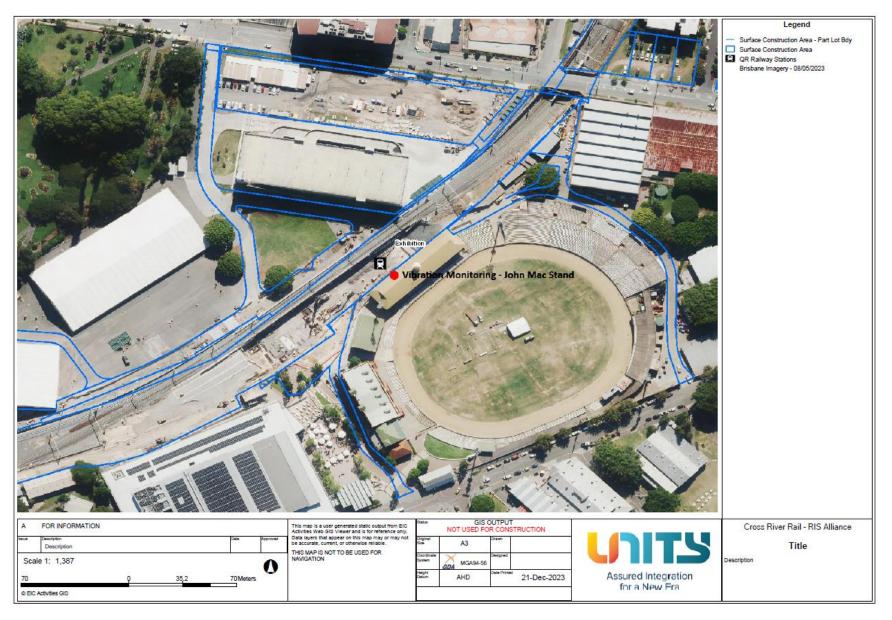


Figure 6: RNA Vibration Monitoring February 2024



Attachment 3 Monitoring Locations – Air Quality

UNITS

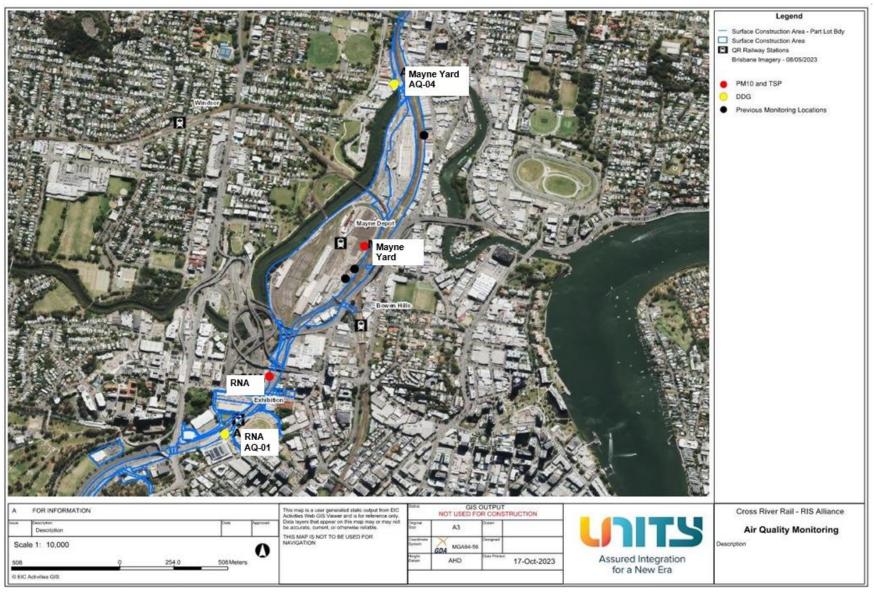


Figure 7: Mayne Yard AQ locations



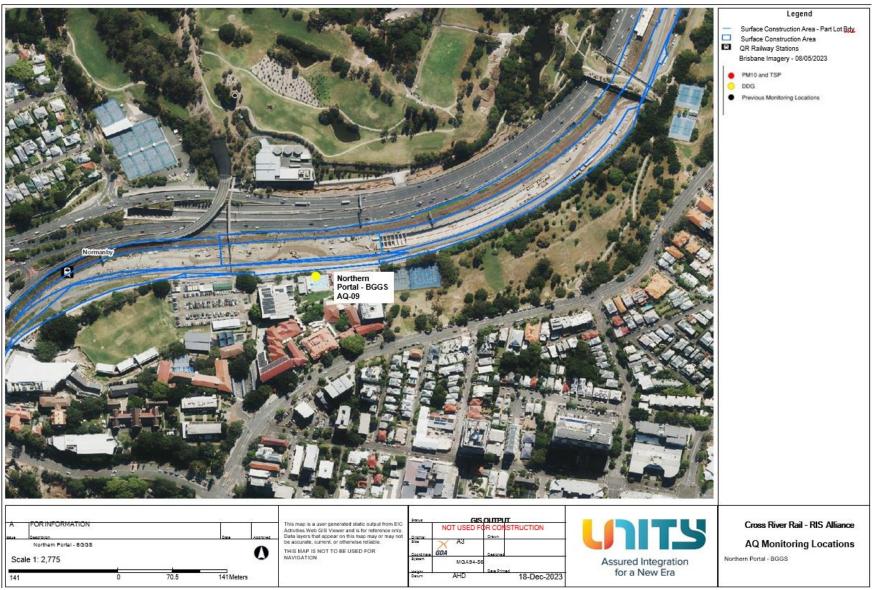


Figure 8: Northern Portal AQ locations



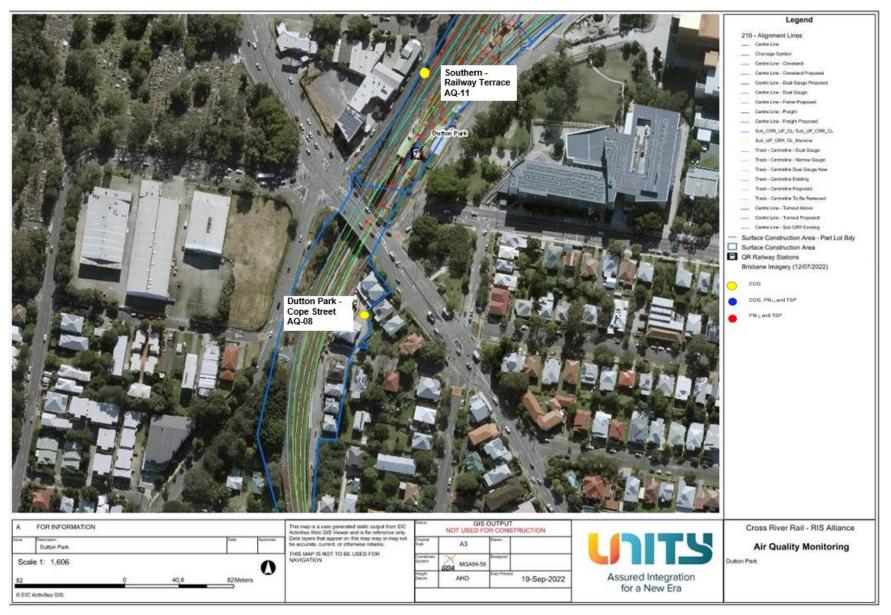


Figure 9: Southern Area AQ locations



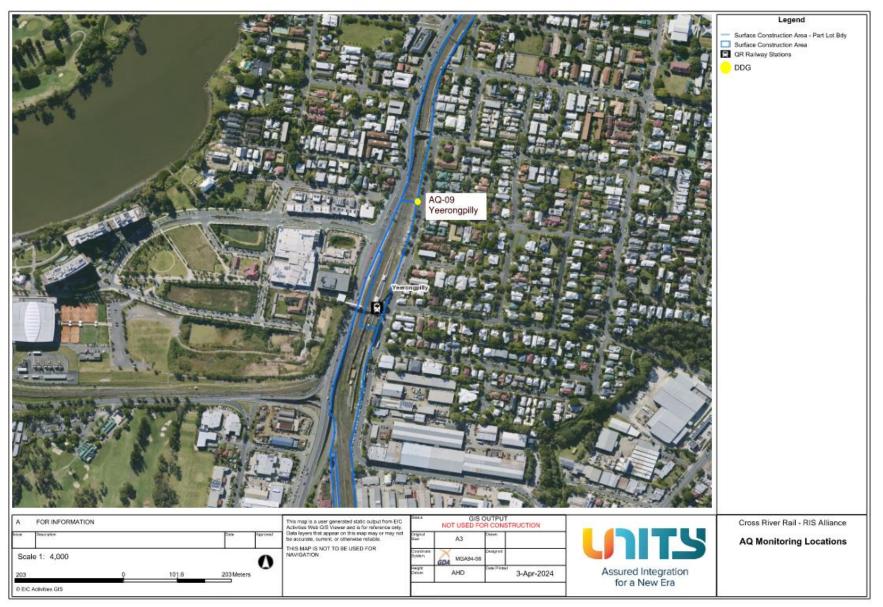


Figure 10: Yeerongpilly AQ locations



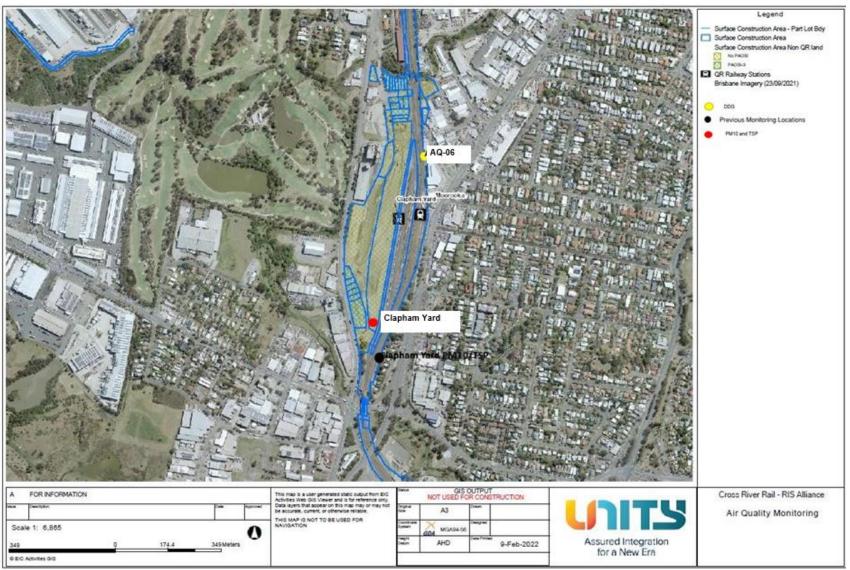


Figure 11: Clapham Yard AQ locations



Attachment 4 Monitoring Locations – Surface Water

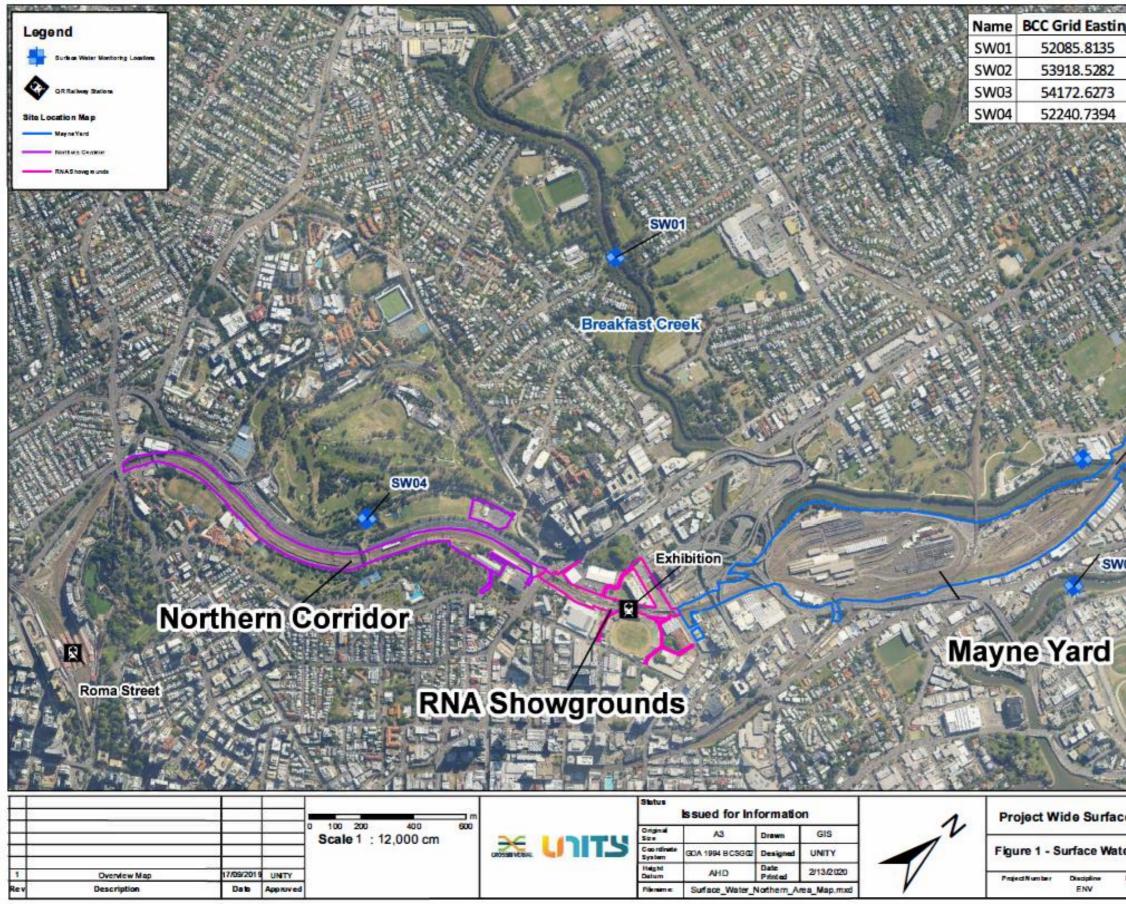


Figure 12: Northern WQ Locations



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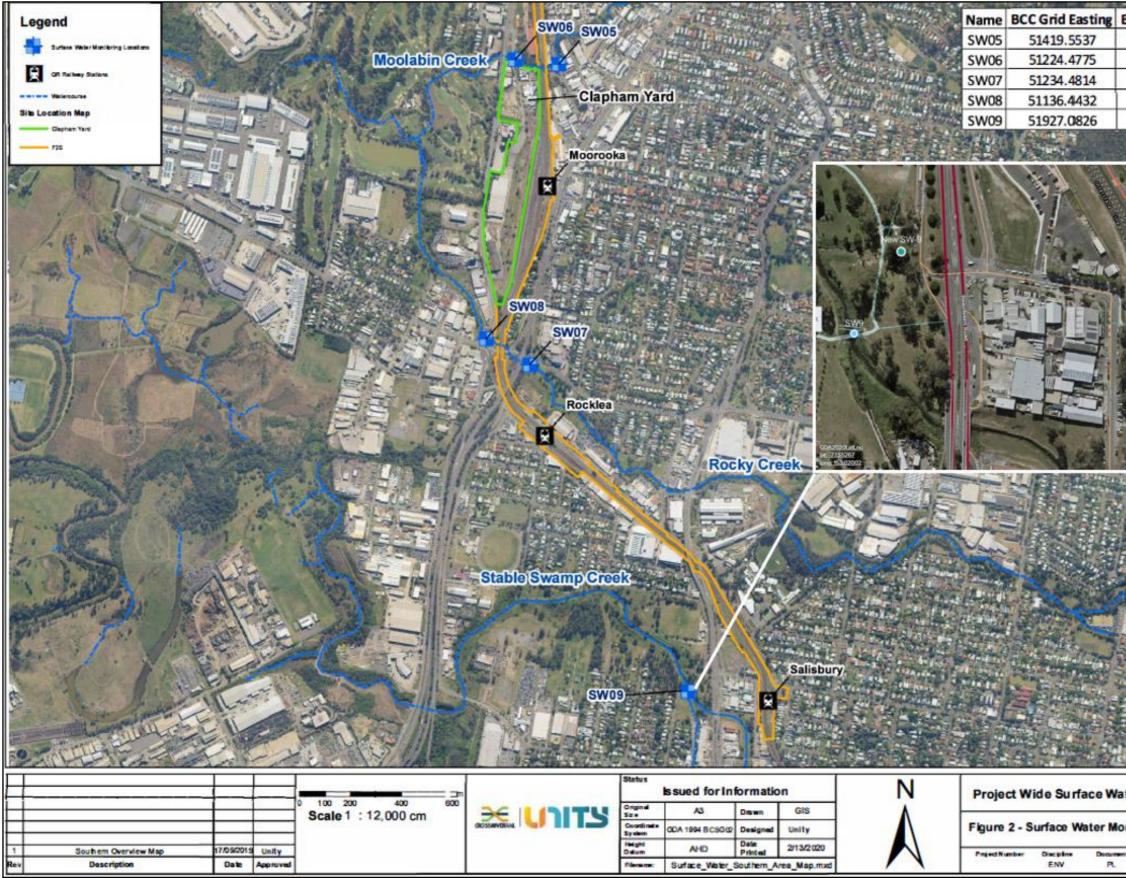


Figure 13: Southern WQ Locations³



| BCC Grid Northing |
|--|
| 151932.6245 |
| 151954.6331 |
| 150778.1744 |
| 150856.2048 |
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³ The relocated SW9 monitoring location has commenced use.

Appendix B TSD Monthly Report

Monthly Environmental Report - February 2024







COORDINATOR-GENERAL'S MONTHLY REPORT: FEBRUARY 2024

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

1. Monthly Monitoring Summary

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

Vibration monitoring was conducted on three (3) occasions during February 2024. Noise monitoring was conducted on ten (10) occasions in February 2024. Each monitoring event that was undertaken confirmed works adhered to Project requirements.

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

Water quality monitoring was conducted before the release of water from the site on twenty-six (26) occasions. Each monitoring event confirmed that Project requirements were adhered to. Two (2) rounds of surface water quality monitoring were conducted; the monitoring events confirmed no impacts were generated by the Project.



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.

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

Table 1: Compliance Status – CG Imposed Conditions

Cross River Rail – Tunnel and Stations



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



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



3. Environmental Monitoring Results

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

3.1 Vibration

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

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

Vibration monitoring was conducted on three (3) occasions during February 2024. All vibration monitoring results adhered to project requirements and are 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. | 12/02/2024 | 12:26 PM | 19/02/2024 | Roma Street (Roma Street Precinct) | 0.08 | 0.1 | 50 | Residential | Yes |
| 2. | 14/02/2024 | 9:08 AM | 15/02/2024 | Albert Street (Albert Street Precinct) | 0.11 | 0.39 | 50 | Commercial | Yes |
| 3. | 28/02/2024 | 12:02 PM | 01/03/2024 | Main Street (Woolloongabba Precinct) | 0.08 | 0.17 | 2 | Heritage | Yes |



3.2 Noise

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

The Coordinator-General Change Reports acknowledge instances where these goals may not be achieved. Noise monitoring was conducted on ten (10) occasions during February 2024. All noise monitoring adhered to project requirements and is detailed in the table below.

Table 3: Noise Monitoring Data

| No. | Date | Time (AM / PM) | Location (Street Name) (Construction Precinct) | Purpose of Monitoring | Internal or External ^[3] Monitoring | Activity | Dominant Noise Source | Noise Goal LA10 ^[1] | Noise level LA10 | Noise Goal LAeq ^[2] | Noise level LAeq | Adhered to Project Requirements (Yes / No) |
|-----|------------|-------------------|--|---|--|-------------------------------|-------------------------------------|--------------------------------------|------------------------|--------------------------------------|----------------------------|---|
| 1. | 6/02/2024 | 1:03:00 PM | Albert Street (Albert Street Precinct) | Construction Monitoring at Sensitive Places | External | Concrete Works | Construction | 72 | 66.9 | 62 | 65.3 | Yes |
| 2. | 12/02/2024 | 8:48:00 PM | Roma Street (Roma Street Precinct) | Model Verification | External | Utilities works | Construction and Road Traffic | 62 | 75.1 | 52 | 73.4 | Yes |
| 3. | 14/02/2024 | 11:23:00 AM | Elizabeth Street (Albert Street Precinct) | Construction Monitoring at Sensitive Places | External | Concrete Works | Construction and Road Traffic | 72 | 72.5 | 62 | 70.8 | Yes |
| 4. | 20/02/2024 | 11:56:00 AM | Mary Street (Albert Street Precinct) | Construction Monitoring at Sensitive Places | External | Deliveries and concrete works | Construction and Road Traffic | 72 | 74 | 62 | 72 | Yes |
| 5. | 20/02/2024 | 7:54:00 AM | Mary Street (Albert Street Precinct) | Construction Monitoring at Sensitive Places | External | Deliveries and concrete works | Construction and Road Traffic | 72 | 68.9 | 62 | 67.5 | Yes |
| 6. | 21/02/2024 | 11:15:00 AM | Albert Atreet (Albert Street Precinct) | Construction Monitoring at Sensitive Places | External | Concrete works | Construction and Road Traffic | 72 | 70 | 62 | 67.8 | Yes |
| 7. | 26/02/2024 | 10:19:00 PM | Albert Street (Albert Street Precinct) | Construction Monitoring at Sensitive Places | Internal | Utilities works | Construction | 55 | 56.4 | 45 | 55.1 | Yes |



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| 8. | 26/02/2024 | 10:43:00 PM | Mary Street (Albert Street Precinct) | Model Verification | External | Utilities works | Construction and Road Traffic | 59 | 75.1 | 52 | 73.3 | Yes |
|-----|------------|-------------|---|---|----------|-----------------------|-------------------------------------|----|------|----|------|-----|
| 9. | 26/02/2024 | 11:08:00 PM | Albert Street (Albert Street Precinct) | Construction Monitoring at Sensitive Places | External | Concrete works | Construction and Road Traffic | 59 | 73.4 | 52 | 71.9 | Yes |
| 10. | 28/02/2024 | 10:05:00 PM | Stanley St (Woolloongabba Precinct) | Model Verification | External | Vegetation removal | Road traffic | 54 | 68.8 | 47 | 65.3 | Yes |

- [1] Intermittent noise goal (LA10)

- [2] Continuous noise goal (LAeq)

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



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 when these goals may not be achieved. Dust deposition monitoring was performed in February 2024. The dust deposition gauge results for the reporting period are detailed below, and all monitoring data adhered to Project requirements.

| | Proj | ect Wide Air Quality | Goals ^[1] | . | | | |
|--------------------------------|------------------------------------|----------------------|----------------------------|-----------------------------------|--|--|--|
| Location | Criterion Air Quality Indicator | | Goal (mg/m²/day) | Monitoring results (mg/m²/day) | Comments | | |
| Roma Street Precinct | | | | 12.90 | | | |
| Albert Street Precinct (North) | | Dependent | 120 | 16.13 | | | |
| Albert Street Precinct (South) | | | | 16.13 | | | |
| Woolloongabba Precinct (North) | Nuisance | | | 18.75 | Air quality monitoring was performed during the reporting period. All results adhered to Project | | |
| Woolloongabba Precinct (South) | | Deposited dust | 120 | 37.5 | requirements. | | |
| Boggo Road Precinct (North) | | | | 13.33 | | | |
| Boggo Road Precinct (South) | | | | 16.67 | | | |
| Southern Portal (East) | | | | 16.67 | | | |

Table 4.2.2: Air Quality Monitoring – February Deposited Dust Data

- [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.



3.3.2 Ambient Air Quality Results

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

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

| | | TSP | PM10 | Woolld | oongabba | Albe | ert | Boggo | Road |
|------|--------|-----------------------------|--------------|--------|-----------|-------|-------|-------|-------|
| D | Date | Project Goal ^[1] | Project Goal | TSP | PM 10 | TSP | PM 10 | TSP | PM 10 |
| | | | | | (μg/m³/24 | hr) | | | |
| 01-F | Feb-24 | 80 | 50 | 6.19 | 6.11 | 12.21 | 12.15 | 3.82 | 3.80 |
| 02-F | Feb-24 | 80 | 50 | 6.67 | 6.58 | 10.78 | 10.71 | 4.23 | 4.21 |
| 03-F | Feb-24 | 80 | 50 | 6.77 | 6.72 | 12.03 | 11.95 | 5.55 | 5.52 |
| 04-F | Feb-24 | 80 | 50 | 9.86 | 9.80 | 13.04 | 13.02 | _ [2] | _ [2] |
| 05-F | Feb-24 | 80 | 50 | 9.85 | 9.77 | 12.05 | 12.01 | _ [2] | _ [2] |
| 06-F | Feb-24 | 80 | 50 | 6.96 | 6.89 | 10.43 | 10.40 | 5.73 | 5.56 |
| 07-F | Feb-24 | 80 | 50 | 7.57 | 7.50 | 13.33 | 13.26 | 5.34 | 5.31 |
| 08-F | Feb-24 | 80 | 50 | _ [3] | _ [3] | 11.23 | 11.13 | 2.49 | 2.45 |
| 09-F | Feb-24 | 80 | 50 | _ [3] | _ [3] | 12.94 | 12.89 | 2.00 | 1.97 |
| 10-F | Feb-24 | 80 | 50 | _ [3] | _ [3] | 11.39 | 11.36 | 2.95 | 2.94 |
| 11-F | Feb-24 | 80 | 50 | 7.70 | 7.64 | 10.69 | 10.66 | 5.24 | 4.65 |
| 12-F | Feb-24 | 80 | 50 | 9.44 | 9.33 | 14.33 | 14.26 | 5.40 | 5.37 |
| 13-F | Feb-24 | 80 | 50 | 9.53 | 9.46 | 16.07 | 16.00 | 5.50 | 5.49 |
| 14-F | Feb-24 | 80 | 50 | 10.08 | 9.96 | 16.63 | 16.54 | 6.36 | 6.34 |
| 15-F | Feb-24 | 80 | 50 | 8.29 | 8.22 | 15.38 | 15.31 | 4.81 | 4.80 |
| 16-F | Feb-24 | 80 | 50 | _ [3] | _ [3] | 12.56 | 12.53 | 3.35 | 3.35 |
| 17-F | Feb-24 | 80 | 50 | _ [3] | _ [3] | 15.01 | 14.96 | 4.07 | 4.02 |
| 18-F | Feb-24 | 80 | 50 | _ [3] | _ [3] | 10.42 | 10.38 | 4.50 | 4.37 |

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

Cross River Rail – Tunnel and Stations

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| Date | TSP | PM10 | Woolld | oongabba | Albo | ert | Boggo | Road | | |
|-----------|-----------------------------|--------------|--------|----------|-------|-------|-------|-------|--|--|
| | Project Goal ^[1] | Project Goal | TSP | PM 10 | TSP | PM 10 | TSP | PM 10 | | |
| | (μg/m³/24 hr) | | | | | | | | | |
| 19-Feb-24 | 80 | 50 | _ [3] | _ [3] | 13.06 | 12.98 | 4.33 | 4.31 | | |
| 20-Feb-24 | 80 | 50 | 4.88 | 4.77 | 11.15 | 11.07 | 3.06 | 3.03 | | |
| 21-Feb-24 | 80 | 50 | 6.67 | 6.56 | 11.79 | 11.70 | 4.23 | 4.21 | | |
| 22-Feb-24 | 80 | 50 | 6.89 | 6.82 | 12.16 | 12.07 | 4.33 | 4.30 | | |
| 23-Feb-24 | 80 | 50 | 8.95 | 8.85 | 12.62 | 12.54 | 6.48 | 6.44 | | |
| 24-Feb-24 | 80 | 50 | 7.08 | 7.03 | 17.06 | 16.96 | 10.94 | 10.90 | | |
| 25-Feb-24 | 80 | 50 | _ [3] | _ [3] | 9.67 | 9.62 | 4.55 | 4.53 | | |
| 26-Feb-24 | 80 | 50 | _ [3] | _ [3] | 12.53 | 12.45 | 5.65 | 5.63 | | |
| 27-Feb-24 | 80 | 50 | _ [3] | _ [3] | 14.69 | 14.62 | 6.87 | 6.84 | | |
| 28-Feb-24 | 80 | 50 | 8.68 | 8.57 | 15.80 | 15.73 | 7.15 | 7.12 | | |
| 29-Feb-24 | 80 | 50 | 11.26 | 11.09 | 14.64 | 14.58 | 7.64 | 7.63 | | |

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

- [2] The Boggo Road air quality unit experienced technical difficulties on the 4th and 5th of February 2024. As soon as practicable, the unit was inspected, and the issue was resolved. A nearby (Woolloongabba) DES Air Quality Station demonstrated compliant air quality during this outage period.

- [3] The Woolloongabba air quality unit experienced technical difficulties on the 8th – 10th, 16th – 19th, and 25th - 27th of February. As soon as practicable, the unit was inspected, and the issue was resolved. A nearby (South Brisbane) DES Air Quality Station demonstrated compliant air quality during this outage period.



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

- Brisbane CBD: PM10 daily maximum average: **27 µg/m3/24 hr** (<u>https://apps.des.qld.gov.au/air-guality/chart/?station=cbd¶meter=18&date=1/2/2024&timeframe=month</u>)
- South Brisbane: PM10 daily maximum average: **25.1 µg/m3/24 hr** (<u>https://apps.des.qld.gov.au/air-guality/chart/?station=sbr¶meter=18&date=1/2/2024&timeframe=month</u>)
- Woolloongabba: PM10 daily maximum average: **26.2 µg/m3/24 hr** (<u>https://apps.des.qld.gov.au/air-guality/chart/?station=woo¶meter=18&date=1/2/2024&timeframe=month</u>).

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



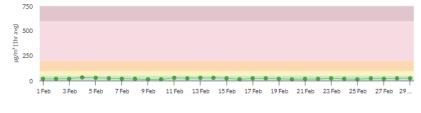
Particle PM₁₀ at Brisbane CBD, 1-29 February 2024 @ about Particle PM₁₀

Srisbane CBD station overview

The guideline for Particle PM₁₀ is 100μg/m³ (1hr avg) and 50μg/m³ (24hr avg).



Daily maximum air quality category (based on 1hr avg)



Daily maximum running average (µg/m³ (24hr avg))

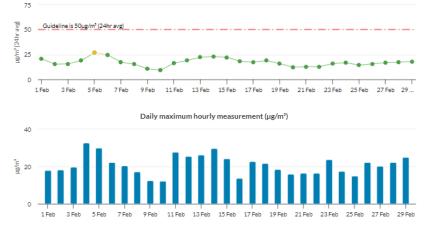


Figure 1: Brisbane CBD – DES Station - PM10 graph for February 2024 (reproduction from the DES website).

Cross River Rail – Tunnel and Stations



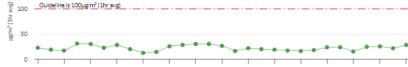
Particle PM₁₀ at South Brisbane, 1-29 February 2024 @ about Particle PM₁₀

South Brisbane station overview

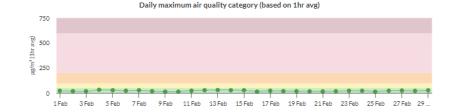
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The guideline for Particle PM₁₀ is 100μg/m³ (1hr avg) and 50μg/m³ (24hr avg).

Daily maximum hourly average (µg/m² (1hr avg))



1Feb 3Feb 5Feb 7Feb 9Feb 11Feb 13Feb 15Feb 17Feb 19Feb 21Feb 23Feb 25Feb 27Feb 29...



Daily maximum running average (µg/m³ (24hr avg))

1 Feb 3 Feb 5 Feb 7 Feb 9 Feb 11 Feb 13 Feb 15 Feb 17 Feb 19 Feb 21 Feb 23 Feb 25 Feb 27 Feb 29 Feb

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

Cross River Rail – Tunnel and Stations



Particle PM₁₀ at Woolloongabba, 1-29 February 2024 @ about Particle PM₁₀



The guideline for Particle PM₁₀ is 100μg/m³ (1hr avg) and 50μg/m³ (24hr avg).

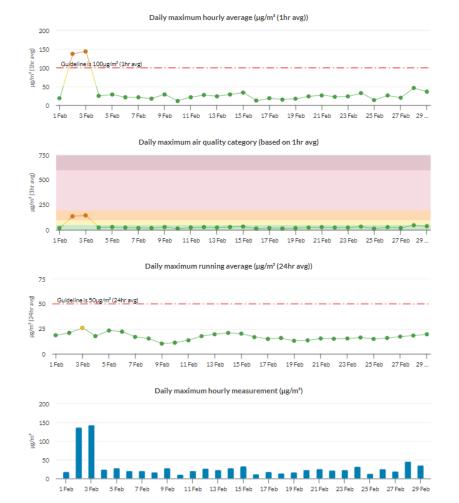


Figure 3: Woolloongabba – DES Station - PM10 graph for February 2024 (reproduction from the DES website).

Cross River Rail – Tunnel and Stations

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3.4 Water Quality – Discharge

CBGU undertook twenty-six (26) water quality monitoring events (groundwater and surface water) before the release from the site.

3.4.1 Groundwater Discharge

Water quality monitoring data is provided in the table below.

Table 6: Groundwater Discharge – Water Quality Monitoring Data

| | | | | | т | esting of W | ater Qualit | y Objectives [1 | .] | | | | Adhered to |
|----------------------------|------------|------|----------------------------|---------------------------|------------------------------------|-------------------------------------|------------------------------------|--|-------------------------------|---|--------------------------------|--|---------------------------------------|
| Location | Date | Hd | Suspended solids (mg/L) | Turbidity (NTU) | Ammonia N (µg/L) ^[3] | Oxidised N (µg/L) ^[3] | Organic N (µg/L) ^[3] | Total nitrogen (µg/L) ^[4] | Total phosphorus (μg/L) | Filterable Reactive phosphorus (μg/L) ^[3] | Chlorophyll a (µg/L) | Dissolved oxygen (%) ^[2] | Project Requirements (Yes / No) |
| Roma Street ^[5] | 14/02/2024 | 7.77 | <5 | 0.79 | 680.00 | 330.00 | 300.00 | 1300.00 | <10 | <10 | <1 | 82.96 | 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.

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

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

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

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



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 (| Adhered to Project | |
|-----|-------------------------|------------|--------------------|---------------------------|----------------------------|
| No. | Location ^[2] | Date | рН | Turbidity (NTU) | Requirements (Yes / No) |
| 1. | Northern Portal | 23/01/2024 | 7.85 | 5.09 | Yes |
| 2. | Northern Portal | 24/01/2024 | 7.92 | 2.05 | Yes |
| 3. | Northern Portal | 27/01/2024 | 7.70 | 0.82 | Yes |
| 4. | Northern Portal | 29/01/2024 | 7.61 | 2.76 | Yes |
| 5. | Northern Portal | 30/01/2024 | 7.82 | 28.30 | Yes |
| 6. | Northern Portal | 31/01/2024 | 7.80 | 2.17 | Yes |
| 7. | Northern Portal | 1/02/2024 | 7.65 | 1.32 | Yes |
| 8. | Northern Portal | 2/02/2024 | 7.82 | 1.23 | Yes |
| 9. | Northern Portal | 5/02/2024 | 7.70 | 0.67 | Yes |
| 10. | Northern Portal | 6/02/2024 | 7.65 | 1.24 | Yes |
| 11. | Northern Portal | 8/02/2024 | 7.83 | 1.32 | Yes |
| 12. | Northern Portal | 10/02/2024 | 7.72 | 4.86 | Yes |
| 13. | Northern Portal | 12/02/2024 | 7.71 | 4.43 | Yes |
| 14. | Northern Portal | 14/02/2024 | 7.76 | 1.25 | Yes |
| 15. | Boggo Road | 16/02/2024 | 7.62 | 17.66 | Yes |

Cross River Rail – Tunnel and Stations

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| 16. | Albert Street | 16/02/2024 | 8.40 | 32.70 | Yes |
|-----|-----------------|------------|------|-------|-----|
| 17. | Northern Portal | 16/02/2024 | 7.40 | 26.00 | Yes |
| 18. | Northern Portal | 17/02/2024 | 7.89 | 8.17 | Yes |
| 19. | Northern Portal | 19/02/2024 | 7.89 | 2.81 | Yes |
| 20. | Southern Portal | 21/02/2024 | 6.51 | 7.90 | Yes |
| 21. | Southern Portal | 21/02/2024 | 6.91 | 5.68 | Yes |
| 22. | Northern Portal | 21/02/2024 | 7.45 | 1.71 | Yes |
| 23. | Northern Portal | 23/02/2024 | 7.58 | 0.78 | Yes |
| 24. | Northern Portal | 24/02/2024 | 7.60 | 2.55 | Yes |
| 25. | Northern Portal | 26/02/2024 | 7.85 | 6.14 | Yes |

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

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

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3.5 Water Quality – Surface Water

During February 2024, CBGU JV undertook two (2) rounds of surface water sampling at five (5) site locations (upstream and downstream). At the time of the completion of January report, the water quality results from the events on the 29th and the 31st of January had not been received from the laboratory. The water quality results are reported in this month's report.

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

 Table 8: Offsite Upstream & Downstream Water Quality Data

| Location | Upstream / Downstream | Date | Purpose of Monitoring | Turbidity (NTU) | Dissolved oxygen (%) | рН |
|---------------------------|--------------------------|------------|-----------------------|---------------------------|-------------------------|------|
| Albert Street | Upstream | 29/01/2024 | Post Rainfall | 175.00 | 56.80 | 7.44 |
| Albert Street | Downstream | 29/01/2024 | Post Rainfall | 172.00 | 65.36 | 7.41 |
| Woolloongabba | Upstream | 29/01/2024 | Post Rainfall | 163.00 | 76.51 | 7.46 |
| Woolloongabba | Downstream | 29/01/2024 | Post Rainfall | 170.00 | 73.10 | 7.41 |
| Boggo Road ^[1] | Downstream | 29/01/2024 | Post Rainfall | 17.80 | 102.04 | 7.14 |
| Roma Street | Upstream | 29/01/2024 | Post Rainfall | 161.00 | 77.29 | 7.29 |
| Roma Street | Downstream | 29/01/2024 | Post Rainfall | 147.00 | 54.73 | 7.27 |
| Northern Portal | Upstream | 29/01/2024 | Post Rainfall | 4.70 | 53.61 | 7.07 |
| Northern Portal | Downstream | 29/01/2024 | Post Rainfall | 10.92 | 67.29 | 7.09 |
| Albert Street | Upstream | 31/01/2024 | Post Rainfall | 109.00 | 58.09 | 6.99 |



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| Location | Upstream / Downstream | Date | Purpose of Monitoring | Turbidity (NTU) | Dissolved oxygen (%) | рН |
|---------------------------|--------------------------|------------|-----------------------|---------------------------|-------------------------|------|
| Albert Street | Downstream | 31/01/2024 | Post Rainfall | 110.00 | 42.36 | 7.05 |
| Woolloongabba | Upstream | 31/01/2024 | Post Rainfall | 124.00 | 57.00 | 6.08 |
| Woolloongabba | Downstream | 31/01/2024 | Post Rainfall | 120.00 | 93.73 | 6.18 |
| Boggo Road ^[1] | Downstream | 31/01/2024 | Post Rainfall | 29.00 | 78.94 | 6.59 |
| Roma Street | Upstream | 31/01/2024 | Post Rainfall | 98.70 | 52.40 | 6.86 |
| Roma Street | Downstream | 31/01/2024 | Post Rainfall | 100.00 | 50.85 | 6.76 |
| Northern Portal | Upstream | 31/01/2024 | Post Rainfall | 5.44 | 92.34 | 7.25 |
| Northern Portal | Downstream | 31/01/2024 | Post Rainfall | 10.63 | 64.48 | 6.94 |
| Roma Street | Upstream | 14/02/2024 | Monthly | 107.00 | 60.49 | 7.15 |
| Roma Street | Downstream | 14/02/2024 | Monthly | 83.10 | 59.21 | 7.30 |
| Northern Portal | Upstream | 14/02/2024 | Monthly | 1.84 | 99.71 | 7.57 |
| Northern Portal | Downstream | 14/02/2024 | Monthly | 5.46 | 69.17 | 7.20 |
| Woolloongabba | Upstream | 15/02/2024 | Monthly | 29.70 | 86.44 | 7.21 |
| Woolloongabba | Downstream | 15/02/2024 | Monthly | 45.30 | 105.64 | 7.10 |
| Boggo Road ^[1] | Upstream | 15/02/2024 | Monthly | 8.99 | 60.26 | 7.00 |
| Albert Street | Upstream | 19/02/2024 | Monthly/Post rain | 9.85 | 64.15 | 7.44 |
| Albert Street | Downstream | 19/02/2024 | Monthly/Post rain | 11.56 | 65.36 | 7.42 |



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| Location | Upstream / Downstream | Date | Purpose of Monitoring | Turbidity (NTU) | Dissolved oxygen (%) | рН |
|---------------------------|--------------------------|------------|-----------------------|---------------------------|-------------------------|------|
| Roma Street | Upstream | 20/02/2024 | Post Rainfall | 5.30 | 72.94 | 7.38 |
| Roma Street | DownStream | 20/02/2024 | Post Rainfall | 7.14 | 73.93 | 7.61 |
| Northern Portal | Upstream | 20/02/2024 | Post Rainfall | 5.81 | 71.76 | 7.80 |
| Northern Portal | Downstream | 20/02/2024 | Post Rainfall | 31.40 | 54.56 | 7.40 |
| Woolloongabba | Upstream | 20/02/2024 | Post Rainfall | 17.56 | 114.87 | 7.61 |
| Woolloongabba | Downstream | 20/02/2024 | Post Rainfall | 10.08 | 118.56 | 7.64 |
| Boggo Road ^[1] | Upstream | 20/02/2024 | Post Rainfall | 14.45 | 98.62 | 7.23 |

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

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4 Non-Compliances

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

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

Table 9: Non-Compliance Events this Month

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



5 <u>Complaints</u>

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

During February 2024, four (4) complaints relating to the Project were received, three (3) complaints were received but that were not related to CBGU Project works, as detailed in Table 10 below.

Table 10: Summary of Complaints

| No. | Date | Location | Description of Issue | Responses | Status of Event |
|-----|------------|---|-------------------------|---|--------------------|
| 1. | 8/02/2024 | Ipswich Road (Woolloongabba Precinct) | Damage Claim | A stakeholder contacted the Project regarding a damage claim due to vibration from the Woolloongabba 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 confirmed the damage claim was not related to Project works. | Closed |
| 2. | 9/02/2024 | Albert Street (Albert Street Precinct) | Property Access | A stakeholder contacted the Project regarding safety exclusion zone set up at the Albert Street worksite. CBGU provided the stakeholder with an overview on the safety exclusion zone and their duration. CBGU also confirmed an alternative set up for the exclusion zone to alleviate potential impacts and ensure compliance. | Closed |
| 3. | 14/02/2024 | Mary Street (Albert Street Precinct) | Noise | A stakeholder contacted the Project regarding noise generated from the Albert Street worksite. CBGU provided the stakeholder with an overview of the works occurring and their duration. CBGU reviewed the circumstances and confirmed the noise complaint was not related to Project works. | Closed |
| 4. | 15/02/2024 | Albert Street (Albert Street Precinct) | Noise | A stakeholder contacted the Project regarding noise generated from the Albert Street worksite. CBGU provided the stakeholder with an overview of the works occurring and their duration. CBGU reviewed the circumstances and confirmed the noise complaint was not related to Project works. | Closed |



| 5. | 20/02/2024 | Albert Street (Albert Street Precinct) | Damage Claim | A stakeholder contacted the Project regarding a damage claim due to vibration 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 vibration requirements. | Closed |
|----|------------|---|-----------------------|---|--------|
| 6. | 22/02/2024 | Mary Street (Albert Street Precinct) | Traffic Management | A stakeholder contacted the Project regarding workforce parking. CBGU investigated and informed the workforce, via toolbox talk, about parking requirements. | Closed |
| 7. | 29/02/2024 | Albert Street (Albert Street Precinct) | Noise | A stakeholder contacted the Project regarding noise generated from the Albert Street worksite. CBGU provided the stakeholder with an overview of the works occurring and their duration. CBGU also outlined the mitigation measures used to alleviate potential impacts and ensure compliance. CBGU reviewed the circumstances and monitoring confirmed works adhered to the Project's noise requirements, and the works undertaken were consistent with the community notification. | Closed |