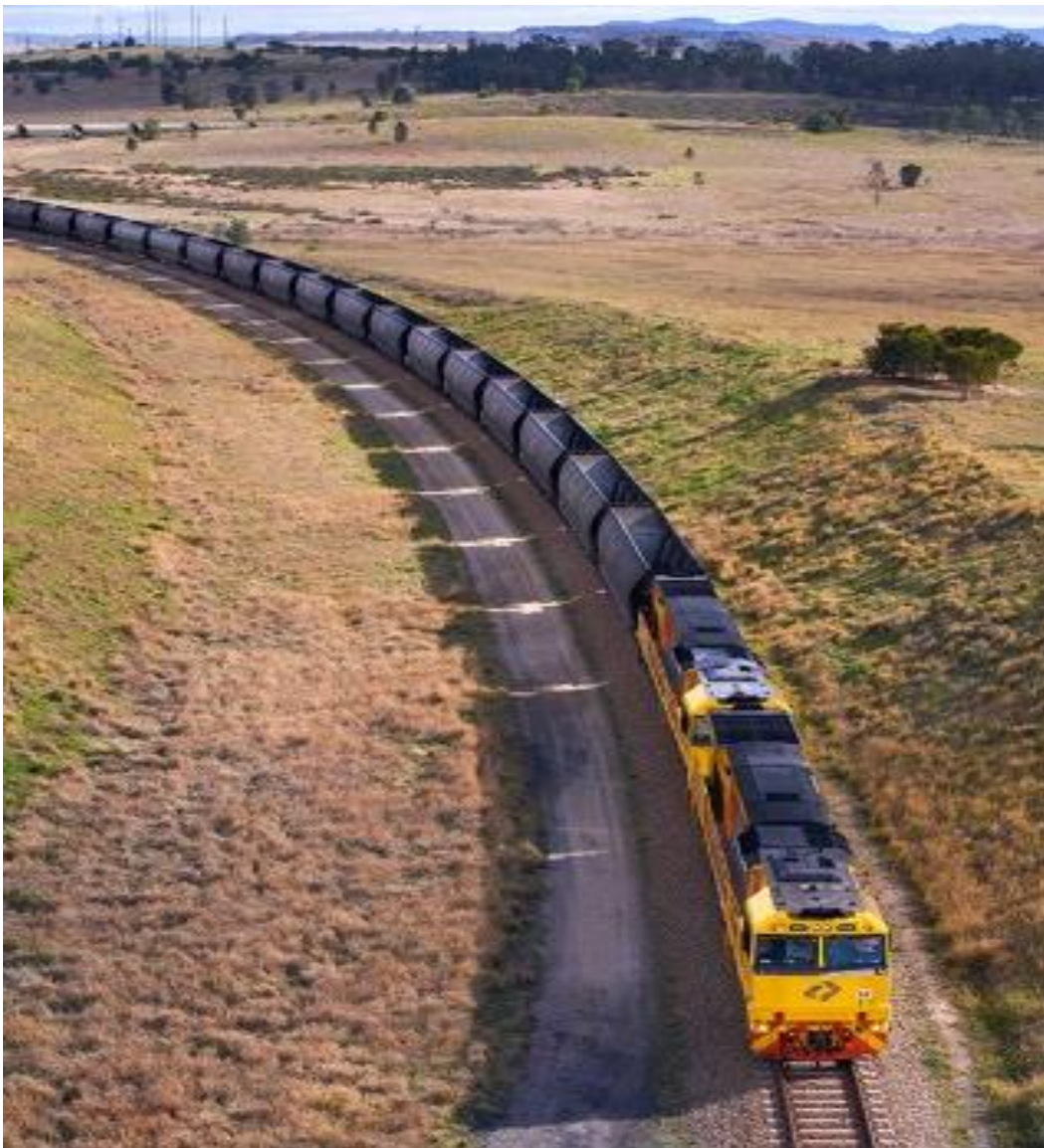


Aurizon NSW Operations - Pollution Incident Response Management Plan


7 March 2022



**NOTIFICATION REQUIREMENTS
AND PROCESSES ARE DETAILED
ON PAGE 6 – 8.**

**IF NOTIFYING, HAVE PEN AND
PAPER AVAILABLE TO TAKE
NOTES AND RECORD
NOTIFICATION REFERENCE
NUMBERS.**

Plan Approval Table

Position	Name	Signature	Date
Senior Adviser Environment NSW	Harry Egan		07/03/2022

Revision History

Rev	Date	Author	Comments
1	12/10/2020	Harry Egan	
2	12/03/2021	Harry Egan	Update contact details
3	07/03/2022	Harry Egan	Update following 2021 PIRMP

Table of Contents

1.0	Introduction.....	5
1.1	Purpose.....	5
1.2	Objectives	5
1.3	Scope.....	5
1.4	EPL Details	5
1.5	Supporting Documentation	6
2.0	Notification Requirements, Contacts and Responsibilities	7
2.1	PIRMP Process	7
2.2	PIRMP Activation Trigger	7
2.3	Key Notification Information.....	7
2.4	PIRMP Activation Responsible Persons.....	8
2.5	Regulatory Contacts	8
2.6	Rail Infrastructure Operator Contacts.....	9
2.7	Community Notification.....	9
3.0	Action During and Post Incident	11
4.0	Environmental Management	12
4.1	Environmental Risk Assessment	12
4.2	Inventory of Pollutants	12
4.3	Safety Equipment	12
5.0	Compliance	13
5.1	Training.....	13
5.2	Testing	13
5.3	Reporting	14
APPENDICIES		15
APPENDIX A	– Incident Details Form	16
APPENDIX B	– Authority Notification Form.....	18
APPENDIX C	– Public Health Unit Contacts	20
APPENDIX D	– Council Contacts.....	24
APPENDIX E	– PIRMP Test Template.....	29
APPENDIX F	– PIRMP Update Register.....	31
APPENDIX G	– Environmental Risk Assessment.....	33

Table of Tables

Table 1 - EPL Details	6
Table 2 - PIRMP Activation and Notification Responsible Person.....	8
Table 3 - Regulatory Contacts.....	9
Table 4 - RIO Contacts.....	9
Table 5 - Incident Response	11
Table 6 - Inventory of Pollutants.....	12

Glossary

Term	Definitions
Aurizon	Aurizon Operations Pty Ltd
EPA	NSW Environment Protection Authority
EPL	Environmental Protection Licence
ERA	Environment Risk Register
PIRMP	Pollution Incident Response Management Plan
RIO	Rail Infrastructure Operator

1.0 Introduction

1.1 Purpose

Aurizon Operations Limited (Aurizon) holds Environment Protection Licence (EPL) 21379 with the NSW Environment Protection Authority (EPA) for '*Rolling Stock Operated on a Licenced Rail Network*'. As per the *Protection of the Environment Operations Act 1997* (the POEO Act), the holder of an EPL must prepare, keep, test and implement a Pollution Incident Response Management Plan (PIRMP) that complies with Part 5.7A of the POEO Act in relation to the activity to which the licence relates.

1.2 Objectives

The objectives of the PIRMP are to:

- Ensure comprehensive and timely communication of a pollution incident to relevant authorities, network operators, community and customers; and
- Ensure that the PIRMP is properly implemented by trained staff, identifying persons responsible for implementing it, and ensuring that the PIRMP is regularly tested for accuracy, currency and suitability.

1.3 Scope

The PIRMP covers all '*Railway activities – rollingstock stock operations*' for *Rolling Stock Operated on a Licenced Rail Network*' in NSW. This includes the running of on-track vehicles for revenue services and refuelling of locomotives. It does not cover activities undertaken at Aurizon's facilities that are not located on a licenced rail network (e.g. Hexham Train Support Facility or the AGLM Antiene Coal Unloader).

1.4 EPL Details

Aurizon's EPL details are included in Table 1 below:

Table 1 - EPL Details

Criteria	Detail
Licensee:	Aurizon Operations Limited
EPL Number:	21379
Premises:	Rolling Stock Operations on a Licenced Network
Contact Details:	Name: Harry Egan Position: Senior Adviser Environment (NSW) Contact (BH and AFH): 0438 13 66 97 Email: Harry.Egan@aurizon.com.au
Website Address:	https://www.aurizon.com.au/
Scheduled Activity:	Railway activities - rolling stock operations
Fee Based Activity:	Rolling stock operations

1.5 Supporting Documentation

The PIRMP has been developed with consultation to the EPA's *Guidelines: Pollution Incident Response Management Plans (2020)*.

The PIRMP also supports and meets the requirement of the following Aurizon procedures and principles.

- 16-PRI-035 – *Enterprise-wide Principle: Enterprise Incident Management*
- RD-SAF-0012-COM-Guide001 *Incident Management Framework Version 1.3*
- 16-PLA-001-COM - *Enterprise-Wide Plan: Rail Emergency Management Plan*
- 16-PRI-021 - *Enterprise-wide Principle: Management of Notifiable Incidents*

2.0 Notification Requirements, Contacts and Responsibilities

2.1 PIRMP Process

The PIRMP notification process is outlined below in Figure 1.



Figure 1 - PIRMP Notification Process

2.2 PIRMP Activation Trigger

If a ‘Pollution Incident’ occurs in the course of an activity so that ‘Material Harm’ to the environment is caused or threatened, Aurizon must **IMMEDIATELY** implement this plan.

This plan will generally be activated by train drivers notifying the Deployment Coordinator of a suspected incident. Deployment will inform relevant responsible persons as listed in Section 2.3 via Noggin¹ of a suspected incident.

A *Pollution Incident* is defined as:

An incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It does not include an incident or set of circumstances involving only the emission of any noise.

Material Harm is defined as:

- 1) *It involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or*
- 2) *It results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations)” (loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.)*

2.3 Key Notification Information

Where known, the following information is required to be recorded by Deployment and communicated to the person responsible for undertaking the notification to the relevant authorities:

- Time/date of Incident;
- nature of incident;
- duration of incident;

¹ NOGGIN - Aurizon enterprise level incident and rollingstock fault notification system.

- location of incident (nearest town/chainage);
- nearby sensitive receivers (creeks/streams, public/private property, stormwater inlets);
- volume of pollutants lost; and
- Actions completed to date to control the incident.

All information must be factual and not speculation. If something is unknown, state that it is currently unknown. An incident details form template is included in Appendix A if required.

2.4 PIRMP Activation Responsible Persons

Activation of the PIRMP and notification of relevant regulatory authorities is the responsibility of the personnel detailed in Table 2 in order of delegation. It is the responsibility of the business unit General Manager to confirm the notification delegate. If a delegate is unavailable responsibility shifts to the next listed delegate.

Table 2 - PIRMP Activation and Notification Responsible Person

Delegation	Position	Name	Contact	Email
1	Senior Adviser Environment	Harry Egan		
2	Manager Environment	Mark Harris		
3	Regional Operations Manager – Hunter	Kevin Taske		
3	Regional Operations Manager – Bulk NSW	Warren Sallis		
4	GM Operations - Bulk	Adrian Browne		
4	GM Operations NSW & SEQ - Coal	Samuel McSkimming		
5	Deployment Coordinator	-		

2.5 Regulatory Contacts

Authorities required to be notified in the case of a pollution incident that causes or threatens to cause material harm to the environment are listed in Table 3. It is the responsibility of the delegate identified in Section 2.4 to notify all regulatory contacts of the information detailed in Section 2.3.

Table 3 - Regulatory Contacts

Priority	Relevant Authority	Contact details	Further Information
1	Fire and Rescue NSW	000	Use 000 in case of an emergency
2	NSW EPA	131 555	Environment Line - 24 hr 7day hotline
3	Public Health Unit	Refer Appendix C	Ask for Environment Health Officer on call
4	WorkCover	13 10 50	Select incident notification (24/7 hotline)
5	Local Council	Refer Appendix D	

2.6 Rail Infrastructure Operator Contacts

Aurizon operates over a variety of Rail Infrastructure Operator (RIO) networks with key contacts detailed in Table 4. Incident response and management of impacts on affected RIO networks will be undertaken in consultation with the affected network owner. Notifying these networks in the event of an incident is the responsibility of Aurizon Deployment.

Table 4 - RIO Contacts

RIO	Contact details	Further Information
ARTC	Junee Control	02 6929 9869
ARTC	Broadmeadow Control	02 4902 9410
Sydney Trains/TfNSW	Sydney Trains (Railcorp) RMC	02 9379 1743
Country Regional Network (JHR)	Network Control	02 4028 9501 or 02 4028 9542

2.7 Community Notification

Aurizon operates over multiple RIO networks which cover an extensive geographical footprint. Density of private and public receptors over this area and availability of exposure pathways to a potential incident varies greatly.

Due to Aurizon having limited resources (two train drivers) available at the scene of an incident immediately following its occurrence all community notification will be undertaken in consultation with, and possibly with the support of, emergency services.

Communication is to be fit-for-purpose and tailored to the:

- Nature of the incident;

- Phase of response (e.g. initial community notifications, update communications, clean-up/recovery); and
- Types of neighbours who need to receive information.

Aurizon communications may consist of:

- Social media;
- Telephone calls, SMS or other messaging systems;
- Emails to community representatives (as agreed through a community consultation process);
- Letterbox drops; and
- Doorknocking of potentially affected community members.

3.0 Action During and Post Incident

Management of pollution incidents are undertaken in compliance with the 16-PLA-001-COM - Enterprise-Wide Plan: Rail Emergency Management Plan as generally summarised in Table 5.

Dependent on the nature and location of the incident, management of the pollution response may be managed by the relevant Regional Operations Manager or by an Incident Manager as appointed by the business unit General Manager.

All incident responses are undertaken in consultation with internal subject matters experts, the network operator and emergency services/regulators as required.

Table 5 - Incident Response

Stage	Description
Incident Notification	Operational incidents will first be known through notification to Aurizon's Deployment team by the affected train crew. Deployment is responsible for incident notification to internal stakeholders through Noggin, the relevant RIO and emergency services. The PIRMP will be triggered at this stage as required.
Immediate (On-site)	Train crew attempt to control incident with available supplies where safe and available to do so as per LMS Spill Control Training.
Activation	Timely escalation of an incident, or activation of a more senior team within the structure, is imperative should an incident become too large to manage with the current resources. Upon notification, it is the responsibility of the Business Unit GM/Director to request the activation of an Incident Management Team (IMT) to Manager Deployment.
Response and Recovery	The offsite management of incidents is coordinated by Aurizon through an IMT. The purpose of the IMT is to bring together a cross-functional team to assess the impact of the incident and determine required management measures. The IMT is Aurizon's offsite coordination point for interaction with the RIO nominated point of contact. Upon activation of the IMT, an Aurizon Incident Commander will be nominated by the Business Unit GM/Director if required.
Watching Brief	As the response to the incident gets closer to completion, a smaller group of key stakeholders from the IMT will continue to meet on a regular basis to ensure the key recovery milestones are achieved as per initial plans developed by the Aurizon IMT. This team shall identify the criteria which would require re-activation of the IMT
Debrief	It is the responsibility of the Manager Deployment to schedule and facilitate a debrief meeting with onsite and offsite stakeholders. The debrief shall be conducted no greater than two weeks after the last IMT meeting for the incident. The purpose of the debrief is to identify and confirm: <ul style="list-style-type: none"> Processes which worked well. Elements of the process which did not work well • Opportunities for improvement. Any changes to the Rail Emergency Management Plan and/or associated tools and resources.

4.0 Environmental Management

4.1 Environmental Risk Assessment

To identify hazards to human health and the environment associated with the activity an Environmental Risk Assessment (ERA) has been developed and is included in Appendix G. The ERA considers the likelihood and consequence of a hazard occurring and the controls required to mitigate that risk.

The ERA has been developed with reference to the enterprise Safety Risk Management Principle (PRI/0014/COR), Aurizon corporate environmental policies and standards and the Aurizon Enterprise Risk Management Framework (RMT/DIR/0001).

In line with the Aurizon Change Management Standard (05-STD-001-COM), the ERA will be reviewed in the following circumstances:

- Upgrade, replacement or decommissioning of old plant or equipment;
- change to business as usual activities; and
- following major environmental incidents.

4.2 Inventory of Pollutants

A general inventory of pollutants has been included in Table 4 below. The inventory has been developed from contaminants expected to be transported as part of forecast revenue services and what is contained within locomotives.

Table 6 - Inventory of Pollutants

Pollutant	Unit	Approximate Volume	Comment
Diesel	Per locomotive	13,000 L	
Coolant	Per locomotive	Varies	
Oil	Per locomotive	200 L	
Lead	Per wagon	90 m ³	Metal concentrate
Zinc	Per wagon	90 m ³	Metal concentrate
Copper	Per wagon	90 m ³	Metal concentrate
Coal	Per wagon	110 m ³	

4.3 Safety Equipment

All Aurizon locomotives and crew carry a spill kit, for control and clean-up of minor spills, and PPE. Where larger pollution incidents occur controls will be implemented with additional support from the nearest Aurizon depot, engaged national waste contractor and emergency services.

Risk specific safety equipment and controls is included in the ERA.

5.0 Compliance

5.1 Training

The contents and requirements of this PIRMP and findings of any reviews will be communicated to Aurizon personnel identified in Section 2 via the following methods:

- Desktop and field incident scenario exercises
- Toolbox talks; and
- Senior Leadership Meetings.

All Aurizon operational personnel will complete compulsory Spill Management Training as included in the Aurizon Learning Management System.

5.2 Testing

The PIRMP will be tested and reviewed annually and within one month of any incident or near miss which caused or had the potential to cause Material Harm.

Testing methods will either be desktop or practical exercises/drills and will reflect the:

- Nature of activities undertaken at the premises or by the mobile plant;
- Risk level determined for the licence under the EPA's risk-based licensing system; and
- Environmental context – location, sensitive/protected waterways (water catchment), air quality, land habitat, sensitive receivers who are close by.

Testing may take the form of a post-incident debrief to assess whether:

- The PIRMP was implemented efficiently during the activation;
- there were areas of the PIRMP that did not work or could be improved;
- all contact details were correct and up-to-date; and
- Maps were accurate and sufficiently detailed.

Testing must cover all components of the PIRMP and include a debrief with personnel who participated in the test. A debrief involves asking the following questions:

- What worked?
- What would we do the same next time?
- What would we do differently next time?
- What needs did we identify? (e.g. staff training, safety procedures, additional equipment)

The results of all testing of the PIRMP will be recorded in the testing register included in Appendix F. The PIRMP will be updated with the findings of all tests as required.

5.3 Reporting

Holders of premises-based and mobile plant licences are required to report on their compliance with PIRMP obligations in their Annual Return. The Annual Return asks licensees to confirm if their PIRMP:

- Has been prepared as required under the legislation;
- Is available at the premises;
- Is available on a publicly accessible website, and if so, the details of the website;
- Has been tested in the last 12 months, and if so, the date it was last tested; and
- Has been updated, and if so, the date it was last updated.

APPENDICIES

APPENDIX A – Incident Details Form

Date	
Name/Position	
Site Name	
Site Type	
Scenario	
Name of Reporter	
Position	

Criteria	Information
Time of incident (24 hour time)	
Date of incident	
Nature of incident	
Duration of incident	
Location (System / KPs/ Chainage)	
Location of impact (rail corridor, nearby receivers)	
Estimate quantity of pollutants (IF KNOWN. DON'T SPECULATE)	
Actions implemented to control incident	
Equipment ID	

APPENDIX B – Authority Notification Form

Details	Have Incident Details Been Communicated (FORM 1)	Time of Notification	Reference Number (Supplied by Regulator)	Notes
NSW EPA	Yes/No			
NSW Minister for Health (Public Health Unit)	Yes/No			
NSW Fire and Rescue	Yes/No			
NSW WorkCover	Yes/No			
Council	Yes/No			

APPENDIX C – Public Health Unit Contacts

Postcode	Managing Public Health Unit	Postcode	Managing Public Health Unit	Postcode	Managing Public Health Unit
2000-2002	Randwick SESI	2379-2382	Tamworth HNE	2717	Broken Hill GW
2004-2009	Camperdown SSW	2386-2390	Tamworth HNE	2720	Albury GS
2010-2011	Randwick SESI	2395-2396	Dubbo GW	2721	Bathurst GW
2012-2017	Camperdown SSW	2397-2411	Tamworth HNE	2722	Albury GS
2018-2036	Randwick SESI	2415	Newcastle HNE	2725	Albury GS
2037-2050	Camperdown SSW	2420-2430	Newcastle HNE	2726	Goulburn GS
2052	Randwick SESI	2431	Port Macquarie NC	2727-2733	Albury GS
2055-2114	Hornsby NSCC	2439-2456	Port Macquarie NC	2734	Broken Hill GW
2115-2118	Parramatta SW	2460-2466	Lismore NC	2735-2736	Albury GS
2119-2122	Hornsby NSCC	2469-2474	Lismore NC	2737-2739	Broken Hill GW
2123-2125	Parramatta SW	2475	Tamworth HNE	2745	Camperdown SSW
2126	Hornsby NSCC	2476-2490	Lismore NC	2747-2751	Penrith SW
2127-2128	Parramatta SW	2500-2502	Wollongong SESI	2752	Camperdown SSW
2129-2140	Camperdown SSW	2505-2508	Wollongong SESI	2753-2760	Penrith SW
2141-2157	Parramatta SW	2515-2522	Wollongong SESI	2761-2770	Parramatta SW
2158-2159	Hornsby NSCC	2525-2530	Wollongong SESI	2773-2786	Penrith SW
2160-2161	Parramatta SW	2533-2535	Wollongong SESI	2787	Bathurst GW
2162-2179	Camperdown SSW	2536-2537	Goulburn GS	2790-2800	Bathurst GW
2190-2200	Camperdown SSW	2538-2541	Wollongong SESI	2803	Goulburn GS
2203-2204	Camperdown SSW	2545-2551	Goulburn GS	2804-2806	Bathurst GW
2205	Randwick SESI	2555-2560	Camperdown SSW	2807	Goulburn GS
2206	Camperdown SSW	2563-2579	Camperdown SSW	2808-2810	Bathurst GW
2207	Randwick SESI	2580-2587	Goulburn GS	2820-2831	Dubbo GW
2208	Camperdown SSW	2588-2590	Albury GS	2832-2834	Broken Hill GW
2209-2210	Randwick SESI	2594	Goulburn GS	2835	Dubbo GW
2211-2214	Camperdown SSW	2611	Goulburn GS	2836	Broken Hill GW
2216-2234	Randwick SESI	2618-2633	Goulburn GS	2839-2840	Broken Hill GW
2250-2252	Gosford NSCC	2640-2647	Albury GS	2842-2844	Dubbo GW
2256-2263	Gosford NSCC	2648	Broken Hill GW	2845-2847	Penrith SW
2264-2267	Newcastle HNE	2649-2671	Albury GS	2848-2849	Bathurst GW
2278-2338	Newcastle HNE	2672	Bathurst GW	2850-2852	Dubbo GW
2339-2356	Tamworth HNE	2675	Albury GS	2864-2877	Bathurst GW
2357	Dubbo GW	2680-2681	Albury GS	2878-2880	Broken Hill GW
2358-2361	Tamworth HNE	2700-2714	Albury GS	2890-2891	Wollongong SESI
2365	Tamworth HNE	2715	Broken Hill GW	2898	Broken Hill GW
2369-2372	Tamworth HNE	2716	Albury GS		

Public Health Unit	Contact Details	After Hours Contact Details
Albury Office	PO Box 3095, Albury, 2640 Ph: 02 6080 8900 Fax: 02 6080 8999	Ph: 02 6080 8900 (diverts to Albury Base Hospital) - ask for Public Health Officer on call
Bathurst Office	PO Box 143, Bathurst, 2795 Ph: 02 6339 5601 Fax: 02 6339 5173 (*s)	Mob: 0428 400 526 - ask for Public Health Officer on call
Broken Hill Office	PO Box 457, Broken Hill, 2880 Ph: 08 8080 1499 Fax: 08 8080 1683 / 1196 (*s)	Ph: 08 8080 1333 (Broken Hill Base Hospital) - ask for Public Health Officer on call, if no answer: Mob: 0417 685 259
Dubbo Office	PO Box 739, Dubbo, 2830 Ph: 02 6841 5569 Fax: 02 6841 5571 (*s)	Ph: 02 6885 8666 (Dubbo Base Hospital) - ask for Public Health Officer on call, if no answer: Mob: 0418 866 397 - ask for Public Health Officer on call
Eastern Zone(Camperdown Office) For Liverpool Area, please dial the Camperdown office.	PO Box 374, Camperdown 2050 Ph: 02 9515 9420 Fax: 02 9515 9440 Fax: 02 9515 9467 (*s)	Ph: 02 9515 6111 (Royal Prince Alfred Hospital) - ask Public Health Officer on call
Gosford Office	PO Box 361, Gosford, 2250 Ph: 02 4349 4845 Fax: 02 4349 4850 (*s)	Ph: 02 4320 2111 (Gosford Hospital) - ask for Public Health Nurse on call
Goulburn Office	Locked Bag 11, Goulburn, 2580 Ph: 02 4824 1840 Fax: 02 4824 1831 / 4822 5038 (*s)	Ph: 02 6080 8900 (diverts to Albury Base Hospital) - ask for Public Health Officer on call,
Hornsby Office	Hornsby Hospital, Palmerston Rd, Hornsby 2077 Ph: 02 9477 9400 Fax: 02 9482 1650 / 1358 (*s)	Ph: 02 9477 9123 (Hornsby Hospital) - ask for Public Health Officer on call
Lismore Office	PO Box 498, Lismore 2480 Ph: 02 6620 7585 Fax: 02 6622 2151 / 6620 2552 (*s)	Pager Service: 1300 555 555 Communicable Disease: 48073 Environmental Health: 149 377 If no answer phone: Mob 0417 244 966 or Mob 0407 904 280
Matrville Office	PO Box 150, Matrville 2036 Ph: 02 9311 2707 Fax: 02 9700 3747 (*s)	Ph: 02 9311 2707
Newcastle Office	Locked Bag 10, Wallsend, 2287 Ph: 02 4924 6477 Fax: 02 4924 6048 (*s)	Ph: 02 4924 6477 (diverts to John Hunter Hospital) - ask for Public Health Officer on call
Parramatta Office	Locked Bag 7118, Parramatta BC 2150 Ph: 02 9840 3603 Fax: 02 9840 3608 / 3591 (*s)	Ph: 02 9845 5555 (Westmead Hospital) - ask for Public Health Officer on call

Public Health Unit	Contact Details	After Hours Contact Details
Penrith Office	PO Box 63, Penrith 2751 Ph: 02 4734 2022 Fax: 02 4734 3300 / 3444 (*s)	Ph: 02 9845 5555 (Westmead Hospital) - ask for Public Health Officer on call
Port Macquarie Office	PO Box 126, Port Macquarie 2444 Ph: 02 6588 2750 Fax: 02 6588 2837	Pager Service: 1300 555 555 Communicable Disease: 48073 Environmental Health: 149 377 If no answer phone: Mob 0417 244 966 or Mob 0407 904 280
Randwick Office	Locked Bag 88, Randwick 2031 Ph: 9382 8333 Fax: 02 9382 8334 / 8314 (*s)	Ph: 02 9382 2222 (Prince of Wales Hospital) - ask for Public Health Nurse on call
Tamworth Office	Locked Mail Bag 9783, NEMSC 2348 Ph: 02 6764 8000 Fax: 02 6766 3890 (*s)	Ph: 02 6764 8000 (diverts to Public Health Officer on call)
Wollongong Office	Locked Bag 9, Wollongong 2500 Ph: 02 4221 6700 Fax: 02 4221 6759 (*s)	Ph: 02 4222 5000 (Wollongong Hospital) - ask for Public Health Officer on call

APPENDIX D – Council Contacts

Council Name	PHONE	FAX	WEB
Albury City Council	02 6023 8111	02 6023 8190	http://www.alburycity.nsw.gov.au
Armidale Dumaresq Council	02 6770 3600	02 6772 9275	http://www.armidale.nsw.gov.au
Ashfield Council	02 9716 1800	02 9716 1911	http://www.ashfield.nsw.gov.au
Auburn City Council	02 9735 1222	02 9643 1120	http://www.auburn.nsw.gov.au/
Ballina Shire Council	02 6686 4444	02 6686 7035	http://www.ballina.nsw.gov.au
Balranald Shire Council	03 5020 1300	03 5020 1620	http://www.balranald.nsw.gov.au/
Bankstown City Council	02 9707 9999	02 9707 9495	http://www.bankstown.nsw.gov.au
Bathurst Regional Council	02 6333 6111	02 6331 7211	http://www.bathurst.nsw.gov.au
Bega Valley Shire Council	02 6499 2222	02 6499 2200	http://www.begavalley.nsw.gov.au
Bellingen Shire Council	02 6655 7300	02 6655 2310	http://www.bellingen.nsw.gov.au
Berrigan Shire Council	03 5888 5100	03 5885 2092	http://www.berriganshire.nsw.gov.au
Blacktown City Council	02 9839 6000	02 9831 1961	http://www.blacktown.nsw.gov.au
Bland Shire Council	02 6972 2266	02 6972 2145	http://www.blandshire.nsw.gov.au
Blayney Shire Council	02 6368 2104	02 6368 3290	http://www.blayney.local-e.nsw.gov.au
Blue Mountains City Council	02 4780 5000	02 4780 5555	http://www.bmcc.nsw.gov.au/
Bogan Shire Council	02 6835 9000	02 6835 9011	http://www.bogan.nsw.gov.au/
Bombala Council	02 6458 3555	02 6458 3777	http://www.bombala.nsw.gov.au
Boorowa Council	02 6385 3303	02 6385 3562	http://www.boorowa.nsw.gov.au
Bourke Shire Council	02 6830 8000	02 6872 3030	http://www.bourke.nsw.gov.au
Brewarrina Shire Council	02 6830 5100	02 6839 2100	http://www.breshire.com
Broken Hill City Council	08 8080 3300	08 8080 3424	http://www.brokenhill.nsw.gov.au
Burwood Council	02 9911 9911	02 9911 9900	http://www.burwood.nsw.gov.au
Byron Shire Council	02 6626 7000	02 6684 3018	http://www.byron.nsw.gov.au
Cabonne Council	02 6392 3200	02 6392 3260	http://www.cabonne.nsw.gov.au
Camden Council	02 4654 7777	02 4654 7829	http://www.camden.nsw.gov.au
Campbelltown City Council	02 4645 4000	02 4645 4111	http://www.campbelltown.nsw.gov.au
Canterbury City Council	02 9789 9300	02 9789 1542	http://www.canterbury.nsw.gov.au
Carrathool Shire Council	02 6965 1900	02 6965 1379	http://www.carrathool.nsw.gov.au
Central Darling Shire Council	08 8083 8900	08 8091 5994	http://www.centraldarling.nsw.gov.au
Cessnock City Council	02 4993 4100	02 4993 2500	http://www.cessnock.nsw.gov.au
City of Canada Bay Council	02 9911 6555	02 9911 6550	http://www.canadabay.nsw.gov.au
City of Lithgow Council	02 6354 9999	02 6351 4259	http://www.council.lithgow.com/
Clarence Valley Council	02 6643 0200	02 6642 7647	http://www.clarence.nsw.gov.au
Cobar Shire Council	02 6836 5888	02 6836 5889	http://www.cobar.nsw.gov.au
Coffs Harbour City Council	02 6648 4000	02 6648 4199	http://www.coffsharbour.nsw.gov.au
Conargo Shire Council	03 5880 1200	03 5881 2568	http://www.conargo.nsw.gov.au
Coolamon Shire Council	02 6927 3206	02 6927 3168	http://www.coolamon.nsw.gov.au
Cooma-Monaro Shire Council	02 6455 1777	02 6455 1799	http://www.cooma.nsw.gov.au
Coonamble Shire Council	02 6827 1900	02 6822 1626	http://www.coonambleshire.nsw.gov.au
Cootamundra Shire Council	02 6940 2100	02 6940 2127	http://www.cootamundra.nsw.gov.au
Corowa Shire Council	02 6033 8999	02 6033 3317	http://www.corowa.nsw.gov.au
Council of the City of Sydney	02 9265 9333	02 9265 9222	http://www.cityofsydney.nsw.gov.au
Cowra Shire Council	02 6340 2000	02 6340 2011	http://www.cowraregion.com.au
Deniliquin Council	03 5898 3000	03 5898 3029	http://www.deniliquin.nsw.gov.au
Dubbo City Council	02 6801 4000	02 6801 4259	http://www.dubbo.nsw.gov.au
Dungog Shire Council	02 4995 7777	02 4995 7750	http://www.dungog.nsw.gov.au
Eurobodalla Shire Council	02 4474 1000	02 4474 1234	http://www.esc.nsw.gov.au
Fairfield City Council	02 9725 0222	02 9725 4249	http://www.fairfieldcity.nsw.gov.au

Council Name	PHONE	FAX	WEB
Forbes Shire Council	02 6850 2300	02 6850 2399	http://www.forbes.nsw.gov.au
Gilgandra Shire Council	02 6817 8800	02 6847 2521	http://www.gilgandra.nsw.gov.au
Glen Innes Severn Council	02 6730 2300	02 6732 3764	http://www.gisc.nsw.gov.au
Gloucester Shire Council	02 6538 5250	02 6558 2343	http://www.gloucester.nsw.gov.au
Gosford City Council	02 4325 8222	02 4323 2477	http://www.gosford.nsw.gov.au
Goulburn Mulwaree Council	02 4823 4444	02 4823 4456	http://www.goulburn.nsw.gov.au/
Great Lakes Council	02 6591 7222	02 6591 7200	http://www.greatlakes.nsw.gov.au
Greater Hume Shire Council	02 6036 0100	02 6036 2683	http://www.greaterhume.nsw.gov.au
Greater Taree City Council	02 6592 5399	02 6592 5311	http://www.gtcc.nsw.gov.au
Griffith City Council	02 6962 8100	02 6962 7161	http://www.griffith.nsw.gov.au
Gundagai Shire Council	02 6944 0200	02 6944 1475	http://gundagai.local-e.nsw.gov.au/
Gunnedah Shire Council	02 6740 2100	02 6740 2119	http://www.infogunnedah.com.au
Guyra Shire Council	02 6770 7100	02 6779 1221	http://www.guyra.nsw.gov.au
Gwydir Shire Council	02 6724 2000	02 6724 1771	http://www.gwydirshire.com/
Harden Shire Council	02 6386 2305	02 6386 2083	http://www.harden.nsw.gov.au
Hawkesbury City Council	02 4560 4444	02 4587 7740	http://www.hawkesbury.nsw.gov.au
Hay Shire Council	02 6993 1003	02 6993 1288	http://www.hay.nsw.gov.au
Holroyd City Council	02 9840 9840	02 9840 9734	http://www.holroyd.nsw.gov.au
Hurstville City Council	02 9330 6222	02 9330 6223	http://www.hurstville.nsw.gov.au
Inverell Shire Council	02 6728 8288	02 6728 8277	www.inverell.nsw.gov.au
Jerilderie Shire Council	03 5886 1200	03 5886 1701	http://www.jerilderie.nsw.gov.au
Junee Shire Council	02 6924 8100	02 6924 2497	http://www.junee.nsw.gov.au
Kempsey Shire Council	02 6566 3200	02 6566 3205	http://www.kempsey.nsw.gov.au
Kogarah City Council	02 9330 9400	02 9330 9560	http://www.kogarah.nsw.gov.au
Ku-ring-gai Council	02 9424 0888	02 9424 0880	http://www.kmc.nsw.gov.au
Kyogle Council	02 6632 1611	02 6632 2228	http://www.kyogle.nsw.gov.au
Lachlan Shire Council	02 6895 1900	02 6895 3478	http://www.lachlan.nsw.gov.au
Lake Macquarie City Council	02 4921 0333	02 4958 7257	http://www.lakemac.com.au
Lane Cove Municipal Council	02 9911 3555	02 9911 3600	http://www.lanecove.nsw.gov.au
Leeton Shire Council	02 6953 0911	02 6953 3337	http://www.leeton.nsw.gov.au
Leichhardt Municipal Council	02 9367 9222	02 9367 9111	http://www.leichhardt.nsw.gov.au
Lismore City Council	02 6625 0500	02 6625 0400	http://www.lismore.nsw.gov.au
Liverpool City Council	02 9821 9222	02 9821 9333	http://www.liverpool.nsw.gov.au
Liverpool Plains Shire Council	02 6746 1755	02 6746 3255	http://www.lpsc.nsw.gov.au/
Lockhart Shire Council	02 6920 5305	02 6920 5247	http://www.lockhart.nsw.gov.au
Maitland City Council	02 4934 9700	02 4933 3209	http://www.maitland.nsw.gov.au
Manly Council	02 9976 1500	02 9976 1400	http://www.manly.nsw.gov.au
Marrickville Council	02 9335 2222	02 9335 2029	http://www.marrickville.nsw.gov.au
Mid-Western Regional Council	02 6378 2850	02 6378 2815	http://www.midwestern.nsw.gov.au/
Moree Plains Shire Council	02 6757 3222	02 6752 3934	http://www.mpsc.nsw.gov.au
Mosman Municipal Council	02 9978 4000	02 9978 4132	http://www.mosman.nsw.gov.au
Murray Shire Council	03 5884 3302	03 5884 3417	http://www.murray.nsw.gov.au
Murrumbidgee Shire Council	02 6968 4166	02 6968 4252	http://www.murrumbidgee.local-e.nsw.gov.au
Muswellbrook Shire Council	02 6549 3700	02 6549 3701	http://www.muswellbrook.nsw.gov.au
Nambucca Shire Council	02 6568 2555	02 6568 2201	http://www.nambucca.nsw.gov.au
Narrabri Shire Council	02 6799 6866	02 6799 6888	http://www.narrabri.nsw.gov.au
Narrandera Shire Council	02 6959 5510	02 6959 1884	http://www.narrandera.nsw.gov.au
Narromine Shire Council	02 6889 9999	02 6889 9998	http://www.narromine.nsw.gov.au

Council Name	PHONE	FAX	WEB
Newcastle City Council	02 4974 2000	02 4974 2222	http://www.newcastle.nsw.gov.au
North Sydney Council	02 9936 8100	02 9936 8177	http://www.northsydney.nsw.gov.au
Oberon Council	02 6329 8100	02 6329 8142	http://www.oberon.nsw.gov.au/
Orange City Council	02 6393 8000	02 6393 8199	http://www.orange.nsw.gov.au
Palerang Council	1300 735 025	02 6238 1290	http://www.palerang.nsw.gov.au
Parkes Shire Council	02 6861 2333	02 6862 3946	http://www.parkes.nsw.gov.au
Parramatta City Council	02 9806 5050	02 9806 5917	http://www.parracity.nsw.gov.au
Penrith City Council	02 4732 7777	02 4732 7958	http://www.penrithcity.nsw.gov.au
Pittwater Council	02 9970 1111	02 9970 7150	http://www.pittwater.nsw.gov.au
Port Macquarie-Hastings Council	02 6581 8111	02 6581 8123	http://www.pmhc.nsw.gov.au
Port Stephens Council	02 4980 0255	02 4987 3612	http://www.portstephens.nsw.gov.au
Queanbeyan City Council	02 6285 6000	02 6298 4666	http://www.qcc.nsw.gov.au
Randwick City Council	02 9399 0999	02 9319 1510	http://www.randwick.nsw.gov.au
Richmond Valley Council	02 6660 0300	02 6660 1300	http://www.richmondvalley.nsw.gov.au
Rockdale City Council	02 9562 1666	02 9562 1777	http://www.rockdale.nsw.gov.au/
Ryde City Council	02 9952 8222	02 9952 8070	http://www.ryde.nsw.gov.au
Shellharbour City Council	02 4221 6111	02 4221 6016	http://www.shellharbour.nsw.gov.au
Shoalhaven City Council	02 4429 3111	02 4422 1816	http://www.shoalhaven.nsw.gov.au
Singleton Council	02 6578 7290	02 6572 4197	http://www.singleton.nsw.gov.au
Snowy River Shire Council	02 6451 1195	02 6456 3337	http://www.snowyriver.nsw.gov.au
Strathfield Municipal Council	02 9748 9999	02 9764 1034	http://www.strathfield.nsw.gov.au
Sutherland Shire Council	02 9710 0333	02 9710 0265	http://www.sutherland.nsw.gov.au
Tamworth Regional Council	02 6767 5555	02 6767 5499	http://www.tamworth.nsw.gov.au
Temora Shire Council	02 6980 1100	02 6980 1138	http://www.temora.nsw.gov.au
Tenterfield Shire Council	02 6736 6000	02 6736 6005	http://www.tenterfield.nsw.gov.au
The Council of the City of Botany Bay	02 9366 3666	02 9366 3777	http://www.botanybay.nsw.gov.au
The Council of the Municipality of Hunters Hill	02 9879 9400	02 9809 7338	http://www.huntershill.nsw.gov.au
The Council of the Municipality of Kiama	02 4232 0444	02 4232 0555	http://www.kiama.nsw.gov.au
The Council of the Shire of Hornsby	02 9847 6666	02 9847 6999	http://www.hornsby.nsw.gov.au
The Council of the Shire of Wakool	03 5887 5007	03 5887 5103	http://www.wakool.nsw.gov.au
The Hills Shire Council	02 9843 0555	02 9843 0409	http://www.thehills.nsw.gov.au
Tumbarumba Shire Council	02 6948 9100	02 6948 2865	http://www.tumbashire.nsw.gov.au
Tumut Shire Council	02 6941 2555	02 6941 2678	http://www.tumut.nsw.gov.au/
Tweed Shire Council	02 6670 2400	02 6670 2429	http://www.tweed.nsw.gov.au
Upper Hunter Shire Council	02 6540 1100	02 6545 2671	http://upperhunter.local-e.nsw.gov.au/
Upper Lachlan Shire Council	02 4830 1000	02 4845 1426	http://upperlachlan.local-e.nsw.gov.au/
Uralla Shire Council	02 6778 6300	02 6778 5073	http://www.uralla.nsw.gov.au
Urana Shire Council	02 6930 9100	02 6930 9101	http://www.urana.nsw.gov.au
Wagga Wagga City Council	1300 292 442	02 6926 9199	http://www.wagga.nsw.gov.au
Walcha Council	02 6774 2500	02 6777 1181	http://www.walcha.nsw.gov.au/
Walgett Shire Council	02 6828 1399	02 6828 1608	http://www.walgett.nsw.gov.au
Warren Shire Council	02 6847 6600	02 6847 6633	http://www.warren.nsw.gov.au
Warringah Council	02 9942 2111	02 9971 4522	http://www.warringah.nsw.gov.au

Council Name	PHONE	FAX	WEB
Warrumbungle Shire Council	02 6849 2000	02 6842 1337	http://www.warrumbungle.nsw.gov.au
Waverley Council	02 9369 8000	02 9387 1820	http://www.waverley.nsw.gov.au
Weddin Shire Council	02 6343 1212	02 6343 1203	http://weddin.local-e.nsw.gov.au
Wellington Council	02 6840 1700	02 6840 1791	http://www.wellington.nsw.gov.au
Wentworth Shire Council	03 5027 5027	03 5027 5000	http://www.wentworth.nsw.gov.au
Willoughby City Council	02 9777 1000	02 9412 3107	http://www.willoughby.nsw.gov.au
Wingecarribee Shire Council	02 4868 0888	02 4869 1203	http://www.wsc.nsw.gov.au/
Wollondilly Shire Council	02 4677 1100	02 4677 2339	http://www.wollondilly.nsw.gov.au/
Wollongong City Council	02 4227 7111	02 4227 7277	http://www.wollongong.nsw.gov.au
Woolahra Municipal Council	02 9391 7000	02 9391 7044	http://www.woollahra.nsw.gov.au/
Wyong Shire Council	02 4350 5555	02 4351 2098	http://www.wyong.nsw.gov.au
Yass Valley Council	02 6226 1477	02 6226 2598	http://www.yass.nsw.gov.au/
Young Shire Council	02 6380 1200	02 6382 4443	http://www.young.nsw.gov.au

APPENDIX E – PIRMP Test Template

Criteria	Information	Comment
Date Tested:	20/05/21	
Test by:	<p>Aurizon Coal Operations NSW/SEQ Harry Egan – Senior Adviser Environment</p>	
Details of Test: (nature of the test, involvement of other agencies) Note: Testing must cover all components of the plan.	<p>Desktop assessment of 3,500 litre diesel spill. All aspects of the notification process tested. Onsite availability of controls audited as per SHE 2nd party audits.</p>	
Findings:	<p>Public Health Officer not correct contact. Should be Environment Health Officer.</p> <p>NCC very slow and unsure of who should be notified during an incident.</p>	
Next Scheduled Test:	May 2022	

APPENDIX F – PIRMP Update Register

Rev #	Date Updated	Update Justification	Detail of Update	Date Uploaded to Website	Comment
2	12/03/21	New ROM contact details	New ROM contact details	12/03/21	
3	07/03/22	Update following PIRMP trial	Update of contact details	07/03/22	

APPENDIX G – Environmental Risk Assessment

CEO Enterprise/ Group Executive:	Group Executive (GE) Edward McKeiver Coal Operations		<u>Risk Assessment Context: (Detailed)</u> The purpose of this Risk Profile is to demonstrate how NSW/SEQ Operations identify and manage their high level risks										
Head/GM Portfolio:	General Manager Greg Dixon NSW/SEQ Coal Operations												
Assessment Owner:	General Manager Greg Dixon NSW/SEQ Coal Operations												
Developed By:	Principal Safety Partner David Keating Safety and HR Partnering Coal												
Authorisation and Date:	General Manager Greg Dixon NSW/SEQ Coal Operations 16/01/2019												
1. IDENTIFY AND DESCRIBE			2. ASSESS AND EVALUATE							3. CONTROL AND MONITOR			
Risk No.	List Activity or Aspect and Hazard - e.g. What is it that has potential to cause harm?	Risk What is the risk associated with the hazard? (The Risk Of)+(Due To)+(Resulting In)	Existing Controls What existing precautionary controls do I currently have in place and how effective are they? Confirm the Hierarchy of Control (HOC) and justify Consider the following in order: 1. Regulations 2. Codes of Practice 3. International / Australian or Industry Standard	Justifications Explain why this arrangement of controls was chosen. <u>(also see Section 6.2 below)</u>	Risk Evaluation			Proposed Controls Are there additional precautionary controls options I can apply to minimise the risk? (Apply the proposed Hierarchy of Control and justify)	Justifications Explain why this arrangement of controls was chosen. <u>(also see Section 6.2 below)</u>	Accountable Officer Who will implement the proposed controls?	Due Date	Governance	Date for next review To monitor control effectiveness
					C	L	Level of Risk Extreme High Moderate Low						

1. IDENTIFY AND DESCRIBE
2. ASSESS AND EVALUATE
3. CONTROL AND MONITOR

1.	Train Operations	<p>COLLISION WITH A VEHICLE AT A LEVEL CROSSING</p> <p>Risk of collision at level crossing and other vehicles within the Danger Zone due to substandard act and/or condition resulting in potential harm</p> <p>Reasonable and foreseeable causal factors Inc. but not limited to;</p> <ul style="list-style-type: none"> - Substandard act, error or omission of public road traffic at the level crossing (including heavy vehicles) - Understanding of expectation - site and rail interface requirements - Integration between stakeholders - communications and relationships - Situational awareness due to rushing, distraction and human behaviour - SPAD or failure of signalling - Mechanical failure of rollingstock - Weather conditions 	<p>Critical Controls</p> <ol style="list-style-type: none"> 1. Level crossings are assessed to determine risk evaluation and required level of protection 2. Rail traffic crew train handling practices, <ol style="list-style-type: none"> i. Risk triggered commentary approaching a level crossing ii. Adherence to defined approach speeds iii. Sounding of the Claxton iv. Headlights and other locomotive lights 3. Potential near miss, collision response including rollingstock emergency braking and activation of lights and Claxton <p>Elimination:</p> <ul style="list-style-type: none"> - Not applied <p>Substitution:</p> <ul style="list-style-type: none"> - Not applied <p>Isolation:</p> <ul style="list-style-type: none"> - Not applied <p>Engineering:</p> <ul style="list-style-type: none"> - Plant maintenance and Inspections - rollingstock and road vehicles <p>Administration</p> <ul style="list-style-type: none"> - Aurizon and Network Owner SMS and associated operational procedures (including train handling, incident notification, safe working systems, traffic management) - Safety Interface Agreements and communication - Inductions (employees, contractors and service providers) - Implementation of requirements for Principal Contractor relationships - Audits and field observations (Efficiency Testing/High Consequence Activity cards) <p>PPE:</p> <ul style="list-style-type: none"> - Enterprise PPE Standard <p>CONTROL EFFECTIVENESS:</p>	5	3	15 - HIGH	<p>Elimination</p> <ul style="list-style-type: none"> - Not Applied <p>Substitution</p> <ul style="list-style-type: none"> - Not Applied <p>Isolation</p> <ul style="list-style-type: none"> - Not Applied <p>Engineering</p> <ul style="list-style-type: none"> - Not Applied <p>Administration</p> <ul style="list-style-type: none"> - Not Applied <p>PPE</p> <ul style="list-style-type: none"> - Not Applied 	<p>The additional precautionary controls are justified. They will further minimise the risk if the controls are effectively implemented and maintained</p>	GM NSW/SEQ	<p>Efficiency Testing Activities:</p> <ul style="list-style-type: none"> - Observance and Reaction to Signals <p>High Consequence Activity Cards</p> <ul style="list-style-type: none"> - HCA005 Shunting - HCA002 Operating Rollingstock <p>1st Party Assurance Activities</p> <p>2nd Party Assurance Activities</p> <ul style="list-style-type: none"> - AUD03 Shunting - AUD14 Prevention of SPAD <p>3rd Party Assurance Activities</p>	<p>Next review May 2021</p>
----	------------------	--	---	---	---	-----------	---	--	------------	--	---------------------------------

			SE									
6.	Train operations	<p>HIGH-SPEED MAINLINE DERAILMENT OF ROLLINGSTOCK</p> <p>Risk of train operations derailment due to substandard act and/or condition resulting in potential harm.</p> <p>Reasonable and foreseeable causal factors include but not limited to;</p> <ul style="list-style-type: none"> - Inadequate train operations - General train handling – Driver error - Locomotive failure - Rollingstock component failure - Wagon doors opening - Uncontrolled Rollingstock movements - Operating systems failure - signalling, etc. - Track infrastructure irregularities/degraded network - Pre-existing Medical conditions - Other Human factors – including Incapacitated worker - Psychosocial hazards - Effects of work-related stress, bullying, violence and work-related fatigue impacting ability decision-making and reaction speeds. - Situational Awareness - Distraction - Communication failure - Adherence to 	<p>Critical Controls</p> <ol style="list-style-type: none"> 1. Rollingstock integrity is maintained through a preventative maintenance program and infield monitoring 2. Network railway infrastructure integrity is maintained 3. Rail traffic crew report rail infrastructure irregularities 4. Potential derailment threat response braking methodology 5. Safe rollingstock loading and securing; <ul style="list-style-type: none"> - Empty wagons are located in an engineered approved location of train consists - Wagons are not overloaded past approved capacities - Rollingstock are fully unloaded to eliminate residual coal <p>Elimination</p> <ul style="list-style-type: none"> - Not Applied <p>Substitution</p> <ul style="list-style-type: none"> - Not Applied <p>Isolation</p> <ul style="list-style-type: none"> - Train isolation devices (Vigilance) and speed control (ATP) <p>Engineering</p> <ul style="list-style-type: none"> - Safeworking systems - fail safe operating systems (signals, points, derailleurs, etc) - Track maintenance and inspection programs - Critical area and/or components are non-destructive tested (NDT) - A breakaway event on train will trigger ECP and pneumatic emergency brake application <p>Administration</p> <ul style="list-style-type: none"> - Procedures and processes - SMS and associated operations procedures (Standards, Specifications, 	5	3	15 - HIGH	<p>Elimination</p> <ul style="list-style-type: none"> - Not Applied <p>Substitution</p> <ul style="list-style-type: none"> - Not Applied <p>Isolation</p> <ul style="list-style-type: none"> - Not Applied <p>Engineering</p> <ul style="list-style-type: none"> - Not Applied <p>Administration</p> <ul style="list-style-type: none"> - Not Applied <p>PPE</p> <ul style="list-style-type: none"> - Not Applied 	The additional precautionary controls are justified. They will further minimise the risk if the controls are effectively implemented and maintained	GM NSW/SEQ	<p>Efficiency Testing Activities:</p> <ul style="list-style-type: none"> - Protecting Propelling Movements - Securing Rail Traffic Against Uncontrolled Movement - Shunting Rollingstock - Observance and Reaction to Signals - Railway Non-Technical Skills <p>High Consequence Activity Cards</p> <ul style="list-style-type: none"> - HCA 005 Shunting - HCA 002 Operating Rollingstock <p>1st Party Assurance Activities</p> <p>2nd Party Assurance Activities</p> <ul style="list-style-type: none"> - AUD14 Prevention of SPAD <p>3rd Party Assurance Activities</p>	Next review Apr 2021	

		standards, specification and procedures - Reliance on undocumented knowledge - Adverse weather conditions – storms, heavy rain, fog, strong wind	SWMS, LOP, etc) - Safeworking qualified train Crew enabling Crew to challenge RIO instructions (PRI/0022/COR. Coal-SAF-STD-0011) - STD-0158 - Training and qualifications - train operating, shunting, etc. - Rollingstock inspection and maintenance programs - Communication equipment and radio protocols - HCA and Efficiency assessments plus observations - Rollby inspections - Stop, Take Time and Switch On - Plant maintenance (including pre-start check) and IS&LO mechanisms - Warning system/safety devices - horns, lights, reverse beepers - Audits and field observations (Efficiency Testing/High Consequence Activity cards) - Mandatory application of fatigue management system (PRI/0025/COR, 06-STD-011-COM) - Mandatory application of fatigue management system (06-PRI-025, 06-STD-011-COM) - Driver hours monitored though Deployment team to prevent exceedance. - Driver configurations of driver and second person in locomotives. - Typical shift length of 10 hours. - Localised sign-on/sign-off locations, including phone-in for barracks jobs. - Drivers have access to support through EAP on external factors related to mental health and fatigue. - Driver's capacity to report adequate fitness for duty prior to commencing work. - 2nd person to intervene - Qualified Drivers and shunters (PRI/0022/COR) - Route knowledge									
--	--	--	---	--	--	--	--	--	--	--	--	--

			<ul style="list-style-type: none"> - Application of National Driver Medical Standards (PRI/0027/COR, Coal-SAF-STD-0021) - Biennial Drivers Assessment Checklist (PRI/0022/COR, Coal-SAF-STD-0011) - 2nd person accountabilities to assist train management - Mandatory one on one SPAD prevention discussion and systematic assessment (PRI/0015/COR) - In cab protocols (OP-INS-35) - "Living as a Shiftworker" training (06-STD-011-COM) - Application of Aurizon SPAD Commandments. - Shunt plans utilised - Application of "HOT Spot" System including data logger reviews and continuous auditing of train handling. - Enterprise "Recognition & Response to Signals" program - Systematic reporting processes for hazards, near miss, network control issues - Contract through ARTC who must meet Rail Safety Regulations to the satisfaction of ONRSR - Enterprise internal communication process - Maintenance Plans for identified maintenance facilities - Safety Interface Agreements in place for all load and unload points - EAP established and offered to employees <p>PPE</p> <ul style="list-style-type: none"> - Enterprise Standard PPE <p>Control Effectiveness: SE</p>									
7.	Working with Hazardous Substances	LOSS OF CONTAINMENT OF HAZARDOUS MATERIAL	Critical Controls 1. Suitable bunding to be utilised for hazardous liquids 2. Suitable storage for	3	3	9 – MOD	Elimination - Not Applied Substitution - Not Applied Isolation	The additional precautionary controls are justified. They will further minimise the	GM NSW/SEQ		High Consequence Activity Cards - HCA018 – Environmental Management	Next Review Jan 2021

		<p>Risk of exposure to hazardous substances event resulting in potential harm.</p> <p>Foreseeable causal factors include but are not limited to</p> <ul style="list-style-type: none"> - Compliance with regulations and codes of practice for transport, handling and storage - Failure of mechanical components during transfer - Training and awareness - Failure to remove refuelling equipment from locomotive prior to departure - Separation and storage of product - Product signage and identification - Maintenance and inspections of site conditions - Understanding of product, contents and response processes – ChemAlert - Adverse weather conditions 	<p>flammable and dangerous goods as appropriate to volume being stored.</p> <p>3. Suitable bunding to be utilised for hazardous liquids as appropriate to the volume being stored or transferred</p> <p>4. Cylinders adequately restrained (chained) and stored in the upright position</p> <p>5. Use of recoverable suitable material for lineside transfer of substances</p> <p>Elimination</p> <ul style="list-style-type: none"> - Contaminated soil removed and disposed of at a licensed facility (if applicable) <p>Substitution</p> <ul style="list-style-type: none"> - Not Applied <p>Isolation</p> <ul style="list-style-type: none"> - Not Applied <p>Engineering</p> <ul style="list-style-type: none"> - Vessels designed and compliant to AS1940 <p>Administration</p> <ul style="list-style-type: none"> - SMS Documentation <ul style="list-style-type: none"> o 04-STD-004-COM Hazardous Manual Tasks - Procedures and processes – SMS and associated operations procedures (Emergency response plan, SWMS, LOP, etc) - Inductions (Aurizon, Contractors and Customers) - Training and Awareness – response, first aid, etc. - Signage - Audits and field observations (Efficiency Testing/High Consequence Activity Cards/Safety Interactions) - Third party audits - Detail SMS docs related to HS - Appropriate labelling - Implement inspection program for assurance. - Review the systems and processes in place to 				<ul style="list-style-type: none"> - Not Applied - Not Applied - Not Applied - Not Applied - Not Applied 	<p>risk if the controls are effectively implemented and maintained</p>			<p>1st Party Assurance Activities</p> <p>2nd Party Assurance Activities</p> <p>3rd Party Assurance Activities</p>	
--	--	--	---	--	--	--	--	--	--	--	--	--

			manage the risk of exposure – eg. Procurement standards, separation of product, PPE requirements, etc. - Nominated location onsite for detailed information e.g. MSDS's. (L4's) PPE - Enterprise PPE Standard Control Effectiveness: SE								
12.	Undertaking train operations	MAINLINE TRAIN COLLISION WITH ANOTHER TRAIN, TRACK VEHICLE OR STOWED ROLLINGSTOCK AND PEOPLE AND PLANT ON OR NEAR TRACK Risk of substandard act or condition during or as a result of performing train operations resulting in Collision and/or potential harm Reasonable and foreseeable causal factors include but not limited to; <ul style="list-style-type: none"> General train handling – Driver error Failure to follow procedures and processes - shunting, safeworking Inadequate stowing, unstowing rollingstock Inadequate securing of trains on main-line, siding, facilities and yards Expiring qualifications – VOCs (Loss of Rail Accreditation) Locomotive failure Rollingstock component failure Inadequate maintenance and inspections or testing of plant and 	Critical Controls <ul style="list-style-type: none"> Cross calling of signals Take action at yellow (slow) Risk triggered commentary to stop Application of sufficient handbrakes when stowing 3 step protection in the danger zone (people) Elimination <ul style="list-style-type: none"> Not Applied Substitution Not Applied Isolation Not Applied Engineering <ul style="list-style-type: none"> Design of crossings based on outcome of ALCAM Assessment and Network owner standard for sighting and protection. Train isolation devices (Vigilance) and speed control (ATP) Locomotive cabs designed to Australian standard for crash worthiness (NSW Fleet and overhauled locomotives) Safeworking systems - fail safe operating systems (signals, points, derailleurs, etc) A breakaway event on train will trigger ECP and pneumatic emergency brake application Administration <ul style="list-style-type: none"> Procedures and processes - SMS and associated 	5	2	10 - HIGH	Elimination <ul style="list-style-type: none"> Not Applied Substitution Not Applied Isolation Not Applied Engineering Not Applied Administration Not Applied 	The additional precautionary controls are justified. They will further minimise the risk if the controls are effectively implemented and maintained	GM NSW/SEQ	Efficiency Testing Activities: - Protecting Propelling Movements - Securing Rail Traffic Against Uncontrolled Movement - Shunting Rollingstock - Observance and Reaction to Signals - Railway Non-Technical Skills High Consequence Activity Cards - HCA 005 Shunting - HCA 002 Operating Rollingstock 1 st Party Assurance Activities 2 nd Party Assurance Activities - AUD14 Prevention of SPAD 3 rd Party Assurance Activities	Next review Jun 2021

		equipment <ul style="list-style-type: none"> Inadequate maintenance recovery activities Uncontrolled Rollingstock movements Operating systems failure - signalling, etc. Pre-existing Medical conditions Other Human factors – including Incapacitated worker Psychosocial hazards - Effects of work-related stress, bullying, violence and work-related fatigue impacting ability decision-making and reaction speeds. Lack of understanding and awareness of expectations Radio communication failure Situational awareness due to rushing, distraction and human behaviour Substandard track, interconnecting or trailable points infrastructure Environmental conditions - weather conditions (storms) 	operations procedures (Standards, Specifications, SWMS, LOP, etc) <ul style="list-style-type: none"> Safeworking qualified train Crew STD-0158 ARTC Safe Notice 2-3034 allowing propelling movement from Bylong Tunnel in event of stall. 3-Step and Half Distance protection Training and qualifications - train operating, shunting, etc. Rollingstock inspection and maintenance programs Communication equipment and radio protocols HCA and Efficiency assessments plus observations Stop, Take Time and Switch On Routine maintenance program Warning system/safety devices - horns, lights, reverse beepers Audits and field observations (Efficiency Testing/High Consequence Activity cards) Mandatory application of fatigue management system (PRI/0025/COR, 06-STD-011-COM) Driver hours monitored though Deployment team to prevent exceedance. Drivers have access to support through EAP on external factors related to mental health and fatigue. Driver configurations of driver and second person in locomotives. Designated light vehicle drivers for crews, where fatigue levels reached. Maximum shift lengths set to reflect driver configurations. Localised sign-on/sign-off locations, including phone- 									
--	--	---	---	--	--	--	--	--	--	--	--	--

			in for barracks jobs and pre-start/debrief with crews at sign-on <ul style="list-style-type: none"> • Driver's capacity to report adequate fitness for duty prior to commencing work • For work in rail corridor, TPO will be utilised to protect work. • 2nd person to intervene • Route knowledge and driving methodology • Application of National Driver Medical Standards (PRI/0027/COR, Coal-SAF-STD-0021) • Biennial Drivers Assessment Checklist (PRI/0022/COR, Coal-SAF-STD-0011) • 2nd person accountabilities to assist train management • Mandatory one on one SPAD prevention discussion and systematic assessment (PRI/0015/COR) • In cab protocols (OP-INS-35) • Application of Expert on Alert, including data logger reviews and continuous auditing of train handling. • Systematic reporting processes for hazards, near miss, network control issues • Contract through ARTC who must meet Rail Safety Regulations to the satisfaction of ONRSR • Handbrake validation tables/power stow tests <p>PPE</p> <ul style="list-style-type: none"> • Enterprise PPE Standard <p>Control Effectiveness: SE</p>									
17. NSW	Environmental Management	INADEQUATE ENVIRONMENTAL	Critical Controls 1. <i>Storage areas comply with relevant standards</i>	3	3	9 - MOD	1) Direct Impact to BAU Operations:	<i>Guidance: The selected HOC is</i>	GM and ROM NSW	30 April 2021		Next review Nov 2021

	<p><i>Factors:</i></p> <ul style="list-style-type: none"> • <i>Pollution – Land, Water, Air, (Dust, Combustion Emissions, Noise);</i> • <i>Environmental Incident response;</i> • <i>Statutory Compliance (Licence to operate);</i> 	<p>MANAGEMENT</p> <p>Risk of inadequate environmental management associated with rail operations, rolling stock maintenance activities and operation of ancillary facilities (including DIL fuelling sites), resulting in environmental harm and potential non-compliance.</p> <p>Foreseeable causal factors include but not limited to:</p> <ul style="list-style-type: none"> • Incidents resulting in material or serious environmental harm; • Failure to report actual or potential incidents of material environmental harm immediately upon identification; • Improper disposal of waste and contaminated soil/water; • Improper management of chemicals; and • Impacts on adjoining landowners (e.g. noise, stormwater, dust). 	<p>Significant financial penalties/reputational impact by:</p> <p>Elimination - Not applied Substitution - Not applied Isolation</p> <ul style="list-style-type: none"> - Locomotive spill kits; <p>Engineering</p> <ul style="list-style-type: none"> - Preventative rolling stock maintenance program; and <p>Administration</p> <ul style="list-style-type: none"> • Aurizon Safety, Health and Environmental Management System; • Aurizon Environmental Policy (POL 08); • Aurizon Environmental Management Principle (ENV-PRI-001); • Aurizon Incident Management Framework (RD-SAF-0012-COM-Guide001); • Aurizon Rail Emergency Management Plan (16-PLA-001-COM); • Rail Network / Contract Operational Environmental Management Plans (OEMP); • Aurizon Community Complaints register/hotline; • Annual 2nd Party Environmental Compliance Audit Program (SHE Audit Program); • Aurizon Corporate Environmental Awareness and Spill Management training (LMS module); • Summary of Env SHEM Incidents presented at monthly LT meetings by Env staff which identify trends across Coal NSW; • Pollution Incident Response Management Plan; and • National Waste Contractor available 24/7 to respond to spill events. <p>Control Effectiveness: SE</p>				<p>Elimination - Not applied Substitution - Not applied Isolation - Not applied Engineering - Not applied Administration:</p> <ul style="list-style-type: none"> • Environmental risk assessment completed when (a) introducing new chemicals (b) proposing new or intensified activities; and • Risk assessment framework/template amended to include (a) assessment of environmental regulatory requirements (b) assessment of applicable EA/TWP (c) Chemwatch requirements. • As and when required, focused environmental toolbox to raise staff awareness of trends identified in SHEM summary & subsequent corrective actions; and • PIRMP training issued to ROMs/GM and Deployment. <p>PPE</p> <ul style="list-style-type: none"> • Not Applied 	<p><i>justified on the basis that the controls form part of the accepted safe system of work for the known operating environment and have valid potential to minimise the identified risk.</i></p> <p><i>All credible control options were considered within the hierarchy of control (HOC) as applicable to the accountable sphere of control.</i></p>	Supported by (Harry Egan SEA NSW/SEQ)			
--	--	--	--	--	--	--	---	---	---------------------------------------	--	--	--

