



ENVIRONMENTAL MANAGEMENT PLAN

Document No.: EV-PLN-001

Revision: 002

Issue Date: 25/05/2020

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1. INTRODUCTION

This Environmental Management Plan (EMP) has been developed to enable One Rail Australia (ORA) to undertake its operations in line with the ORA Environmental Policy and Environmental Management System (EMS).

ORA operates over nearly 5,000 kilometres of track and provides haulage of bulk commodities to key industries as well as short haul shunting and terminal operations. It is also a major supplier of contracted services, such as locomotives, wagons and crews to freight forwarders and infrastructure service providers operating on the interstate rail network. The ORA Rollingstock fleet consists of standard, broad and narrow gauge locomotives and wagons.

The EMP applies to all railway maintenance and operational activities associated with the provision of railway services at all facilities and networks in which ORA operates, with the exception of the exclusions noted in section 3.

2. SCOPE

The geographical scope of ORA's total operations includes all mainland states of Australia, although predominately within South Australia, Northern Territory and New South Wales (including Freightliner Australia Pty Ltd operations) and Queensland.

The operational activities that are conducted in these states and territories have the potential to generate environmental impacts through the following activities:

- Operation of rollingstock
- Maintenance of rollingstock
- Locomotive refuelling
- · Bulk fuel storage
- Transport of dangerous goods
- Use of hazardous chemicals and dangerous goods
- · Generation of waste
- Transport of waste
- Rollingstock washing
- Trade waste & effluent collection, containment, treatment & disposal
- Transport of trade waste/effluent
- Track maintenance and repair activities
- · Land clearing
- Water consumption
- Fire management
- Derailments

Strategies have been designed to address the key operational aspects and form an essential part of the EMP. The management plan takes into account ORA internal procedures and policies as well as Commonwealth and State legislative requirements and policies. Legislative requirements and policies associated with operational aspects of rail operations in each state have been listed in the *ORA Environmental Compliance Register EV-FRM-015*.



3. EXCLUSIONS

This EMP excludes the following:

- Operations on the Tarcoola to Darwin Rail Corridor and associated property, which are covered under EV-PLN-003 Environmental Management Plan Tarcoola – Darwin Network.
- Operations on the Queensland Aurizon Network, which are covered under EV-PLN-004 Aurizon Access Environmental Management Plan.

4. **DEFINITIONS**

Environmental Aspect:

Element of an organisation's activities, products or services which can interact with the environment.

Environmental Impact:

Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's activities, products or services.

Railway Reserve:

The land on which the track infrastructure is located, or which is used for railway purposes.

Significant Impact:

An Environmental Aspect that can have a significant impact on the environment and surrounds.

Further environmental definitions are detailed in HS-GUI-004 WHSE Definitions.

5. RESPONSIBILITIES

5.1. Chief Executive Officer

The Chief Executive Officer shall be responsible for ensuring the following:

- That procedures and resources are in place to comply with the requirements of this plan.
- That the requirements of this plan are adequate and rigorously applied to the organisation's operations and activities.
- The provision of adequate resources for implementation of the plan, including the training of key personnel as required to achieve its goals.

5.2. Environment Manager

The Environment Manager shall be responsible for ensuring that any environmental incidents are reported and investigated in accordance with legislative and regulatory requirements, and that existing procedures are reviewed to ensure they are current and relevant to the works being carried out.

The Environment Manager is also responsible for administering the Environmental Management System (EMS).

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5.3. Track Superintendents and Depot Coordinators

All Track Superintendents and Depot Coordinators shall be responsible for ensuring that staff under their direct supervision have access to and comply with the requirements of this management plan and related procedures.

They shall also be responsible for ensuring that incident investigations involving ORA resources are carried out in accordance with the requirements of this management plan and related procedures.

5.4. ORA Employees

It shall be the responsibility of all ORA employees to promptly and accurately report any non-compliance to their Track Superintendent or Depot Coordinator, who will in turn report non-compliances to the Environment Manager.

In the absence of both the Track Superintendent and Depot Coordinator, the employee shall directly contact the ORA Environment Manager. All ORA employees have an environmental duty and an obligation to ensure they demonstrate good environmental stewardship when conducting tasks and activities that have the potential to impact the environment.

5.5. Contractors and Subcontractors

Contractors and subcontractors engaged by ORA or another party to undertake activities on ORA property, or involving company resources, shall be required to comply with the requirements of this management plan and related requirements including *EV-PRC-009 – Management of Third Party Environmental Incidents*.

6. INTERESTED PARTIES

Interested parties have been identified in the EMP due to the interface between ORA, business stakeholders and community in all areas of its operations.

Table 1 - Interested Parties

Stakeholder	Requirements	Objective	
Government	ORA operate under a variety of Local, State and Federal Government legislation. In addition ORA's operations are licensed by the Environment Protection Authority within South Australia.	ORA will meet or exceed all environmental compliance and reporting obligations set by Local, State and Federal Government as described in EV-FRM-015 Legal and Other Requirements Register.	
Community	Due to the proximity of rail operations to community, ORA has a social responsibility to be engaged with community.	It is the expectation that ORA will work within compliance guidelines and respond to community concerns in a timely manner.	
Customers	Customers using ORA rail services have a requirement to maintain their brand image and reputation where represented by ORA.	ORA will meet or exceed all customer expectations on a case by case basis, in addition to the expectations set by ORA.	
Senior Management/ Executive Team	The senior management team have a requirement to be engaged and informed on significant environmental matters including incidents and legislative changes.	ORA Environmental staff will provide timely notification of all major environmental incidents in accordance with EV-PRC-002 Environmental Incident Response Procedure and through scheduled SEC meetings.	
ORA Employees	All employees deserve an environmentally sound workplace in which to perform their duties.	It is expected that all employees will be provided the tools and resources to maintain an environmentally sound workplace consistent with the requirements of the EMS.	

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7. RISK METHODOLOGY

7.1. Identification and Assessment

ORA is committed to identifying all potential situations that could cause damage to the environment or have the potential to cause environmental harm while conducting its business activities. ORA has undertaken a comprehensive risk identification process, which seeks to identify all the potential risks as a result of its business activities and incident situations that could arise while conducting these activities.

These risks have been assessed and documented within ORA Aspects and Impacts Register (EV-FRM-013). ORA has specific Aspects and Impacts registers for each operational site/location and a full list of site-specific registers is included as **Appendix B**.

As a result of each assessment, risks have been determined and categorised into Low, Medium, High or Extreme risk.

7.2. Planning

ORA plans and conducts regular reviews and audits of its environmental framework to ensure effectiveness in managing and reducing risk so far as reasonably practicable.

7.3. Evaluation and Review of Risks

ORA is committed to ensuring risks are identified, assessed, controlled, and evaluated. ORA conducts regular reviews to ensure controls implemented are adequate and timely, and provide the risk reduction required to prevent re-occurrence. Regular reviews include audits, inspections, meetings and reporting to senior management to ensure the ORA Risk Management procedures and processes are adequate and functional. This review process also includes a review of this EMP and relating procedures within the ORA EMS.

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7.4. ORA Risk Methodology

Table 2 - Likelihood or Probability of Risks Occurring

		Likelihood Score	
Score	Rating	Description	Probability
5	Almost Certain	Has occurred. Is expected to occur in most circumstances and frequently during the year.	>90% to 99%
4	Likely	Will probably occur in most circumstances. Is expected to occur several times during the year.	>70% to 90 %
3	Possible	Might occur at some time. Event could occur once every three years.	>30% to 70%
2	Unlikely	Could occur at some time but unlikely. May occur once every five years.	>5% to 30%
1	Rare	May occur only in exceptional circumstances. Event is known to have occurred elsewhere. May occur once every 10 years.	<5%

Table 3 - ORA Risk Matrix

		Likelihood				
		Rare	Unlikely	Possible	Likely	Almost Certain
Consequence		1	2	3	4	5
Catastrophic	5	6	7	8	9	10
Major	4	5	6	7	8	9
Moderate	3	4	5	6	7	8
Minor	2	3	4	5	6	7
Limited	1	2	3	4	5	6



Table 4 - Likely Consequence of Risks

Score	Descriptor	Environmental Risk Consequence	
5	Catastrophic - Changes in operations and additional resources may be required that exceed the company's resource capability.	Occurrence/Avoidance of significant long term or widespread environmental harm with extensive remediation required and little if any potential for effective recovery. Confidence of customers and general public undermined. Cost to recover expected to exceed materiality threshold.	
4	Major - Changes in operations and additional resources may be greater than those available internally or within necessary response times	Occurrence/avoidance of moderate environmental harm with long term recovery. Cost to recover may exceed the current materiality threshold.	
3	Moderate - Changes in operations may be required and additional resources are needed – may result in disruption to other work operations	Occurrence/avoidance of moderate environmental harm with mid-term effects. Incident requires external assistance. Cost to recover expected to be less than current materiality threshold.	
2	Minor - Can be managed without operational change, but may need changes to priorities and resource allocation	Occurrence/avoidance of temporary environmental harm with short term effects. Management effort required to resolve.	
1	Limited - Can be managed without operational change or resource relocation	Occurrence/avoidance of temporary environmental harm with effective remediation.	

8. CONTROL OF ENVIRONMENTAL ASPECTS AND IMPACTS

The site specific Environmental Aspect & Impact registers (EV-FRM-013) detail the controls ORA has implemented to manage its environmental risks. The registers will be reviewed upon any significant change in site specific activities as outlined in **section 2**.

Site specific Aspects and Impacts Registers will be reviewed annually against any operational changes and where possible accompanied by a site visit.

8.1. Regulatory Compliance

ORA will fully comply with its statutory and regulatory requirements applicable to rail activities and operations.

In addition, ORA also operates under environmental protection authorization (EPA2933) as a network operator in South Australia and under environment protection licence (EPL222) when transporting listed wasted between Northern Territory and South Australia.

ORA must also adhere to the environmental authorization of other network and terminal providers on which it operates including:

- Australian Rail Track Corporation (ARTC)
- John Holland Rail
- Sydney Trains (RailCorp)
- Port Waratah Coal Services (PWCS)
- Newcastle Coal Infrastructure Group (NCIG)

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8.2. Approvals and Consents

ORA have identified a number of approvals/consents, licenses and permits which may be required to comply with statutory and regulatory requirements when undertaking its operations. This list is indicative only and is presented in the ORA Environmental Compliance Register EV-FRM-015.

To ensure that these requirements remain applicable, and that all future requirements are identified, all acts and regulations will be subject to an annual review as part of the Management Review processes.

Where required, ORA will seek expert consultant and/or legal advice on compliance issues at the request of the Environment Manager.

8.3. Objectives and Targets

ORA is committed to the protection of the environment at all of its operational sites. The objectives defined are consistent with the ORA Environmental Policy.

The Environment Manager, in conjunction with operational managers, will target areas and develop procedures where improvements are deemed necessary to reduce risk and liability. In conjunction with this plan, the referenced procedure details the identification, assessment and treatment of all aspects and impacts associated with the railway operations.

Objectives and targets are detailed within the ORA WHSE Strategic Plan (HS-PLN-002). Additional to this, review of objectives and targets is undertaken on a quarterly basis as part of the SEC meetings. This monthly review will ensure the adequacy and relevance of objectives, and the achievement of targets including:

8.4. Environmental Management Procedures and Guidance

The environmental management procedures and work instructions provide the action, schedules, resources and responsibilities required to achieve stated short and long-term objectives, and policy conformance.

9. IMPLEMENTATION AND OPERATION

9.1. Training

All staff and personnel will undergo ORA Environmental Awareness Training. This training shall be implemented by the Environment Manager and will outline the regulatory framework and key environmental risks for ORA's operations.

9.2. Communication

ORA is committed to reporting and communicating environmental information both internally and externally as required.

Internal communications will be disseminated to the operational staff by the following means:

- Training
- Toolbox talks
- Scheduled safety calls
- Incident alerts

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9.3. EMS Documentation

The ORA EMS consists of the following components:

- Environmental Policy and Objectives.
- Environmental Aspects and Impacts.
- Environmental Management Procedures and Instructions.
- Environmental Performance Evaluation.

All environmental management system documents will be managed and administered by the Environment Manager in accordance with the EMS register.

9.4. Operational Control

The respective site operational managers in conjunction with the Environment Manager will develop procedures to ensure that all activities carried out within their operational control are documented and implemented to ensure environmental risks are managed adequately and comply with the ORA Environment Policy and stated objectives and targets.

9.5. Emergency Response and Incident Management

The Environmental Incident Response Procedure EV-PRC-002 details the criteria for reporting and details those who need to be contacted in the event of an emergency or incident.

This procedure considers incidents arising, or likely to arise, as a consequence of abnormal operating conditions, accidents, and potential emergency situations. The procedure clearly outlines the steps to be taken in the event of an incident and who is to be contacted to initiate a response based on the severity of the incident.

In the event an environmental nuisance is caused i.e. locomotive exhaust emissions, noise or dust generation, this will be reported via TCIR to the Environment Manager and relevant line managers.

When under the control of another network operator, that operator's emergency response protocols will take priority for all emergency response.

If required, the Environment Manager will notify the Regulator of any incident occurring.

9.6. Environmental Complaints

All environmental complaints are to be reported to the ORA Environment Manager to liaise with complainants in a timely manner. Complaints will be logged and tracked in the ORA Environmental Complaints Register to close-out, in accordance with EPA Licence 2933.

The Environmental Complaints Register will be used to assign actions and action dates for resolution. The register is used to review ORA's environmental performance and is reviewed as part of the management review process.

In addition, the following site specific protocols apply:

- GFG Alliance/Liberty Onesteel Client site contact personnel to be included in all correspondence between ORA and complainants.
- ARTC Network ARTC Policy Coordinator (or equivalent) to be included in all correspondence between ORA and complainants.

ORA will target twelve environmental complaints annually.

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Complaints will be communicated via TCIR and logged within the ORA Environment Complaints Register. Actions will be assigned to relevant responsible persons for completion prior to the action date.

Communication with complainants will generally be undertaken by the Environment Manager unless circumstances dictate otherwise.

9.7. Site Specific Requirements

Site and network specific requirements are detailed in **Appendix C**. These are subject to change, and generally limited to client and network specific requirements that are in addition to standard ORA protocols.

10. MEASUREMENT AND EVALUATION

10.1. Monitoring and Measurement

ORA utilise a range of methods to monitor and measure the effectiveness of the ORA EMS, which identifies the key characteristics of the operations that have the potential to result in a significant environmental impact and/or legal non-compliance.

Effectiveness of the EMS is monitored through:

- Third party and client audits and reports
- Safety & Environmental Council (SEC) Monthly Meetings
- Weekly Operational Meetings
- Internal audits and incident reports
- Frequency of improvements reports and non-compliances
- · Close-out of audit actions.

Systems and procedures are in place to ensure the integrity of ORA controlled operations. The inspections and monitoring processes are to be scheduled by the Environment Manager to ensure conformance against performance criteria.

10.2. Corrective and Preventative Action

Procedures are in place to ensure that breaches of legislation and the occurrence of environmental incidents are reported, appropriately investigated and corrective actions put in place to minimize the risk of reoccurrence.

The investigation must be carried out in accordance with the *Environment Incident Response Procedure EV-PRC-002*.

10.3. Record Keeping

All records generated shall be identified, collected and stored in accordance with *Procedure RS-PRC-002 Document & Data Control*.

Environmental records generated will include, but will not be limited to:

- · Management review minutes and agendas
- Internal and external audit reports
- Non-conformance and corrective actions
- Records of customer and public complaints
- Incident reports

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10.4. Audits

All internal audits will be completed using the *Environmental Audit Tool EV-FRM-017*. All environmental audits to be carried out in a timely manner in accordance with the audit schedule outlined in the EMS Register. The results of all internal and any external audits will be reported at the management review meetings. Copies of compliance audits will be made available to all relevant stakeholders.

10.5. Review

The management review of the ORA EMS is undertaken through quarterly SEC meetings. Senior management from all relevant departments across the ORA business are represented at this forum. Meeting minutes and action plans are developed as a result of the outcomes of these on-going reviews.

The Environmental Management Plan EV-PLN-01 will be reviewed for currency and content on a 3 yearly basis as part of the document review process. This review will look at all Aspects and Impacts and associated objectives and targets. Aspects and Impacts Registers specific to each site will be reviewed annually.

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APPENDIX A - ORA ENVIRONMENTAL POLICY

ENVIRONMENTAL POLICY



1 OVERVIEW

One Rail Australia (ORA) are committed to managing our business operations and activities in an environmentally responsible manner with an emphasis on achieving sustainable development and protection of the environment.

As a major national rail transport organisation, ORA recognises that our operations pose risks to the environment and will therefore take all reasonable and practicable measures to ensure adverse impacts to the environment are prevented or minimised.

2 PRINCIPLES

To achieve this ORA will:

- Comply with applicable environmental laws and regulatory requirements.
- Establish and maintain an environmental management system utilising the framework of Australian Standard AS/NZS 14001.
- Establish objectives and targets for continual improvement in environmental performance.
- Ensure our staff have the skills and resources to comply with this policy.
- Ensure that areas of significant environmental risk, such as land degradation, community impact and the use and handling of hazardous materials are appropriately managed.
- Contribute to sustainable development through the responsible use of natural resources.
- Minimise emissions to the environment, including the use of alternative fuel sources and emissions reduction technologies as they become economically viable.
- . Take appropriate action to rehabilitate and/or mitigate any environmental harm caused by our operations.
- Communicate this policy to and consult with employees, contractors and other relevant parties as appropriate.

3 RESPONSIBILITIES

Protection of the environment is both an individual and shared responsibility.

All managers, supervisors, employees and contractors are accountable for protecting the environment from potential risks and impacts of operations and activities under their control. ORA will ensure that they have established safe systems to work by and take all reasonable care to ensure their own safety and that of the environment.

Yours sincerely,

Luke Anderson

Chief Executive Officer

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APPENDIX B - Aspect and Impacts Registers

- 1. ARTC Network
- 2. Dry Creek Terminal 1 Kidman Road, Dry Creek SA
- 3. Eastern Region Operations 9 Laurio Place, Mayfield West NSW
- 4. Kilburn Track and Infrastructure 320 Churchill Road, Islington SA
- 5. Port Augusta Spencer Junction Tassie Street, Port Augusta SA
- 6. Port Augusta Track Carlton Parade, Port Augusta SA
- 7. Port Flat Cnr East Parade and Grand Trunkway, Port Adelaide SA
- 8. Port Lincoln 1 Railway Place, Port Lincoln SA
- 9. Port Pirie 2 Albert Terrace, Port Pirie SA
- 10. Southern Iron Depot Lincoln Highway, Whyalla SA
- 11. Tailem Bend Webb St, Tailem Bend SA
- 12. Thevenard Railway Terrace, Thevenard SA
- 13. Whyalla One Steel Site, Port Augusta Highway, Whyalla SA 5600

Aspects and Impacts Register Excluded as per **Section 3** (Alice Springs, Berrimah, Tarcoola to Darwin and Queensland Operations).

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APPENDIX C - Site and Network Specific Requirements

C1 Whyalla Operations

ORA operate and maintain rollingstock on behalf of GFG Alliance. ORA maintain the track infrastructure for this contract. The operations include narrow gauge and standard gauge rail operations.

Communication Strategy

Due to the close interface between rail operations and residential areas of Whyalla, community engagement is of the utmost importance on GFG Alliance sites. In the event of a complaint arising from environmental non-conformance, ORA will assist GFG Alliance in its investigation and provide further information as required.

Where any singular event is deemed significant, as determined by the EPA, information will be provided to the community by GFG Alliance through releases to the local media. Any community meetings required as a result of ORA/GFG Alliance environmental non-conformance will be attended by the Whyalla Operations Manager and ORA Environment Manager (or equivalent).

In addition, ORA will be required to provide regular updates to GFG Alliance on the progress of agreed actions and changes made to prevent re-occurrence until the action is closed out.

ORA is required to communicate in writing any changes to its operations that have the potential to impact either ORA or GFG Alliance licence conditions.

Training

In addition to standard ORA operational training, those working on GFG Alliance sites will be required to undertake GFG Alliance online inductions specific to their role.

Further information on specific GFG Alliance training should be sought from the Whyalla Operations Manager.

Whyalla Management Review and Program Evaluation

The Whyalla Operations Manager is responsible for ongoing monitoring and reporting against the environmental objectives for ORA operations, with the support of ORA Environment Manager.

A Whyalla Operations representative will be in attendance of all ORA Safety and Environment Council (SEC) Meetings undertaken.

On a monthly basis the Whyalla Operations Manager shall prepare a report which communicates and reports ORA's progress in-line with its KPIs and legal obligations as outlined in the ORA Compliance Register, GFG Alliance Rail Haulage Agreement and the OneSteel EPA Licence.

On an annual basis the Whyalla Operations Manager and ORA Environment Manager will conduct an audit of the Whyalla Operations environmental performance, against the objectives of the ORA EMS. This review will be documented and retained. All actions arising from this review will be documented with copies made available to GFG Alliance and EPA upon request.

Management of Locomotive Exhaust Emissions

The management of locomotive exhaust emissions within the Whyalla steelworks and between the steelworks and mine site has historically been of concern due to the proximity to residents and the propensity for locomotives to accumulate excess hydrocarbon whilst being run at idle and during low speed shunt movements, prior to being place under load. This has the greatest potential to occur when exiting the pellet plant.

Whilst some smoke is expected during the course of operations, drivers and operational staff must be proficient in identifying instances of abnormally smoky locomotives and report these locomotives for maintenance.

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The following shows a compliant emission with only small amounts of smoke under load that is readily dispersed on take-off





Figure 1 - Compliant Locomotive Exhaust Emissions

Non-compliant exhaust emissions are identified by heavy, widespread smoking that does not readily disperse. This has the potential to leave the rail corridor and impact residential areas surround the site.





Figure 2 - Non-Compliant Locomotive Exhaust Emissions



C2 Other Rail Operator Networks

When operating on other rail networks, ORA is required to adhere to the guidelines set out by that operator. The following table outlines the obligations set by each network operator. This is not an exhaustive list and requirements are subject to change.

Table 5 - Other Network Obligations

Network Operator	Compliance Documentation	Key Points
ARTC	ENV-PR-004 Environmental Management Plan for Operators on the ARTC Network	Application to be made for approval to refuel by DIL. Compliance with all aspects of environment protection licenses relevant to operators in SA and NSW. Seek approval for rollingstock not identified as approved for operation
	EPL3142 (NSW) EPA10555 (SA)	on the network.
John Holland Rail	EPL13421 (NSW)	Approval to be sought to operate locomotives not included as approved within the EPL.
Sydney Trains	EMS-10-PR-0079 Rail Operator Environmental Management Plan EPL12208 (NSW)	Approval to be sought to operate locomotives not included as approved within the EPL. Have in place and comply with an EMS consistent with ISO 14001 Prepare maintain and implement an EMP. Provide assistance and information when requested by Sydney Trains. Comply with environmental laws as if the Rail Operator is the holder of EPL 12208.
Port Waratah Coal Services (PWCS)	EPL601 (Pt Waratah) EPL1552 (Kooragang Is)	Cooperation with rail monitoring and reporting if/when required by the terminal operators. Compliance with general environmental requirements of EPL601 and EPL1552.
Newcastle Coal Infrastructure Group (NCIG)	EPL12693	Cooperation with rail monitoring and reporting if/when required by the terminal operators as part of train exception reporting. Compliance with general environmental requirements of EPL12693.