Non-compliance Event Report

In accordance with Condition 5 (c) of the Coordinator General Change Report (CGCR) – this event report is to be provided to the Environmental Monitor and the Coordinator-General, within 14 days following the notification of a Non-Compliance Event.

Event Title	**Social media feedback regarding noise associated with the following Project Works:** **Intrusive Site Investigations at Lake Street, Yeronga**
Location, Date and time of event	Yeronga Station - Lake Street (Refer to Location Map – **Attachment 1**) Saturday 09 November 2019 - 3.40 am
Reported by	UNITY Community and Stakeholder Engagement Team
Reported to	Unity Environment and Approvals Manager Monday 11 November 2019 – 6.30 am
Date the Event was a confirmed as a Non-Compliance Event	Tuesday 12 November 2019
Date the Event was formally notified on behalf of the Proponent	Thursday 14 November 2019 (Within 48 hours)
Contact details of designated contact person	1800 010 875 info@crossriverrail.qld.gov.au
Short description of the Event	• During Project Works within a road reserve, a site investigation crew has used a concrete / asphalt saw to enable a borehole to be drilled as part of the Project Works. • The noise has resulted in a member of the local community posting on a CRR social media website.

Circumstances in which the non-compliance occurred	**Possession Planning and working hours**
	• Intrusive Site Investigations were planned to occur as part and concurrently with a Rail Possession week end (SCAS) at Yeronga and Fairfield.
	• As per Queensland Rail Possession Protocols, a Possession means a *temporary closure or occupation by Queensland Rail of part of the Network (including closure of Track or isolation of any electrical overhead traction system) for the purpose of carrying out Rail Infrastructure Operations, other work or other activities on or in the proximity of the Network*.
	• Closure of commuter car parking within the Road Reserve at Yeronga station for the purpose of the Project Works is not deemed to form part of the approved rail possession.
	• The Rail Possession was approved by Queensland Rail and publicly notified prior to the Project Works commencing (ref. link: https://s3-ap-southeast-2.amazonaws.com/cross-river-rail/wp-content/uploads/2019/10/28113749/0007-WN-Site-investigations-between-Fairfield-and-Yeronga-October-2019.pdf)
	• The Project Works at Yeronga station car park therefore were:
	  ○ authorised to proceed during standard hours for surface works under Condition 10 (a), that is Monday to Saturday - 6.30 am to 6.30 pm;
	  ○ authorised to proceed under Other extended works (being in a road reserve), that is Monday to Friday – 6.30 pm to 10.00 pm; and
	  ○ not authorised to proceed under Extended work hours for approved rail possession, that is 80hours continuous work.
	• The Project Works at Lake St were initially planned for Saturday mid-morning during the Surface Works – Standard Hours, after a borehole at the Fairfield Rd (west) side of the rail formation was drilled (under an approved rail possession).
	
	Predictive noise modelling and consultation with DAPs
	• The noise modelling undertaken for the intrusive scope (site wide) covered the typical process for this specific activity within the rail corridor.
	• Saw-cutting is not required in locations within the rail formation therefore was not included in the predictive modelling.
	• The location of boreholes at Yeronga Station (east) were required to be moved from rail formation up to edge of Lake St due to access constraints within the corridor at the required location.
	• The micro-siting of these boreholes occurred following the predictive noise modelling activities occurred.
	• The new locations required saw cutting though asphalt pavement to access the underlying earth formation.
	• The Project Team did not undertake further predictive modelling to cater for the re-positioning of those discrete locations.
	• These Project Works and the potential impacts had however been notified to the local community a per the works notices published on the Cross River Rail Delivery Website:
	  ○ https://s3-ap-southeast-2.amazonaws.com/cross-river-rail/wp-content/uploads/2019/09/23032620/0006-WN-Early-works-between-Fairfield-and-Salisbury-September-2019.pdf
	  ○ https://s3-ap-southeast-2.amazonaws.com/cross-river-rail/wp-content/uploads/2019/10/28113642/2019-10-08-WN-Yeronga-temporary-traffic-changes-NOV-2019_APPROVED.pdf
	• In addition to the published notices, letter drop box had occurred up to a few days preceding the Project Works.
	Non- Compliance Event Mechanism
	• During the Rail Possession, the planned sequence of intrusive site investigations (e.g. Geotechnical drilling) works was changed due to existing service locations adjacent Fairfield Rd, which prevented drilling the borehole at this location.
	• The works crew were consequently redirected to the next planned borehole located at Lake Street earlier than originally planned.

Event Title	**Social media feedback regarding noise associated with the following Project Works:** **Intrusive Site Investigations at Lake Street, Yeronga**
	• Works at this location required saw cutting of asphalt pavement through the station carpark pavement to enable vacuum excavation (NDD) for services and subsequent geotechnical investigation drilling to progress. • Due to the aforementioned changes, the saw cutting on Lake Street, Yeronga occurred at approximately 4am Saturday 09 November 2019.

Description of Non-Compliance Event	This Event has resulted in Non-Compliances with the following CGCR conditions:
	• **4(c)(ii),**
	  ○ The predicted noise impacts were modelled for the works at these locations, however, the predictive modelling did not incorporate the use of the saw at this location for the prediction of noise impacts, as this was a non-typical borehole location outside of rail formation.
	  ○ The predictive modelling had regards to the planned scale, location and duration of the works, however, the predictive modelling did not have a comprehensive regard to the intensity of the works at this specific location, as it did not consider the added step of saw-cutting.
	• **4(c) (v) and (vii)**
	  ○ Non-compliance with condition 4(c)(ii) automatically affect compliance with these two sub-conditions in this instance.
	• **10(a)**
	  ○ Whilst the planned works did not breach condition 10(a), the change of execution sequence resulted in an automatic non-compliance with condition 10(a).
	• **11 (a)** → Actual non-compliance is speculative only as we do not have actual noise measurements of the saw cutting at this location. A desktop predictive model undertaken since the event shows:
	  ○ a likely predicted exceedance of the upper noise limit (by 1dBA) for night works as defined in Table 2 of the CGCR (Monday to Saturday, 6.30pm to 6.30am, Sundays, Public Holidays), (refer **Attachment 2**).
	  ○ compliance with the day time upper noise limits[1] (refer **Attachment 3**), confirming the works were allowed to proceed during Standard Hours on Saturday as initially planned.

Details of any complaints in relation to this incident	A member of the public posted feedback on the Cross-River Rail Facebook Messenger regarding noisy works at night. The stakeholder has not been able to be contacted and they did not contact the community hotline or UNITY Alliance directly.
Root Cause of non-compliance	Change Management: • the revised work methodology for the Lake St boreholes (the Project Works) should have prompted an updated noise model to be compiled. • sawcut works should not have proceeded at 3:40am after work sequence was revised, work should have been delayed until after 6:30am.
Description of environmental effects	Increase of noise levels above background conditions to a level audible by nearby stakeholders.

[1] For the purpose of this report the meaning of Performance Criteria (as per the definition of Managed Words), the Project Team has taken a conservative approach it has been assumed that the lower noise limits (or goals) are the Performance Criteria.
Were the upper noise limits as defined by condition 11(c) to be deemed the Performance Criteria for the purpose of defining whether Project Works are Managed Works, these Project Works may have been deemed Managed Works.

Event Title	**Social media feedback regarding noise associated with the following Project Works:** **Intrusive Site Investigations at Lake Street, Yeronga**
Was sampling or monitoring performed in relation to this Event? (If so attach results)	No. As per the endorsed C-EMP and associated endorsed Noise and Vibration Management subplan attended noise monitoring (or buffer distance tests) is: • undertaken at the start of an activity for the Relevant Project Works (e.g. Intrusive Investigations). For Intrusive works the Project Team undertook two rounds of monitoring in September and October during standard hours and out of hours (this is reported on in the monthly report); and/or • as a response to a complaint. The Project Team became aware of the event after the event has occurred by which time the possession works were finished. It was therefore not possible to undertake the responsive monitoring. In lieu of the monitoring, retrospective predictive modelling has been undertaken, the findings of which are presented in **Attachment 2 & 3.**
Actions undertaken to mitigate the environmental effects of this non-compliance	• No further saw-cutting undertaken at night at this location.
Proposed actions to prevent a recurrence of the non-compliance event (Include responsibility and timeframes)	• Review the remainder of the geotechnical program to identify any potential locations where additional saw cutting may be required. • Re-run predictive modelling including saw cutting at these locations. • Amend works documentation based on the outcomes of the model. • Briefing of frontline staff on out of hours processes. • Development of a Night Shift Checklist. ➢ Responsibility: Construction Manager and Environment & Approvals Manager. ➢ Timeframes: within 2 weeks of the event occurring.

Attachments

Attachment 1 – Non-Compliance Event Location Map

Legend

Unity Geotech Investigation

- Augerhole
- Augerhole Large
- Borehole
- Inclined Borehole
- CPT
- Testpit

Rail Corridor Boundary Lines

Rail Corridor Boundary Areas

DCDB

A	FOR INFORMATION		
Issue	Description	Date	Approved
	Yeronga Station Car Park		

Scale 1: 500

25 0 12.7 25 Meters

This map is a user generated static output from EIC Activities Web GIS Viewer and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Status	GIS OUTPUT NOT USED FOR CONSTRUCTION		
Original Size	A3	Drawn	
Coordinate System	GDA MGA94-56	Designed	
Height Datum	AHD	Date Printed	28-Nov-2019

Assured Integration for a New Era

Cross River Rail - RIS Alliance

Intrusive Works

Yeronga Station Car Park

Attachment 2 – Predictive Modelling – Out of Hours Works

NOISE SCREENING RESULT SHEET: Project Works: Intrusive Site Investigations

Scenario	Time of Works	Closest Receiver Type	Noisiest Equipment	Noise "type"	AS2107 maximum Design Level	AS2107 maximum Design Level Description
Detail	Monday – Saturday 6.30pm to 6.30 am	Residential Dwellings Queenslander Single Glazed windows	Concrete Saw	Intermittent	Not Applicable	Not Applicable

SPL = SWL(point) - 20log (r) - 8

Quick Calculator (user inputs as outlined below)

Noise SWL (dBA)	Distance (m)	SPL (dB(A))	Additional Air Attenuation (dBA)	Additional Attenuation (hoarding, façade...) (dBA)	Predicted Noise level (dBA) Indoors
109	25	73	0	10	63
	User defined			User defined	

Noise Management Levels (NMLs) - Internal

Lower Limit		Upper Limit	
42	User defined	62	User defined

Predicted Exceedances of NMLs

Lower Limit	Upper Limit
21	1

Attachment 3 – Predictive Modelling – Standard Working Hours

NOISE SCREENING RESULT SHEET: Project Works: Intrusive Site Investigations

Scenario	Time of Works	Closest Receiver Type	Noisiest Equipment	Noise "type"	AS2107 maximum Design Level	AS2107 maximum Design Level Description
Detail	Monday – Saturday 6.30am to 6.30 pm	Residential Dwellings Queenslander Single Glazed windows	Concrete Saw	Intermittent	40	Residential Building in suburban areas or near minor roads living areas

SPL = SWL(point) - 20log (r) - 8

Quick Calculator (user inputs as outlined below)

Noise SWL (dBA)	Distance (m)	SPL (dB(A))	Additional Air Attenuation (dBA)	Additional Attenuation (hoarding, façade...) (dBA)	Predicted Noise level (dBA) Indoors
109	25	73	0	10	63
	User defined			User defined	

Noise Management Levels (NMLs) - Internal

Lower Limit		Upper Limit	
50	User defined	70	User defined

Predicted Exceedances of NMLs

Lower Limit	Upper Limit
13	Compliant