

Construction Waste Management Plan (CWMP)

Pacific National – St Marys Freight Hub Terminal

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1 Document Control

1.1 Document Status

Title:	Construction Waste Management Plan Pacific National – Freight Hub Terminal
Version No:	2
Effective Date:	23/06/2020

1.2 Document Review

This Construction Waste Management Plan (CWMP) is issued under the authority of the Rhomberg Rail Australia Systems and Safety Manager.

Amendments can only be authorised by the authority of Rhomberg Rail. For further information on the CWMP, please contact the Systems and Safety Manager.

Any amendments will be published as and when necessary. Recipients of an amendment will be responsible for incorporation of the amendment into their copy of the plan.

The need for amendments will become apparent from project meetings, safety meetings, system reviews, audits, and major environmental incidents, changes to Rhomberg Rail's Core Business, associated documents or by changes to legal requirements. The Waste Management Plan will be reviewed when deemed necessary by Pacific National or by Rhomberg Rail and amendments issued accordingly.

1.3 Amendment Instructions

Issue Date	Section	Description of Change	Insert Page/s	Remove Page/s

2 Introduction

Rhomberg Rail is a medium sized enterprise servicing the Australian rail industry carrying out the construction and maintenance of railway infrastructure, railway tracks and associated track structures. Rhomberg Rail is involved in the design, management, commissioning, maintenance, repair, modification, and installation of rail infrastructure.

To carry out these works, Rhomberg Rail owns and operate a fleet of purpose-built railway maintenance and construction equipment and rolling stock. Rhomberg Rail commissions, maintains, repairs, modifies and when necessary, decommissions this rolling stock. During Rhomberg Rail's operations, this rolling stock is moved and operated on railways for the purposes of construction or restoration of rail infrastructure.

Rhomberg Rail does not operate rolling stock for the purposes of operating a railway service but do operate On-track Repair Vehicles including tampers and ballast regulators as described in Section 11 of Sydney Trains Train Operating Conditions (TOC) Manual (September 2017).

Pacific National have engaged Rhomberg Rail for the development of their railway infrastructure as part of the St Marys Freight Hub Development. The development will form an important port link to move containers to and from Port Botany to greater Western Sydney.

3 Background

Pacific National has approached Rhomberg Rail for the development of their track infrastructure for the St Marys Freight Hub Terminal Development. The facility will be used for a rail freight terminal and associated logistic facilities. Internal roads, services and ancillary structures are proposed as part of the overall St Marys Intermodal Terminal. The Facility is aimed at accommodating a maximum operating capacity of 300,000 TEU (Twenty-foot Equivalent Unit) throughput annually. It is proposed to have the track operational 24 hours per day, 7 days per week.

This development will result in increased freight movement via rail and thus relieving the demand on the regional and local road network from container freight related traffic.

The site includes a single landholding owned by Lendlease that is located between two parcels owned by Pacific National. The site details are provided in Table 1 below:

Table 1 - Construction site lot details

Land Details	Address	Owner
Lot 196 DP31912	196 Christie Street, St Marys	Lendlease

4 Site Description

The existing site was initially acquired by the State Rail Authority (SRA) as a site to house its Tangara Train maintenance storage facility in 1986. It then was unused in the late 1990's. In 1999 the site was filled with material from the North side Sewerage Tunnel Project. The site has remained relatively untouched since.

The below map highlights the areas of infrastructure that are directly related to Rhomberg Rails construction works.

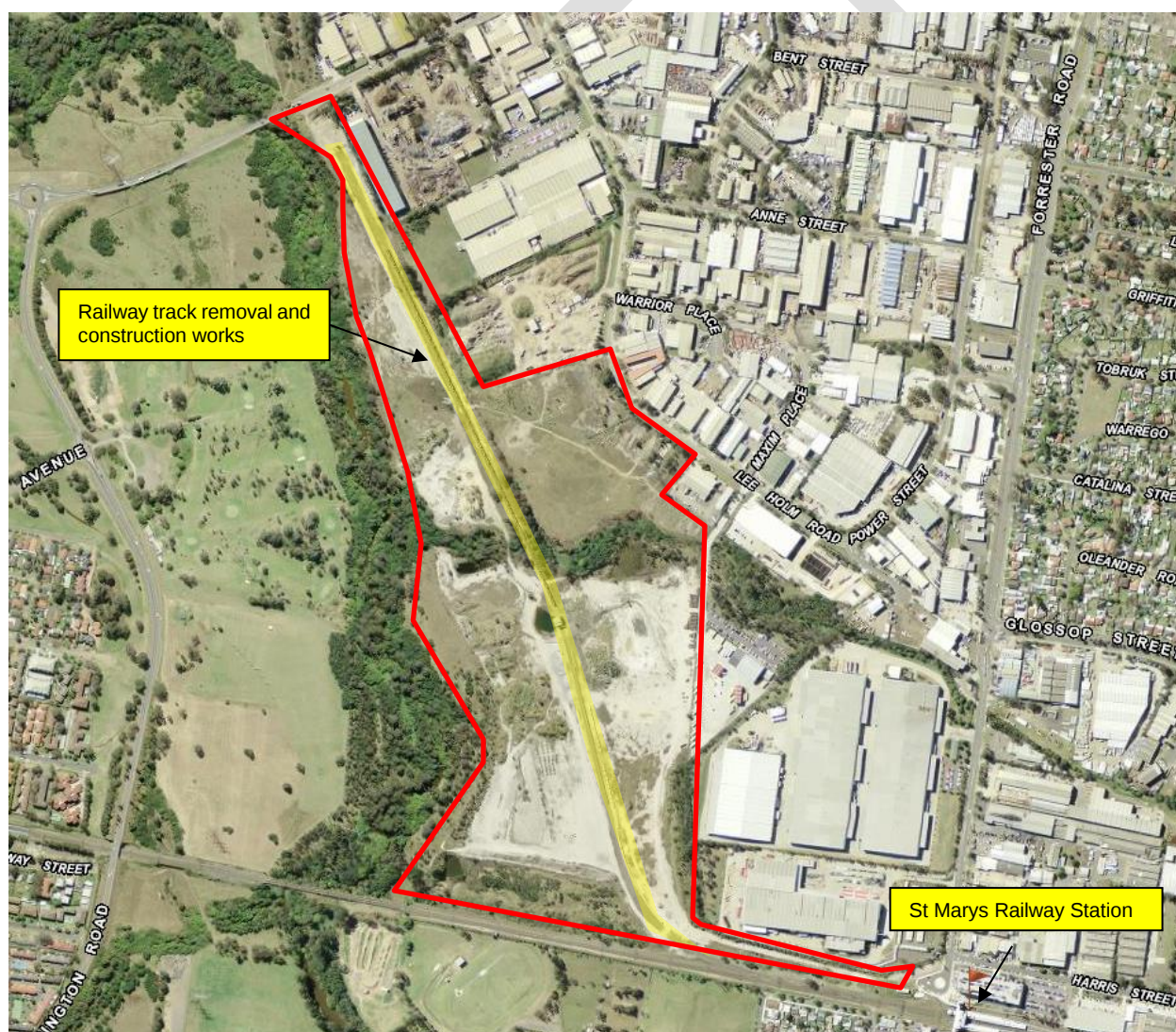


Figure 1 Site Map showing location of major track construction tasks. Note, the site boundary is illustrated by the red outline.

5 Waste Generation Estimate

The aim of this CWMP is to ensure that all waste resulting from construction and demolition activities is managed in an effective and environmentally aware manner. Specifically,

- To maximise the reuse and recycling of demolition and construction materials
- To reduce the volume of spoil that will be unused/landfilled
- To maximise waste material avoidance and reuse on site
- To ensure that where practicable, an efficient recycling procedure is applied to waste materials.
- To ensure efficient storage and collection of waste.

6 Construction

The quantity of waste materials to be generated onsite are estimated based on the information provided to Rhombert Rail Australia and therefore the systems that will be put in place need to incorporate flexibility to allow for variation in the total quantities generated. Active site management during the construction phase will ensure all waste/recyclable materials are disposed of appropriately and that all waste receptacles are of sufficient capacity to manage on site activities.

Table 2 below details the estimated composition by unit rate of construction waste to be generated

Table 2 - Composition of construction waste by volume

Material	Unit	Quantity
Rail	m	5600
Fill/Excavation	m ³	23000
Timber Sleepers	Ea.	3800
Concrete Sleepers	Ea.	600

7 Waste Management Strategy

Figure 2 below illustrates the waste hierarchy will be used as a guiding principle:



Figure 2 - Waste Management action hierarchy

7.1 Avoid and Reduce

Minimise the production of waste materials in the construction process by:

- Accessing and taking into consideration the resultant waste from different design and construction options.
- Purchasing materials that will result in less waste, which have minimal packaging, are pre-cut or fabricated.
- Avoid over ordering products and materials.

7.2 Reuse

Ensure that wherever possible materials are reused either on site or offsite

- Identify all waste products that can be reused.
- Put systems in place to separate and store reusable items.
- Identify the potential application for reuse both onsite and offsite and facilitate reuse (example, RRA may seek into re-using timbers and/or rail coming out of the existing siding for maintenance works on other PN construction sites).

7.3 Recycling

Identify all recyclable waste products to be produced on site

- Provide systems for separating and stockpiling of recyclables.
- Provide clear signage to ensure recyclable materials are separated
- Process the material for recycling either onsite or offsite

7.4 Disposal

Waste products which cannot be reused or recycled will be removed and disposed of. The following will need to be considered:

- Ensure the chosen waste disposal contractor complies with the OEH requirements.
- Implement regular collection of bins.
- Ensure all material is disposed of in an environmentally sound manner.

8 Hazardous Wastes

It is not anticipated that any hazardous wastes will be present, however during any demolition and material recovery activities, one should beware potentially hazardous materials (for example, if spoil is to be moved off-site, adequate testing should be conducted to check for contamination). Hazardous construction materials should be disposed of in accordance with EPA guidelines in order to protect the environment.

This document recognises the importance of waste management and draws from the following legislations:

- Protection of the Environment Operations Act 1997
- Protection of the Environment Operations (Illegal Waste Disposal) Act 2013
- Protection of the Environment Operations (Waste) Regulation 2014
- Waste Avoidance and Resource Recovery Act 2001
- NSW Waste Minimisation and Management Regulation 1996

Within the above legislation hazardous waste includes dangerous goods, poison, liquids, and other waste containing hazardous components.

The EPA can require waste generator, transporter, and receiver to clean up and pay for waste to be taken to a lawful place. It is recognised that the penalties related illegal waste management practices include:

- If waste is illegally dumped and harms the environment, the maximum penalty is \$5 million- or seven-years jail.
- The maximum penalty for unknowingly supplying false or misleading information about waste is \$250,000.00 for a corporation or \$120,000.00 for an individual.

- The maximum penalty for unknowingly supplying false or misleading information is \$500,000.00 for a corporation or for an individual \$240,000.00- or 18-months imprisonment, or both.

In order to avoid risk to the environment and any breach of legislation this development endeavours to uphold the following practices:

- Early identification and reporting of hazardous waste.
- Reporting of any suspicious activities o involved stakeholders (waste generator, transporter, or receiver) to including handling waste unlawfully or illegally dumping waste through the Environment Line 131 555.
- Ensure waste is transported to a place that can be lawfully accepted under Section 143 of the Protection of the Environment Operations Act 1997.
- Take reasonable precautions and exercised due diligence to prevent commission of the offence.
- Keep accurate written records such as:
 - Who transported the waste (company name, ABN, vehicle registration and driver details, date and time of transport, description of waste),
 - Copies of waste dockets/receipts from the waste facility (date and time of delivery, name and address of the facility, its BN, contact person).

9 Waste Management Systems

9.1 Onsite and Offsite Systems

RRA is not anticipating the removal of any track material from site. Table 3 below details the expected waste materials and management systems for the construction phase of the project:

Table 3 - Waste management system (construction)

Material	Units	Quantity	Onsite	Offsite	Disposal (contractor and landfill site)
Rail	m	5600	All rail to be stockpiled on site. Good rail to be identified and marked for future usage.		
Spoil (ballast and capping)	m3	23000	Utilise as much as possible for fill material during construction.		

			Any waste spoil to be stockpiled on site with adequate erosion control.		
Timber Sleepers		3800	All timber sleepers taken out of track to be stockpiled on site. Good and bad sleepers to be stockpiled separately. Good timber sleepers to be used for future works.		
Concrete Sleepers		600	All concrete sleepers taken out of existing track to be reused.		

Note, the quantities of construction and demolition waste materials have been Issued for Construction (IFC) Drawings issued to RRA. The figures in Table 3 above are estimated and are used as a guide for designing the waste management system on site. The waste management system will be adjusted, as necessary.

9.2 Contract and Purchasing

Each subcontractor working on the site will be required to adhere to this Waste Management Plan. The Rhomborg Rail will ensure each subcontractor:

- Take practical measure to prevent waste being generated for their work.
- Implement procedures to ensure waste resulting from their work will be actively managed and where possible recycled, as part of the overall site recycling strategy or separately as appropriate.
- Ensure that the right quantities of material are ordered, minimally packaged, and where practical prefabricated.
- Implement source separation of off cuts to facilitate reuse, resale, or recycling.

The Site Manager will be responsible for:

- Ensuring there is a secure location for on-site storage of materials to be reused on site, and for separated materials for recycling off site.
- Ensuring all skips/bins/stockpiles are clearly labelled identifying which materials is suitable for each item being disposed of.

- Engaging appropriate waste and recycling contractors to remove waste and recycling materials from the site.
- Monitoring of bins on a regular basis by site supervisor to detect any contamination or leakage.
- Ensuring the site has clear signs directing staff to appropriate location for recycling and stockpiling station/s. In addition, ensuring each bin/skip/stockpile is clearly sign posted.
- Providing training to all site employees and subcontractors in regard to the environmental and waste requirements as covered in CEMP and CWMP.
- Should the subcontractor cause a bin to be significantly contaminated, the Site Manager will be advised by a non-conformance report procedure. The offending subcontractor will then be required to take corrective action, at their own cost. The non-conformance process would be managed by Rhomberg Rail Project Manager.
- Retaining demolition and construction waste dockets to confirm and verify which facility received the material for recycling or disposal.

9.3 Training and Education

All site employees and subcontractors will be required to attend a site specific induction that will outline the components of the SWMS and explain the site specific practicalities of the CWMP and explain the site specific practicalities of the waste reduction and recycling strategies outlined in the CWMP.

All employees are to have clear understanding of which products are being reused/recycled on site and where they are stockpiled. They are also to be made aware of waste reduction efforts in regard to packaging.

The management team will arrange educational posters and signs to be placed which relate to recycling activities on site in breakout areas/ lunchrooms etc.

9.4 Site Waste Control and Management

To ensure adequate site environmental standards are maintained, the following will be considered:

1. All waste generated during the project is assessed, classified and managed in accordance with the "Waste Classification Guidelines Part 1: Classifying Waste" (DECCW, December 2009).

2. The body of any vehicle or trailer, used to transport waste or excavation spoil from the premises, is covered before leaving the premises to prevent any spill or escape of any dust, waste or spoil from the vehicle or trailer.
3. Mud, splatter, dust and other material likely to fall from or be cast off the wheels, underside or body of any vehicle, trailer or motorized plant leaving the site, is removed before the vehicle, trailer or motorized plant leaves the premises.

9.5 Waste Storage and Collection

A designated waste storage area will be allocated for the collection of all waste and recyclables. The waste storage area shall have appropriate signage to clearly identify the area to construction workers and to prevent unauthorized access to the area.

Stockpile size to be monitored and remediated when advised by Pacific National, and construction staging plans must allow for the waste storage area to move within the site as the development progresses.

Material containers will be stored on a stable surface with appropriate contamination control measures implemented to mitigate run-off into stormwater when required. Any spillages in the waste storage area should be treated immediately using a spill kit. Contaminated or hazardous wastes should be stored in a secure area with appropriate signage.

9.6 Waste Truck Routes

When waste is to be removed from site via trucks, waste truck routes must be implemented and assessed by the project team to ensure the safest, quickest, and most economical route is used.