



**OPERATIONAL
ENVIRONMENTAL
MANAGEMENT PLAN**

MAYFIELD NO.4 BERTH (DA 293-08-00)

4 NOVEMBER 2021

**LEVEL 4, 251 WHARF ROAD
NEWCASTLE NSW 2300 AUSTRALIA**
+61 2 4908 8200
info@portofnewcastle.com.au
portofnewcastle.com.au

DOCUMENT CONTROL

Version	Date	Author	Reviewer	Approved
01	09/01/2015	J Spiteri	J Spiteri	15/12/2015, Department of Planning
02	28/09/2018	J Spiteri	J Spiteri	2018, Department of Planning
03	04/11/2021	R Condon B Kelly	J Anderson <i>Jennifer Anderson</i>	04/11/2021, Department of Planning, Industry and Environment (DPIE)

CONTENTS

1. INTRODUCTION	1
1.1. SCOPE OF THE OEMP	1
1.2. OBJECTIVES OF THE OEMP	1
1.3. MAYFIELD SITE ‘CLOSURE AREA’ – ENVIRONMENTAL RESPONSIBILITIES	2
1.4. MAYFIELD NO.4 BERTH DESCRIPTION	2
1.4.1. Mayfield No.4 Berth Structure	2
1.4.2. General Berth and Hardstand Arrangements	3
1.4.3. Potential Cargo	3
1.4.4. Estimated Cargo, Volumes, Shipping, Handling and Storage	4
1.4.5. Personnel	6
1.4.6. Key Issues	6
2. ENVIRONMENTAL MANAGEMENT RESPONSIBILITIES	7
2.1. ORGANISATIONAL STRUCTURE	7
2.1.1. Port of Newcastle	7
2.1.2. Executive Manager – Marine & Operations	7
2.1.3. Stevedore Licence Deed	8
2.1.4. Port Users	8
2.2. ENVIRONMENTAL POLICY OBJECTIVES	8
3. STATUTORY REQUIREMENTS	9
3.1. LEGISLATIVE AND POLICY REQUIREMENTS	9
3.1.1. Development Consent Conditions	10
3.2. LICENSING REQUIREMENTS	10
4. REPORTING AND MONITORING	11
4.1. ENVIRONMENTAL MONITORING PROGRAM	11
4.1.1. Noise	11
4.1.2. Air Quality	12
4.1.3. Stormwater	13
4.1.4. Reporting	16
4.1.5. Other Reporting	17
4.2. MAINTENANCE	17
4.3. INCIDENT MANAGEMENT	17
4.4. NON-CONFORMANCE AND CORRECTIVE ACTIONS	17

4.5.	COMPLAINTS HANDLING.....	18
5.	AUDITING AND REVIEW.....	19
5.1.	ENVIRONMENTAL.....	19
5.2.	HAZARDS.....	19
6.	ENVIRONMENTAL TRAINING.....	20
7.	OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN	21
7.1.	SOIL AND WATER.....	21
7.1.1.	Water Supply.....	21
7.2.	STORMWATER.....	22
7.3.	GROUNDWATER.....	23
7.4.	CAPPING MAINTENANCE.....	23
7.5.	CONTAMINATED SITE MANAGEMENT	23
7.6.	TRAFFIC.....	24
7.6.1.	Heavy Vehicle Routes.....	24
7.6.2.	Stevedores.....	24
7.7.	NOISE.....	25
7.8.	VIBRATION	26
7.9.	AIR QUALITY	26
7.10.	WASTE.....	27
7.11.	METEOROLOGICAL MONITORING.....	28
7.12.	SECURITY	28
7.13.	LANDSCAPING AND LIGHTING.....	29
7.14.	HERITAGE.....	30
7.15.	DANGEROUS GOODS	30
8.	EMERGENCY RESPONSE AND CONTACT DETAILS.....	31
8.1.	COMMUNICATION.....	31
8.2.	EMERGENCY PROCEDURES.....	31
8.3.	NOTIFICATION OF SIGNIFICANT ENVIRONMENTAL EVENTS TO AUTHORITIES.....	31
8.3.1.	Follow up Actions.....	32
8.4.	EMERGENCY CONTACTS.....	33
9.	RECORDS MANAGEMENT.....	34
10.	WORK HEALTH AND SAFETY.....	35
10.1.	GENERAL.....	35

10.2. PERSONAL PROTECTIVE EQUIPMENT	35
10.3. HAZARD AND RISK	35
11. REFERENCES.....	37

List of Tables

Table 1: Operational Environmental Plan Requirements.....	1
Table 2: Estimated cargo volumes, number of ships, and handling and storage requirements.....	5
Table 3: Environmental Policy Objectives	8
Table 4: Legislation Relevant to the Operation and Maintenance of Mayfield No.4 Berth and Hardstand	9
Table 5: Noise Limits for Mayfield No. 4 Berth and Hardstand	11
Table 6: Analytes for Stormwater	14
Table 7: Environmental Safeguards (ex EIS Table 10.2)	14
Table 8: Stormwater Design Criteria	15
Table 9: Soil and Water Management Measures.....	21
Table 10: Stormwater Management Measures	22
Table 11: Capping Maintenance Management Measures.....	23
Table 12: Contaminated Site Management Measures.....	24
Table 13: Stevedore Environmental Management Measures	25
Table 14: Noise Environmental Management Measures	25
Table 15: Air Quality Environmental Management Measures	26
Table 16: Waste Management Measures	27
Table 17: Security Management Measures	29
Table 18: Landscape and Lighting Management Measures.....	29
Table 19: Environmental Event Contacts.....	32
Table 20: Emergency Response Contacts.....	33

FIGURES

Figure F1: Site Location

Figure F2: Site Layout

Figure F3: Mayfield No. 4 Berth Responsibility and Organisation Structure

Figure F4: Water Supply System Arrangement (Plan View)

Figure F5: Stormwater Management System

APPENDICES

Appendix A – Conditions of Consent

Appendix B – Environment Protection Licence (EPL) 13181

Appendix C – OEMP Compliance Checklist

Appendix D – Contaminated Site Management Plan

Appendix E – Heavy Vehicle Route Plan

Appendix F – Capping Diagrams

GLOSSARY OF TERMS

List of Abbreviations	
CBD	Central Business District
CEMP	Construction Environmental Management Plan
CEO	Chief Executive Officer
CIMP	Cap Integrity Management Plan
CSMP	Contaminated Site Management Plan
DA	Development Application
DAWE	Department of Agriculture, Water and the Environment
DPIE	Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EM	Environment Manager
EMP	Environmental Management Plan
EPL	Environment Protection Licence
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EMMO	Executive Manager Marine & Operations
HCCDC	Hunter and Central Coast Development Corporation (formerly HDC)
HDC	Hunter Development Corporation (now HCCDC)
HVAS	High Volume Air Sampler
HVR	Heavy Vehicle Route
LEP	Local Environment Plan
LGA	Local Government Area
MC	Maintenance Coordinator
MPT	Multi-Purpose Terminal
MTOFSA	<i>Maritime Transport and Offshore Facilities Security Act 2003</i>
NATA	National Association of Testing Authorities
NPC	Newcastle Port Corporation
NSW	New South Wales
OEH	Office of Environment and Heritage
OEMP	Operational Environmental Management Plan
PANSW	Port Authority NSW
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
PON	Port of Newcastle

List of Abbreviations	
PPE	Personal Protective Equipment
PSOL	Port Safety Operating Licence
RAP	Remediation Action Plan
Ro-Ro	Roll-on Roll-off
SEPP	State Environmental Planning Policy
SSD	State Significant Development
TEU	Twenty foot (container) Equivalent Units
TPA	Tonnes per Annum
TSP	Total Suspended Particulate
VRA	Voluntary Remediation Agreement
VTIC	Vessel Traffic Information Centre
WHS	Work Health and Safety

I. INTRODUCTION

I.1. Scope of the OEMP

The following Operational Environmental Management Plan (OEMP) has been prepared for the operation and maintenance of the Mayfield No.4 Berth and hardstand area, operated by Port of Newcastle (PON).

This OEMP has been prepared in accordance with Condition 4.4 of the Consent Conditions of Development Application (DA) DA-293-08-00 (Appendix A) and subsequent modifications to MOD 9 dated 29 August 2013.

The OEMP has also been prepared in accordance with relevant legislative and policy requirements, and defines the environmental management and maintenance responsibilities and reporting channels for all personnel, including employees and contractors involved in the operation and maintenance of the Mayfield No.4 Berth and hardstand area. All personnel are responsible for ensuring that their activities are conducted in accordance with legislative requirements and the requirements of this OEMP.

This document has been prepared as a dynamic document that will be regularly reviewed and updated as required or as directed by the Director-General.

I.2. Objectives of the OEMP

The objectives of this OEMP are to:

- Ensure that environmental management is undertaken in accordance with relevant legislative and policy requirements;
- Prevent, reduce and effectively manage potential impacts to the environment resulting from operation and maintenance of the Mayfield No.4 Berth and hardstand area; and
- Promote environmental awareness amongst employees and contractors to ensure that operation and maintenance of the Mayfield No.4 Berth and hardstand area is conducted with due diligence to the environment.

The objectives of this OEMP as described in Condition 4.4 are outlined in Table 1. The relevant sections of this OEMP where specific requirements are addressed have also been referenced. In addition, other environmental issues requiring management at the site have also been addressed and included in Section 7.

Table 1: Operational Environmental Plan Requirements

Consent Conditions	Reference in OEMP
Describe the proposed operations	Section 1.3
Identify all the relevant statutory requirements that apply to the operation of the development	Section 3
Set standards and performance measures for each of the relevant environmental issues	Section 2.2 and Section 7
Describe what actions and measures will be implemented to mitigate the potential impacts of the development, and to ensure that the development meets these standards and performance measures	Sections 4 through to 7
Describe what measures and procedures will be implemented to: Register and respond to complaints;	Section 4.5

Consent Conditions	Reference in OEMP
Ensure the operational health and safety of the workers; and Respond to potential emergencies, such as plant failure	Section 10 Section 8
Describe the role, responsibility, authority, and accountability of all the key personnel involved in the operation of the development	Section 2.1
Incorporate the detailed Environmental Monitoring Program (see Condition 8.1). Include the following: <ul style="list-style-type: none"> Stormwater Management Plan (Condition 5.30); Capping Maintenance Plan (Condition 5.20); Contaminated Site Environmental Management Plan (Condition 4.1); and Heavy Vehicle Route Plan (Condition 5.46) 	Section 4.1 Section 7.2 Section 7.4 Section 0 Section 7.6.1

1.3. Mayfield Site ‘Closure Area’ – Environmental Responsibilities

The Mayfield No.4 Berth (which incorporates the berth and adjacent hardstand) is located within the Mayfield site Closure Area and constitutes approximately 1% of this area. The berth and hardstand have been fully remediated in compliance with the Voluntary Remediation Agreement (VRA) requirements and is now isolated from the remainder of the site in terms of stormwater and groundwater. In this OEMP, PON describe its environmental management plan to comply with the Environment Protection Licence (EPL) 13181 issued specifically for the operations of Mayfield No.4 Berth and hardstand.

The remainder of the Closure Area (150 ha) has been remediated and is now managed under the Mayfield Concept Approval.

1.4. Mayfield No.4 Berth Description

Mayfield No.4 Berth is a two-hectare multi-product berth and hardstand that was constructed as part of the refurbishment of former BHP Wharf 5 and is located within an area known as the Closure Area in Mayfield, NSW (Figure F1). Mayfield is approximately 7km northwest of the Newcastle CBD.

The site is located in an existing industrial port area and surrounding land use is predominantly comprised of industrial development with the Mayfield East residential area located approximately 1.4km to the southwest across Industrial Drive. The main road access to the site is from Selwyn Street via Industrial Drive and shipping access is via the shipping channel in the South Arm of the Hunter River which the site abuts to the north and east (Figure F1).

The site is accessed by a sealed bitumen internal driveway crossing land that has recently been remediated (approximately 500 metres long) from the eastern end of Selwyn Street Mayfield.

The site overlooks Kooragang Island and other surrounding land uses, which is largely characterised by industrial activities and associated infrastructure such as large storage buildings, railway yards and tracks, coal loading gantry cranes, stockpiles and other items. In this regard, the landscape is predominantly industrial in nature, highly visually modified and intensively disturbed.

1.4.1. MAYFIELD NO.4 BERTH STRUCTURE

The berth is shown in Figure F2 and can be described as consisting of:

- Wharf front constructed with reinforced concrete pile caps, edge beams, diaphragms and a 750mm thick apron slab approximately 266 metres long and 13.65 metres wide. The new wharf is fitted with new fenders, bollards, capstans, kerbs and ladders as wharf furniture. The following new services are provided:
 - Fire hose reels and hydrants;
 - Potable water;
 - Three-phase power;
 - Single-phase power;
 - Wharf flood lighting; and
 - Wharf edge lighting
- A 400mm thick reinforced concrete slab immediately behind the wharf front on ground measuring approximately 262 metres by 23 metres. Along the south edge of the concrete slab runs an old service duct which has been capped with a 750 mm thick reinforced concrete slab. This area is predominately used for the transfer of the potential cargoes.
- An adjacent hardstand area of approximately 9,000 square metres immediately south of the concrete slab which is used for temporary storage.

1.4.2. GENERAL BERTH AND HARDSTAND ARRANGEMENTS

Figure F2 details the Site Layout and provides context for the following section.

The Mayfield No.4 Berth is a secured site and requires security approval or access card prior to gaining access. At any given time activities on the berth and hardstand may include:

- trucks carrying cargo into and out of the site;
- handling of cargo from or into a ship using land or ship-based cranes, or discharging conveying equipment;
- transfer of cargo via forklifts to temporary ground storage;
- assembling cargo for shipment or road transport;
- ship bunkering from road tanker;
- employee vehicles entering or leaving the site; and
- Department of Agriculture, Water and the Environment (DAWE) biosecurity inspections.

As of June 2021 the M4 site is operational and guarded by security up to 72 hours pre-shipping, 24 hours per day during shipping procedures, and up to 72 hours post-shipping. PON staff and contractors are able to access site out of the specified shipping hours upon approval.

Operational buildings on the site are limited facilities for stevedoring operations and include:

- 2 x offices;
- 1 x first aid room; 1 x meal room; and
- 1 x amenities block.

The buildings are located on the eastern end of the hardstand. The employee car parking is located adjacent to the buildings and caters for up to 60 vehicles. There is also a guardhouse building upon arrival at the site entrance.

1.4.3. POTENTIAL CARGO

The following potential cargoes have been identified by PON for Mayfield No. 4 Berth:

- Project cargoes: eg wind turbines, transformers, mining equipment and materials, other heavy plant;
- Break bulk (inert materials only) eg aluminium, steel products;

- General freight in containers;
- Bulk cargoes which are transferred directly from ship to transport and/or loaded to ship with no uncontained ground storage ie sand; and
- Ammonium nitrate in containers/bulker bags.

Of the potential cargoes identified, ammonium nitrate is the only one classified as a Hazardous Material. Transport of ammonium nitrate has been considered as part of the Mayfield Berth Risk Assessment prepared for the Newcastle Port Corporation (NPC) (Lloyd's Register, 2012). Procedures are in place for handling and transport of ammonium nitrate.

The Mayfield No.4 Berth will neither receive nor dispatch as cargo any material classified as a 'Class 7 dangerous good' (radioactive material) in accordance with condition 7.2 of DA 293_08_00.

The Mayfield No.4 Berth will neither receive nor dispatch as cargo any material classified as a 'Class 1 dangerous good' (explosives) unless prior approval of the Director-General is sought in accordance with condition 7.2 of DA 293-08-00.

1.4.4. ESTIMATED CARGO, VOLUMES, SHIPPING, HANDLING AND STORAGE

Table 2 shows estimated cargo volumes, cargo types as per Section 1.4.3, and shipping, handling and storage requirements for M4 for the following three (3) years. Additional cargoes may be handled at M4 dependent on market and PON priority drivers.

Table 2: Estimated cargo volumes, number of ships, and handling and storage requirements

Cargo Type	Units	Year 1 – 2022		Year 2 – 2023		Year 3 – 2024		Ship Type	Handling Requirements	Storage Requirements
		Vol.	Ships	Vol.	Ships	Vol.	Ships			
Breakbulk	t ¹	418,000	16	418,000	16	418,000	16	Up to Panamax	Mobile cranes, ship cranes	Short term open hardstand
Project Cargoes	t	297,000	27	506,000	46	242,000	22	Up to Panamax	Roll on/roll off (Ro-Ro) ramps, mobile cranes, ship cranes	Direct to truck or adjacent storage
Ammonium Nitrate	t	30,240	21	48,960	68	86,400	25	Handymax to Panamax	Mobile cranes, ship cranes	Short term open hardstand
General Freight in Containers	TEU ²	100,000	3	300,000	8	300,000	120	Up to Panamax	Mobile cranes / mobile conveyors	Nil. Direct to truck/ship
Bulk Cargoes	t	418,000	16	418,000	16	418,000	8	Up to Panamax	Mobile cranes / mobile conveyors	Short term open hardstand
Total	-	953,240	92	1,380,960	163	1,154,400	191	-	-	-

1: Revenue tonnes; this is more indicative than tonnes.

2: TEU = twenty foot (container) equivalent units

3: TPA = tonnes per annum

Panamax = Based on the maximum vessel dimensions that would fit through the locks of the Panama Canal. Maximum length 294.1 m, width 32.3 m, draft 12 m.

Handymax = Usually referred to a dry bulk vessel with deadweight of between 35,000 to 58,000 tonnes, usually 150 to 200 m in length, usually have up to 5 cargo holds and up to 4 cranes.

The estimated scenario will result in approximately 1-2 ships per fortnight in the berth in Year 1 through to 3-4 per week in Year 3. PON trade volume reports will be used to confirm tonnages.

Cargo handling on the berth and hardstand between ship and truck, ship and storage or storage and truck may be undertaken using the following equipment (numbers in brackets indicate potential quantities of equipment at peak times):

- mobile cranes (2);
- bulk discharger/loader (1);
- forklifts (6);
- trucks (8); and
- front end loader or bobcats for cleaning the inside the ship (2).

Truck movements into and out of the site will be steady throughout normal business hours at around 5 to 10 truck movements per hour, peaking at up to 15 to 20 truck movements per hour in line with normal traffic peak hours. However, when ships are being unloaded or loaded directly onto road transport their will potentially be up to 35-40 truck movements per hour.

At Year 10, peak vehicle movements on a day when a ship is at the berth, including personnel vehicles, may total 800 vehicle movements per day.

There is no current intention to service this specific berth with rail. However, if this becomes a possibility, it will be the subject of a separate application to the Department of Planning, Industry and Environment (DPIE).

1.4.5. PERSONNEL

The site may operate at up to three shifts per day including up to 30 stevedore employees per shift. At shift changeover there may be 60 stevedoring employees on site.

At any given time the site will also potentially accommodate truck drivers, specialist contractors in maintenance or equipment operation, ship's crew, DAVE biosecurity inspectors and PON employees, which may total an additional 5 to 20 personnel.

1.4.6. KEY ISSUES

The Mayfield No.4 Berth and hardstand area is located adjacent to the south arm of the Hunter River and comprises a concrete slab over the berth area and impervious bitumen over the hardstand area. Lighting poles are located across the site and are of different luminosity levels depending on the area and nominated lighting standards. Drainage of the site has been constructed for appropriate water and stormwater management.

Key potential issues associated with the operation and maintenance of the Mayfield No.4 Berth and hardstand area include:

- Stormwater runoff;
- Noise nuisance to residents, land users and sensitive native fauna;
- Traffic management and loading / unloading operations;
- Waste management;
- Damage to the existing contamination capping layer at the site;
- Security; and
- Air Quality.

2. ENVIRONMENTAL MANAGEMENT RESPONSIBILITIES

Roles and responsibilities for personnel relevant to this OEMP are detailed below.

2.1. Organisational Structure

The organisation of environmental management responsibilities is shown in Figure 3 and is detailed below.

2.1.1. PORT OF NEWCASTLE

PON is the proponent for this part of the development within the Closure Area. PON is a private entity whose primary function is to provide safe, effective and sustainable port operations at Newcastle and to deliver port development that enhances the economic growth of the Hunter Region and NSW. The Chief Executive Officer (CEO) of PON assumes ultimate responsibility for Mayfield No. 4 Berth.

2.1.2. EXECUTIVE MANAGER – MARINE & OPERATIONS

The Executive Manager Marine Operations (EMMO) of PON is responsible for the operation of the Mayfield No. 4 Berth Site. The Executive Manager Projects is responsible for the maintenance of the site. The EMMO and Executive Manager Projects are therefore responsible for the environmental performance of the Mayfield No.4 Berth and hardstand site as well as directing staff and contractors. The approved stevedoring company will assume exclusive control over defined parts of the Mayfield No. 4 Berth in accordance with a Stevedore Licence Deed (see Section 2.1.3), which will transfer responsibility for elements of this OEMP. The transfer of this responsibility will exclude environmental monitoring and reporting.

The EMMO and Executive Manager Projects shall delegate accountability and responsibilities to the Senior Manager Operations, Maintenance Coordinator (MC), the Work Health and Safety (WHS) Manager and Environment Manager (EM) for managing PON's activities at Mayfield No.4 Berth. The delegation of accountabilities and responsibilities will be as follows:

- The Senior Manager Operations manages personnel (Wharf Officers) to coordinate the berthing and departure of all vessels, vessel samplings and inspections of Stevedores importing / exporting at the berth;
- The Maintenance Coordinator is responsible for maintaining the Mayfield No.4 Berth site. This includes preventative maintenance, any site-specific project works and breakdowns;
- The Environment Manager (EM) is responsible for all environmental matters associated with the Mayfield No.4 Berth and hardstand area. The Environment Manager reports to the appointed Environment Officer under the DA (Condition 9.1 of DA 293-08-00, currently the PON Senior Manager PEP) on the effectiveness of implemented environmental and management controls and any environmental incidents that may have occurred on site. The EM implements and oversees monitoring at the site so that the operations meet the 13181 and OEMP requirements. The Environment Manager is responsible for ensuring environmental documentation is maintained (ie policies, procedures, work instructions, risk assessments) and are current with all PON employees having access to them.
- The WHS Manager is responsible for ensuring WHS documentation is maintained (ie policies and procedures) and are current with all PON employees having access to them. Work instructions and risk assessments are the responsibility of the work owner(s).

2.1.3. STEVEDORE LICENCE DEED

Any Stevedoring company operating on the Mayfield No. 4 Berth site will be required to enter into a Stevedore Licence Deed with PON. The licence will detail environmental accountabilities and responsibilities for the Mayfield No. 4 Berth site. Specifically, Stevedores are responsible and accountable for ensuring that all loading and unloading of cargo activities at the Mayfield No. 4 Berth site complies with relevant legislation, EPL requirements and this OEMP.

2.1.4. PORT USERS

Port Users comprise of any person, contractor or service provider engaged by the Stevedore, a vessel agent and / or PON. Port Users must complete PON’s Level 1 Site Access Induction. The induction communicates the safety and environmental requirements for the Mayfield No. 4 Berth site and the inductee’s responsibilities. All visitors to the site must be escorted by an inducted person at all times. Inductees are responsible for complying with PON’s site safety and environmental requirements.

2.2. Environmental Policy Objectives

Environmental objectives for key environmental management issues associated with the operation of the berth have been derived in accordance with the PON’s Safety and Environmental Policies and are also provided for each key issue in Section 7. All personnel, including PON employees, Stevedores and Port Users have a responsibility to ensure that the Mayfield No. 4 Berth and hardstand is operated and maintained in accordance with these objectives shown in Table 3.

Table 3: Environmental Policy Objectives

Management item	Objectives
Soil and Water	<ul style="list-style-type: none"> Minimise the impacts of erosion and sediment discharge on the local environment during operation of activities Minimise surface water runoff and sediment discharge from the site Ensure that site drainage does not cause an increase in downstream turbidity Ensure there are no adverse effects on the water quality of the downstream system
Stormwater	<ul style="list-style-type: none"> Minimise uncontrolled surface water runoff and discharge from the site Ensure that site drainage system efficiently manages potential onsite contaminants (such as fuels, wash-off and lubricants) and site drainage is reused where possible Ensure there are no adverse effects on the water quality of the surrounding and downstream water system
Capping Maintenance	<ul style="list-style-type: none"> Ensure the integrity of the capping layer is preserved.
Contaminated Site	<ul style="list-style-type: none"> Ensure the site is managed and monitored in a way that reduces the risk of contamination
Traffic	<ul style="list-style-type: none"> Minimise impact to residents, landholders and third parties in the vicinity of the development
Noise and Vibration	<ul style="list-style-type: none"> Minimise the impact and potential nuisance of noise emissions from operation and maintenance activities, machinery and vehicles on the local community
Air Quality	<ul style="list-style-type: none"> Control sources of dust and other emissions to air that may affect nearby residents and other landholders, pedestrians, vehicular traffic or other sensitive receiving environment

Management item	Objectives
	<ul style="list-style-type: none"> Minimise incidence of offensive odour, vapours or emissions
Waste	<ul style="list-style-type: none"> Ensure responsible disposal of all waste generated on site, and recycle where possible Minimise environmental impacts related to waste management
Security	<ul style="list-style-type: none"> Prevention of vandalism and unlawful access Prevention of security risks to vessels, adjacent residents and industry/landholders
Landscape and Lighting	<ul style="list-style-type: none"> Prevention of lighting impacts on nearby receivers Prevention of visual disturbance and degradation of amenity.
Biosecurity	<ul style="list-style-type: none"> Minimise the risk of introducing non-native species

3. STATUTORY REQUIREMENTS

3.1. Legislative and Policy Requirements

Legislation which may apply to the operation and maintenance of Mayfield No. 4 Berth and hardstand is listed in Table 4.

Table 4: Legislation Relevant to the Operation and Maintenance of Mayfield No.4 Berth and Hardstand

Relevant Legislation
<i>Biosecurity Act 2015</i>
<i>Contaminated Land Management Act 1997 (CLM Act)</i>
<i>Environmental Planning and Assessment Act 1979; and the Environmental Planning and Assessment Regulation 2000</i>
<i>Environment Protection and Biodiversity Conservation Act 1999</i>
<i>Heritage Act 1977</i>
<i>Maritime Transport and Offshore Facilities Security Act 2003</i>
<i>Ports and Maritime Administration Act 1995</i>
<i>Protection of the Environment Operations Act 1997 (POEO Act)</i>
<i>Roads Act 1993</i>
<i>Waste Avoidance and Resource Recovery Act 2001</i>
<i>Work Health and Safety Act 2011 (WHS Act) and the Work Health and Safety Regulation 2017 (WHS Regulation)</i>
<i>State Environmental Planning Policy 55 – Remediation of Land (SEPP 55)</i>
<i>State Environmental Planning Policy 33 – Hazardous and Offensive Development (SEPP 33)</i>
<i>State Environmental Planning Policy (Three Ports) 2013 (the Ports SEPP)</i>

The site is located within the Newcastle Local Government Area (LGA) and is subject to the provisions of the Ports SEPP. Under the Ports SEPP the site is zoned SPI – Special Activities with the main objectives

of the zone being to maximise the use of waterfront areas to accommodate port facilities, freight and bulk storage premises that benefit from being located close to port facilities, to enable efficient movement and operation of commercial shipping and to provide for the efficient handling and distribution of freight from Port areas.

3.1.1. DEVELOPMENT CONSENT CONDITIONS

The Mayfield No. 4 Berth and hardstand is part of the overarching consent for:

Stage 1, being the remediation of the Closure Area, including the demolition and removal of structures and the development of a Multi-Purpose Terminal comprising a container terminal and a general cargo handling facility and associated road, rail and wharf infrastructure and dredging of the South Arm of the Hunter River.

As part of the development conditions of consent, preparation of an OEMP is also required.

This OEMP has been prepared in accordance with the relevant requirements identified in Condition 4.4 of DA 293-08-00 and subsequent modifications to 29 August 2013.

3.2. Licensing Requirements

Mayfield No. 4 Berth will operate under an EPL for *shipping in bulk* activities issued by NSW Environment Protection Authority (EPA) under section 55 of the POEO Act. The EPL 13181 was transferred to PON on 27 February 2014 (refer to Appendix B).

4. REPORTING AND MONITORING

4.1. Environmental Monitoring Program

Environmental monitoring requirements for the operation of the berth are included in the relevant environmental management plans in Section 7 of this OEMP. The Environment Officer nominated under Condition 9.1 of DA 293-08-00 is responsible for undertaking the monitoring required. If necessary, specialist consultants shall be engaged to assist with the establishment of monitoring systems and to train relevant personnel with sampling protocols, reading of instruments, and analysis and recording of results. Monitoring equipment will be maintained and calibrated according to the manufacturer’s specifications.

The environmental monitoring plan presented in this section summarises all the monitoring and reporting commitments associated with the various plans held under this OEMP.

The commitments made in this section should be taken as minimum frequencies as monitoring may need to be more frequent if circumstances dictate. The Property Inspector who undertakes the weekly site inspections completes a site inspection record to prove that the inspection has taken place and to show conformance. Inspections also include a general visual inspection including matter such as sediment build up, litter, traffic conditions, capping exposure, and any retained water on site.

The following plans have primarily been prepared to comply with EPL 13181 in accordance with EPA requirements, which is detailed in Section 7 and attached in Appendix B. Refer to Section 1.3 for an explanation of full monitoring under the Conditions of Consent Clause 8 of DA 293-08-00.

4.1.1. NOISE

OPERATIONAL NOISE MONITORING

Operator attended noise monitoring is conducted on an annual basis.

The following noise limits apply the locations shown in Table 5.

Table 5: Noise Limits for Mayfield No. 4 Berth and Hardstand

Location	Day	Evening	Night
	<i>7:00 am to 6:00 pm Mon to Sat 8:00 am to 6:00 pm Sun and public holidays</i>	<i>6:00 pm to 10:00 pm on any day</i>	<i>10:00 pm to 7:00 am Mon to Sat 10:00 pm to 8:00 am Sun and public holidays</i>
	<u>LAeq (15 minute)</u>	<u>LAeq (15 minute)</u>	<u>LAeq (15 minute)</u>
1. 52 Arthur Street	49	38	38
2. Mayfield East Public School	47	37	37
3. 21 Crebert Street	49	39	39
4. Newcastle TAFE	44	38	38

The noise monitoring is to be conducted at the locations in the day, evening and night periods. Noise measurements are to be conducted as follows:

- Measure ambient noise levels at receivers 1 to 5 over a minimum of 15 minutes using a calibrated integrating sound level meter.
- Noise measurements are to be conducted at each location for a 15 minute period in the day and night periods.

- The $LA_{eq(15 \text{ minute})}$ noise descriptors are to be recorded for each measurement location.
- The noise limits apply during all assessment periods under winds up to 3 metres per second (measured at 10 metres above ground level) and Pasquil stability classes from A to F.
- Where noise measurements do not exceed the noise criteria detailed in Condition 5.11 compliance is demonstrated and the results are to be recorded.
- Where measured ambient noise levels exceed the noise criteria but the noise from the site is judged to be inaudible compliance is deemed to be achieved and the results are to be recorded.
- Where measured ambient noise levels exceed the noise criteria and the exceedance is deemed to be emanating from the subject site the results are to be recorded. This outcome will trigger the need for nearfield noise measurement.

NEARFIELD NOISE MEASUREMENTS

Nearfield noise measurements are to be conducted when:

1. Measured ambient noise levels exceed the nominated noise criteria; and
2. The operator has determined that the exceedance may be as a result of industrial noise from the direction of the subject site.

Nearfield noise measurements are to be conducted during the period of assessment (ie that period of the day when further noise investigations are deemed to be necessary), on the boundary of the subject site to determine the noise emissions from the site. These noise levels will be used to determine the noise contribution at residences and hence compliance with noise criteria. Nearfield measurements will be conducted for 15 minutes at the site boundary. The noise levels will be used to determine the effective site sound power level. The noise contribution at receivers will be calculated at residences to determine compliance with site specific noise criteria. Result of measurements, observations and compliance calculations will be recorded.

REPORTING

A report of ambient noise measurements is to be prepared. The report is to include the following details:

- Date of noise measurements;
- Location of noise measurements;
- Weather conditions;
- Instrumentation and calibration checks; and
- Noise criteria.

EXCEEDANCE RESPONSE AND CONTINGENCY MEASURES

In the event that PON receive an exceedance in its annual noise monitoring, the following actions should be undertaken:

- Notify NSW DPIE and associated agencies of the result and our plan of action within 24 hours;
- Conduct relevant additional noise monitoring to identify the offending noise source;
- Restrict the coincidence of noisy plant working simultaneously; and
- Implement engineered solutions as appropriate.

4.1.2. AIR QUALITY

A PM10 High Volume Air Sampler (HVAS) and Total Suspended Particulate (TSP) sampler are installed as indicated in Figure F2 allowing continuous monitoring throughout the operation of the berth as specified in EPL 13181 in Appendix B. Details for the monitoring are as follows:

- Monitoring methodology and frequency – Monitoring shall be undertaken in accordance with NSW EPA (2007) *Approved Methods for Sampling and Analysis of Air Pollutants in NSW AS 3580.9.3:2015 Total suspended particulate matter (TSP) – High volume sample gravimetric method* and *AS 3580.9.6-1990 Particulate matter – PM10-high volume sampler with size selective inlet* as specified in the EPL. The monitoring shall be on a six-day cycle in accordance with typical NSW EPA requirements.
- Location of monitors – The location of the monitors was assessed and placed to ensure compliance with *AS3580.1.1:2007 Methods for sampling and analysis of ambient air - Part 1.1: Guide to siting air monitoring equipment*
- Maintenance of monitor – The unit will be operated and calibrated in accordance with *AS 3580.9.6-1990 PM10-high volume sampler with size selective inlet* and analysis will be undertaken in accordance with *AS 3580.9.3-2003* by a National Association of Testing Authorities (NATA) accredited laboratory.
- Procedure for recording results – results from the NATA accredited laboratory shall be reported as per approved frequency (Table 6) in a combined report with the sites stormwater monitoring and kept on PON's electronic record system as indicated in Section 9 and annually within the Annual Environmental Management Report (AEMR) supplied to the Director General as per Condition 8.4 of DA 293-08-00, and to the EPA as set out in Section 4.1.4.

Meteorological data is obtained from PON's Mayfield 4 Meteorological station to assist in interpreting air quality results that is sited, operated and maintained in accordance with EPA (2007) *Approved Methods for the Sampling and Analysis of Air Pollutants in NSW* and administered by EPA.

4.1.3. STORMWATER

Monitoring of the stormwater onsite will be undertaken in accordance with the EPL and plan [EPA License Area, Mayfield No. 4 within Lot 4 DP.117746](#) indicated in Appendix B. All details for the monitoring are as follows:

- Monitoring methodology and frequency – the sampling procedure will be in accordance with *AS/NZS 5667.1-1998 Water quality – Sampling – Guidance on the design of sampling programs, sampling techniques and the preservation and handling samples* and *AS/NZS 5667.10-1998 Water Quality – Sampling guidance on sampling waste waters*. The monitoring shall be undertaken monthly during a discharge by a grab sample in accordance with the sites EPL requirements as administered by the EPA
- Locations of monitoring – the locations of the stormwater monitoring was assessed by the EPA and PON representatives and will be undertaken in accordance with EPL and Plan [EPA License Area, Mayfield No. 4 within Lot 4 DP.117746](#) as indicated in Appendix B.
- Maintenance of stormwater pits – routine maintenance shall be undertaken by PON's Asset Management section as described in Section 4.2.
- Sampling and analysis methods – sampling will be undertaken by consultants engaged by PON in accordance with *AS/NZS 5667.1-1998* and *AS/NZS 5667.10-1998*. Consultants will use a NATA accredited laboratory to undertake the analysis. Samples will be collected in appropriate containers, transported in eskies and chain of custody documentation shall be maintained.
- Procedure for recording results – results from the NATA accredited laboratory shall be reported monthly in a combined report with the site's air quality monitoring and kept on PON's electronic record system as indicated in Section 9 and the Annual Environmental Management Report (AEMR) supplied to the Director General as per Condition 8.4 of DA 293-08-00, and to the EPA as set out in Section 4.1.4.

In the event PON experience an incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment, a report shall be supplied to DPIE outlining the basic facts. In its stormwater assessment, the following action and contingency measures should be undertaken:

- Notify DPIE and EPA within 24 hours of receiving the laboratory report;
- Conduct an investigation (including additional sampling if required) to identify the offending source; and
- Implement solutions as appropriate.

A further detailed report shall be prepared and submitted following investigations of the causes and identification of necessary additional preventative measures. The report shall be submitted to the Director-General no later than 14 days after the incident or potential incident.

The stormwater monitoring will include those analytes identified in Table 6 below.

Table 6: Analytes for Stormwater

Pollutant	Unit of Measure	Frequency	Sampling Method
Total Suspended Solids	mg/L	Special frequency I*	Grab Sample
pH	pH units	Special frequency I	Grab Sample
Nitrogen (Total)	µg/L	Special frequency I	Grab Sample
Oil and Grease	mg/L	Special frequency I	Grab Sample
Phosphate	µg/L	Special frequency I	Grab Sample

* *Special Frequency I means the collection of samples during the first discharge event following a loose bulk cargo operation. Only one discharge event is required to be sampled each month.*

Table 7 comments on PON's action or comment in relation to the environmental safeguards noted in Table 10.2 of the original *Environmental Impact Statement (EIS) (2000)* as required under the development consent Condition 5.30.

Table 7: Environmental Safeguards (ex EIS Table 10.2)

Environmental Safeguards	PON Action/Comment
Prepare and implement an Environmental and Monitoring Management Plan which ensures that potential contaminants are appropriately contained and treated.	The current OEMP for the Mayfield No.4 berth and hardstand will ensure that potential contaminants are appropriately contained and treated.
Install detention/sediment control ponds in the Eastern and Western drains. The ponds would treat water to the appropriate EPA requirement and would be designed to meet minimum recognised standards for wet weather containment based on the document Australian Rainfall and Runoff. The ponds would be cleaned of silt as required to ensure their capacity is not reduced by more than 10% of volume.	Originally Regional Land Management Corporation (RLMC), now Hunter and Central Coast Development Corporation (HCCDC), under the consent conditions have installed detention/sediment control ponds in the Eastern and Western drains in accordance with the document Australian Rainfall and Runoff. PON are responsible for the maintenance and upkeep of the drains.
Inform relevant personnel of appropriate contingency measures for spill containment, clean up and disposal procedures in the event that there are leaks of oil or grease from equipment or spills of waste materials.	PON currently requires all employees, Stevedores and Port users accessing the Mayfield No.4 Berth and hardstand area to undertake appropriate inductions for activities in site. PON's Level I induction program provides general environmental awareness and ensures

Environmental Safeguards	PON Action/Comment
<p>Store waste materials in dedicated receptacles which should be emptied on a regular basis.</p> <p>Maintain vehicles and equipment to minimise oil and fluid drips.</p>	<p>that all inductees understand their obligation and legislative requirement to exercise due diligence for environmental matters.</p>
<p>Provide a concrete bund around the fuel depot to contain any potential spillage while vehicles are refuelling. Spilled fuel and oil would be directed to a waste collection tank.</p>	<p>There is no refuelling tank on site. Refuelling of vehicles is not encouraged on site. Where there is a need a temporary bund must be provided.</p>
<p>Store fumigation chemicals for the Bulk Handling Terminal in a hazardous materials storehouse</p>	<p>Fumigation chemicals will not be stored on the Mayfield No.4 berth and hardstand site. If fumigation is necessary, a DAVE-accredited service provider will be engaged to ensure that all fumigation is conducted in accordance with approved guidelines.</p>

Table 8 identifies how the provisions of City of Newcastle *Technical Manual – stormwater and Water Efficiency for Development* (formally *Development DCP No.50 – Stormwater Management for Development Sites*) have been addressed, as required under development consent condition 5.30.

Table 8: Stormwater Design Criteria

Design Criteria (from Newcastle City Council Technical Manual)	PON Comment
Interim controls for residential estate developments	This section is not relevant to this development.
Erosion and sediment control strategy	Erosion and Sediment Control Plans and Soil along with Water Management Plans were part of the approved construction environmental management plan (CEMP) for the project and audits were carried out during construction to ensure that the requirements of these plans were addressed.
Stormwater collection	<ol style="list-style-type: none"> I. All surface levels have been designed and constructed to be free draining; II. Drainage pits have been installed so that nuisance water does not collect at low points; and III. Pits are connected to the stormwater management system for the site being a baffled system with a series of filters.
Flooding and runoff regimes	All runoff from low intensity common rainfall is captured and directed to the stormwater management system. There is no scour or natural creek systems affected by this rainfall.
Pollutants	All water from this site is treated in the stormwater management system constructed within the wharf prior to being discharged into the harbour. Water monitoring points have been provided (including in EPL) to check that any pollutants in the discharge to the harbour are below the allowable concentrations.

Design Criteria (from Newcastle City Council Technical Manual)	PON Comment
Overflow disposal	There are no neighbouring properties that are affected by overflows.
Existing drainage systems	There are no existing drainage systems on site affected by the development.
Efficient use of mains water	Mains water is efficiently used on site.
Comprehensive water cycle management plans	There is no water cycle management plan for the development as there is no landscaping or other facilities present that recycled water can be used in an efficient manner.
Installation and maintenance requirements	As noted previously the sediment and erosion controls were audited during construction to ensure that they were being maintained. The stormwater management system is routinely maintained as described in Section 4.2 .

4.1.4. REPORTING

PON will provide the detailed results from the Environmental Monitoring Program in an Annual Environmental Management Report (AEMR) to the Secretary General in accordance with Section 8.4 of the consent conditions.

The report will:

- a. Identify all the standards, performance measures and statutory requirements with which the development is required to comply;
- b. Review the environmental performance of the development to determine whether it is complying with these standards, performance measures and statutory requirements;
- c. Identify all the occasions during the previous year where these standards, performance measures and statutory requirements have not been in compliance;
- d. Include a summary of any complaints made about the development and indicate what actions were taken (or are being taken) to address these complaints;
- e. Include the detailed reporting from the Environmental Monitoring Program (As per Consent Condition 8.1), and identify any trends in the monitoring over the life of the project; and
- f. Where non-compliance is occurring, describe what actions will be taken to ensure compliance, who will be responsible for carrying out these actions and when these actions will be implemented.

After reviewing the Annual Environmental Management Report, the Secretary General may require the Applicant to address certain matters identified in the report.

PON will also complete and supply to the EPA an Annual Return in the approved form in accordance with section 6 of EPL 13181 that will comprise:

- a. a statement of Compliance; and
- b. a Monitoring and Complaints Summary

The Annual return for the reporting period will be supplied to the EPA by through the approved e-Connect system by the due date of no later than 60 days after the end of each reporting period.

4.1.5. OTHER REPORTING

At five-yearly intervals PON will provide a report to the Secretary General outlining the need for the Mayfield No.4 berth to remain operational in accordance with Condition I.1B of DA 293-08-00.

4.2. Maintenance

The following maintenance activities, in relation to environmental matters, will be undertaken by contractors at the site:

- Routine inspection and cleaning of stormwater management system;
- Checking and maintaining the integrity of fencing;
- Inspecting lighting and adjusting as necessary;
- Immediate cleaning of any spills or materials; and
- Clearing of rubbish and waste during loading and unloading activities.

4.3. Incident Management

An incident/ accident is an unplanned or uncontrolled sequence of events resulting in injury, illness, property damage, environmental impact or has the potential to do so. All accidents/ incidents should be reported immediately to the Port Authority NSW (PANSW) Vessel Traffic Information Centre (VTIC) on (02) 4929 3890 as soon as practicable and an incident form completed and forwarded to the relevant PON representative. All incidents are to be recorded in the PON incident management system database.

Incident reporting requirements are communicated to all PON employees, Stevedores and Port Users through PON's Level 1 Induction.

Consistent with Condition 7.10 of DA 293-08-00, within 24 hours of any incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment, a report will be supplied to the Department outlining the basic facts. A further detailed report will be prepared and submitted following investigations of the causes and identification of necessary additional preventative measures. The report will be submitted to the Secretary-General no later than 14 days after the incident or potential incident. PON maintains an events and incidents management system database. Events relating to Mayfield 4 berth shall be made available, at any time, for inspection by the Secretary-General. PON will comply with any reasonable requirement of the Secretary-General in response to a registered event.

4.4. Non-Conformance and Corrective Actions

As soon as it is recognised that any required environmental control is not in place, environmental management practices are not being adhered to, or environmental impacts exceed nominated criteria, the Environmental Officer will inspect the Mayfield site and / or activities to review the extent of the possible non-conformance. Activities in the affected area will cease or be modified until the non-conformance has been corrected. The EMMO is responsible for ensuring appropriate rectification measures, including work procedures, have been effectively implemented. Approval from the EMMO is required before work can re-commence.

Non-conformances reported are to be recorded in the incident management database and will include details of the non-conformance, any immediate actions undertaken and the corrective actions implemented to prevent a recurrence.

The incident report would be reviewed by the relevant division manager. A register of non-conformances must be maintained for all active and resolved non-conformances.

4.5. COMPLAINTS HANDLING

PON maintain a public website with access to information on how to lodge a complaint:

<https://www.portofnewcastle.com.au/contact-us/>

Any complaints received will be entered into the incident management database with relevant division managers being notified.

The following detail should be included in the event report:

- Date, time and nature of the complaint or inquiry;
- Type of communication (telephone, letter, meeting etc);
- Name, address, contact number;
- Nature of complaint; and
- Response details.

5. AUDITING AND REVIEW

5.1. Environmental

Condition 9.4 of DA 293-08-00 requires that:

Within 12 months of commissioning the Multi-Purpose Terminal and every three years thereafter, unless the Director-General directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit.

A suitably qualified environmental specialist shall conduct an audit of the Conditions of Consent and associated OEMP initially following twelve months of its implementation, followed by regular audits every three (3) years thereafter. Audits shall involve a review of all environmental documents, records, and reports to ensure compliance with the requirements of the Conditions of Consent and OEMP. If any deficiency is detected appropriate corrective actions will be initiated by PON.

The OEMP was reviewed after the first twelve months of the site operation to ensure that it adequately addresses the identified issues and the activities being undertaken during the operation of the upgrade. Follow up reviews can also take place following each audit or changes in site operation

Key environmental and procedural issues to be covered by the audit shall include, but may not be limited to those requirements in Condition 9.4 as well as:

- Environmental management measures (Section 7);
- Adherence to reporting procedures (Section 4.1.4 and Section 4.1.5);
- Incidents and non-conformances (Section 4.3, Section 4.4 and Section 8);
- Complaint management (Section 4.5);
- Licences and legislative requirements (Section 3);
- Environmental education and training (Section 6);
- Environmental monitoring outcomes (Section 4); and
- Changes in organisational structure and responsibilities (Section 2).

The audits and reviews will be documented and provided to the Secretary-General of DPIE within two months of commissioning the audit (or as otherwise agreed with DPIE).

5.2. Hazards

Condition 7.11 of the development consent requires that:

Twelve months after the receipt of the first dangerous goods cargo... the applicant shall carry out a comprehensive Hazard Audit of the development and submit a report to the Director General.

PON conducted the Hazard Audit at twelve months after the receipt of the first dangerous goods cargo by a duly qualified independent auditor approved in advance by the Secretary General. The completed audit was submitted to the Secretary General within one month of its completion. Audits are conducted at 3yearly intervals or as determined by the Secretary General. Audits will be in accordance with the NSW Department of Planning (2011) *Hazardous Industry Planning Advisory Paper No 5 – Hazard Audit Guidelines*.

6. ENVIRONMENTAL TRAINING

All PON employees, Stevedores and Port Users shall be informed of their responsibilities under the OEMP.

PON currently requires all employees, Stevedores and Port Users accessing the Mayfield No. 4 Berth and hardstand area to undertake appropriate inductions for activities on site. PON's Level I induction program provides general environmental awareness and ensures that all inductees understand their obligation and legislative requirement to exercise due diligence for environmental matters.

PON is committed to providing appropriate training to all PON employees to enable them to perform their tasks without risks to health, safety and the environment. All operating and maintenance personnel are required to be suitably qualified, trained and experienced to accepted industry competency levels.

Records of all induction and training details and attendees are maintained within the PON induction system.

7. OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN

The following sections set out the environmental management activities and management measures, which shall be undertaken or complied with during operation and maintenance of the Mayfield No. 4 Berth and hardstand. PON shall ensure that the personnel responsible for implementing the OEMP, such as the nominated EO and nominated Stevedores are aware of their roles and responsibilities.

Environmental management issues have been presented separately, with each aspect addressed in respect of environmental objectives, key environmental issues, and environmental management measures to achieve the objectives. An activity-specific OEMP compliance checklist is provided in Appendix C, which may be completed during operation and maintenance activities to document compliance with environmental management measures detailed in the following sections.

7.1. Soil and Water

Management of soil and water along Mayfield No. 4 Berth and hardstand is necessary to protect the berth's operation activities as well as the integrity of the South Arm of the Hunter River, and to minimise erosion which may destabilise site activities. Environmental management measures (Table 9) would comply with industry best practice.

Table 9: Soil and Water Management Measures

Key Environmental Performance Objectives
<ul style="list-style-type: none"> Minimise the impacts of erosion and sediment discharge on the local environment during operation of activities Minimise surface water runoff and sediment discharge from the site Ensure that site drainage does not cause an increase in downstream turbidity Ensure there are no adverse effects on the water quality of the downstream system
Key Environmental Issues
<ul style="list-style-type: none"> Sedimentation as a result of cargo movements and heavy vehicles Pollution and hydrocarbon contamination of the Hunter River
Environmental Action and Management Measures
<ul style="list-style-type: none"> Use of sediment control structures such as a series of solid pollution filters and baffles within the stormwater management system. Installation of emergency shut off valves at the three outlets on the wharf to prevent any spills from entering the Hunter River. Any fuels, chemicals and liquids to be stored within the hardstand area will be appropriately bunded to prevent spills or contaminants entering the stormwater system. All fuels, chemicals and liquids to be securely stored at the site Fuels and chemicals to be stored in bunded areas designed to contain 120% of volume stored Containers to be stored on hardstand area to ensure potential contamination and soils are managed within the stormwater drainage and treatment system (as described in Section 7.2) Records of inspections and maintenance on stormwater management systems to be kept and provided at any time upon request Compliance with relevant EPA requirements with respect to stormwater discharges

7.1.1. WATER SUPPLY

All water supplied to the berth is sourced from Hunter Water mains via a private line from Selwyn Street. Potable water is supplied to the amenities block located at the southern end of the site.

The fire water ring main is located beneath the berth. The main delivers water to the fire hydrants. Five dual outlet fire hydrants including pits are located across the site and run parallel to the potable water main (**Figure F4**).

Ships potable water is supplied via a standpipe with water being drawn from the ring main located under the berth.

7.2. Stormwater

The stormwater drainage system used for the site is shown in Figure F5. The power drain manages the wharf area drainage system located between the wharf front and cement apron, and running along the length of the berth.

The power drain which receives water runoff and potential contaminant water from the berth area as the area slopes towards the power drain as shown on Figure F5. Within this drainage system there are three treatment chambers incorporating the stormwater management filter systems which remove hydrocarbons and suspended solids from stormwater, preventing spills and minimising non-point source pollution entering downstream waterways. When there is sufficient water within this system, the stormwater is discharged into the river.

Each of the three treatment chambers has been fitted with an emergency shut off valve. In the event that there is a spill of material on the wharf the valves can be closed and all material can be contained within the power drain

The hardstand area at the rear of the berth drains into a stormwater swale outside the boundaries of the berth area. The swale has been designed to remove contaminants and other pollution that may be contained in the runoff. The swale connects to a stormwater culvert for discharge to the Hunter River. Stormwater management measures are presented in Table 10.

Table 10: Stormwater Management Measures

Key Environmental Performance Objectives
<ul style="list-style-type: none"> • Minimise uncontrolled surface water runoff and discharge from the site • Ensure that site drainage system efficiently manages potential onsite contaminants (such as fuels, wash-off and lubricants) and site drainage is reused where possible • Ensure there are no adverse effects on the water quality of the surrounding and downstream water system
Key Environmental Issues
<ul style="list-style-type: none"> • Further contamination of stormwater with fuels, lubricants, wash-off from cargoes, other liquids and herbicides/pesticides as well as accidental spillages • The potential of uncontrolled runoff to increase pollution and turbidity and overall water quality of the Hunter River
Environmental Action and Management Measures
<p>In addition to general measures listed in Section 7.1, specific control measures to stormwater include the following:</p> <ul style="list-style-type: none"> • Direction of all stormwater to constructed stormwater drains/swales; • Stormwater Culvert system (as outlined in Section 7.2) with biofiltration swale used in stormwater diversion from hardstand area to outlet drains; • Re-use of stormwater onsite (where possible); and • Regular monitoring as specified in Section 4.1.3

7.3. Groundwater

The Mayfield No.4 Berth and hardstand has been remediated in accordance with the voluntary remediation agreement (VRA). There is no longer a requirement to monitor groundwater for the Mayfield No. 4 Berth and hardstand area.

7.4. Capping Maintenance

As part of the remediation activities undertaken onsite, a final capping layer has been applied in order to contain contaminants in the subsoils. As part of the Contaminated Site Management Plan (CSMP) for previous Stage I works (Appendix D), specific control measures have been outlined for the maintenance of the integrity of the capping layer. These control measures are adopted for the Mayfield No. 4 Berth and are outlined in Table 11.

Table 11: Capping Maintenance Management Measures

Key Environmental Performance Objectives
<ul style="list-style-type: none"> • Ensure the integrity of the capping layer is preserved
Key Environmental Issues
<ul style="list-style-type: none"> • A breach in the capping layer as a result of poor site management resulting in the exposure of potential contamination risk
Environmental Action and Management Measures
<ul style="list-style-type: none"> • Specific inductions on cap preservation where required eg any excavation; • No excavation work will be allowed on site without an excavation permit and/ or excavation notification form being completed. The excavation permitting process will prompt PON to consider whether cap integrity could be compromised by the proposed work. Works should be planned to minimise excavation needs near or through the cap; • Any excavation permit will reference the three diagrams attached in Appendix F, which identify the nature and thickness of the capping layer, the location of Level 2 materials (refer to CSMP for definition) and the location of Steelstone Mix 3 (a recycled mix containing manganese) • Where there is the potential for a breach of cap integrity, procedures identified in the CSMP must be adhered to (Appendix D); • Where actual breach of cap integrity occurs, the event will be logged on the Incident Register and formal notification procedures implemented under this OEMP (refer Sections 4.3 and 4.4) and rectification measures undertaken as specified in the CSMP; and • General visual monitoring would be conducted as specified in Section 4.1 of this OEMP.

7.5. Contaminated Site Management

The objectives of contaminated site management include ensuring the efficacy of remediation works across the site is maintained over time.

Specific control measures for contaminated site management are found in the CSMP for the whole Mayfield remediated area, including Mayfield No. 4 Berth and hardstand. The CSMP shall be referred to for all contaminated site monitoring and management (Appendix D), with management measures summarised in Table 12.

Table 12: Contaminated Site Management Measures

Key Environmental Performance Objectives
<ul style="list-style-type: none"> • Ensure the site is managed and monitored in a way that reduces the risk of contamination
Key Environmental Issues
<ul style="list-style-type: none"> • Contamination of runoff or sediment resulting in downstream impacts in the surrounding land uses and Hunter River
Environmental Action and Management Measures
<p>All remediation works and structures must be maintained in a proper and efficient condition and manner so that they continue to properly perform those functions for which they were delivered or installed, including compliance with:</p> <ul style="list-style-type: none"> • Maintenance protocols included in the relevant approved Remediation Action Plan (RAP) for the Mayfield site and which outlines design requirements in respect of remediation works; • Any Site Auditor requirements; • All applicable legal requirements; and • All onsite workers are inducted and trained appropriately as discussed in Section 6 of this OEMP.

7.6. Traffic

7.6.1. HEAVY VEHICLE ROUTES

The Heavy Vehicle Route (HVR) is outlined in the *Heavy Vehicle Route Plan for Mayfield No. 4 Berth* (HVR Plan) attached in Appendix E. All heavy vehicles will access the site via the following route:

- 1 Pacific Highway
- 2 Industrial Drive
- 3 Selwyn Street
- 4 Internal Lead-in road

All drivers of heavy vehicles will be inducted into the overall OEMP and the HVR Plan and be made familiar with the approved heavy vehicle route.

Industrial Drive provides regional road linkages to the west via the New England Highway, to the north via the Pacific Highway and south via the F3 Freeway. The majority of cargo transport to the port is via these regional road linkages.

Due to the uncertainty with the cargo sources and delivery location precise heavy vehicle routes are not able to be determined. However general principles including prohibiting heavy vehicles going to and from the port from using local residential streets have been included in the HVR Plan. Approved B-double routes in the locality are shown in this Plan.

7.6.2. STEVEDORES

All Stevedores operating from PON owned wharves are required to enter into licence agreements with PON. The licence covers the use of the wharf and the conditions under which the wharf can be operated.

As part of the conditions of the stevedoring licence to use the wharf PON will impose a condition specifying that all truck drivers engaged and/ or arranged by the stevedoring company are to be notified

that all heavy vehicles accessing the site are prohibited from using the residential streets of Mayfield and Mayfield East and are to follow the routes identified in the HVR Plan and outlined above in **Section 7.6.1**.

Management measures for the air quality of Mayfield Berth No. 4 are outlined in Table 13.

Table 13: Stevedore Environmental Management Measures

Key Environmental Performance Objectives
<ul style="list-style-type: none"> Minimise impact to residents, landholders and third parties in the vicinity of the development
Key Environmental Issues
<ul style="list-style-type: none"> Temporary disruptions to residents, landholders and other third parties
Environmental Action and Management Measures
<ul style="list-style-type: none"> Implementation of the Heavy Vehicle Route Plan for Mayfield No. 4 Berth Access would be via Selwyn Street only and controlled via the gate located at the Mayfield No. 4 Berth and hardstand Public access to the site shall not be permitted Roads and parking areas will be regularly maintained A restricted speed limit will apply to the site Appropriate signage will be implemented around the site and along the access route Where local deliveries of cargo are required the heavy vehicles will be confined to the major roads All heavy vehicles are prohibited from passing through residential areas and in particular, no travel is allowed through Mayfield or Mayfield East General monitoring would be conducted as specified in Section 4.1. Operation of the Complaint Register.

7.7. Noise

Noise impacts associated with the operation and maintenance are likely to be similar to the existing industrial environment. The operation may have the potential to impact on the amenity of residents and landowners in surrounding areas. Activities that may result in localised impacts to the amenity of the surrounding area should be assessed on a site-specific basis, and management measures implemented in accordance with this OEMP.

Management measures for noise at Mayfield Berth No. 4 are outlined in Table 14.

Table 14: Noise Environmental Management Measures

Key Environmental Performance Objectives
<ul style="list-style-type: none"> Minimise the impact and potential nuisance of noise emissions from operation and maintenance activities, machinery and vehicles on the local community
Key Environmental Issues
<ul style="list-style-type: none"> Disturbance to amenity of residents and other land users in the vicinity
Environmental Action and Management Measures
<ul style="list-style-type: none"> Limiting daytime and night-time noise to development consent criteria through regular monitoring Ensure regular maintenance of machinery and vehicles Ensure machinery and vehicles are fitted with high efficiency mufflers (if required)

- Avoid the coincidence of simultaneous workings of high noise level machinery/operations near sensitive receivers where possible
- Loading and unloading operations to be conducted away from noise sensitive receivers where possible
- Use of noise mitigation technologies and techniques where necessary (eg silencers, noise barriers or other noise treatment of high noise generating equipment)
- Minimise the operation of site machinery and vehicles during the night period where practicable and feasible
- Noise Compliance Monitoring to be conducted as described in Section 4.1.1.
- Noise complaints shall be considered incidents and shall be managed in accordance with the non-conformance and corrective action procedures detailed in Section 4.4.

7.8. Vibration

Due to the considerable distance between the key components of the operational activities and the surrounding residents, vibration is not expected to be a significant environmental issue. As such there are no vibration management measures or monitoring proposed for the Mayfield No. 4 Berth and hardstand.

7.9. Air Quality

PON maintain both an air quality monitoring station to measure PM10 and TSP for accurately monitoring the operational aspects of the site where the level of particulate matter being sampled is representative of emissions from the premises taking into account prevailing wind direction and the location of residential properties or other sensitive receivers.

Air emissions from the operation and maintenance of the site are expected to be manageable. Emissions that may have an adverse impact on surrounding air quality include vehicle and machinery exhaust. Given that the site is completely sealed, no air quality issues are anticipated for the site.

Management measures for the air quality of Mayfield Berth No. 4 are outlined in Table 15.

Table 15: Air Quality Environmental Management Measures

Key Environmental Performance Objectives
<ul style="list-style-type: none"> • Control sources of dust and other emissions to air that may affect nearby residents and other landholders, pedestrians, vehicular traffic or other sensitive receiving environment • Minimise incidence of offensive odour, vapours or emissions
Key Environmental Issues
<ul style="list-style-type: none"> • Disturbance to amenity of residents and other land users in the vicinity as a result of pollution and dust generation from heavy vehicles and cargo movements
Environmental Action and Management Measures
<ul style="list-style-type: none"> • All loading/unloading and vehicle movements to take place on fully sealed surfaces • Vehicles to comply with Australian design standards and regularly serviced to minimise exhaust emissions • Immediate clean-up of any spills • Adjusted work practices (as required) based on wind conditions and dust monitoring results – see Section 7.11 for meteorological monitoring requirements • Operation of complaints register • Monitoring measures to be conducted as described in Section 4.1.2.

7.10. Waste

All wastes generated during operation and maintenance of the site shall be dealt with in an environmentally sensitive manner and in accordance with the POEO Act and the *Waste Avoidance and Resource Recovery Act 2001*. Waste management should consider the reduction, reuse and recycling of wastes prior to disposal. Where activities are likely to generate waste, appropriate procedures shall be implemented to ensure responsible disposal of waste is undertaken or, where possible, appropriate recycling of waste. Likely and expected waste streams for the site include putrescible and non-putrescible general solid waste.

There is also a possibility that some vessels berthing at Mayfield No. 4 Berth and hardstand may require garbage (including general waste) to be collected. In these instances the vessel will contact the vessel agent who will arrange for a DAWE licensed waste contractor to collect the garbage to ensure disposal is conducted in accordance with DAWE requirements.

Vessels are required to submit a Quarantine Pre-Arrival Report for Vessels (*Pratique*) no more than 96 hours and no less than 12 hours prior to arrival (ie before dropping anchor) at the Port of Newcastle. This form is submitted to DAWE through the vessel agent. DAWE conduct risk assessments on the completed forms and issue an approval form with clear instructions regarding quarantine matters including management of vessel waste during the time at berth to the vessel via the vessel agent. DAWE risk assess every vessel where the Port of Newcastle is the first port of call and in line with the risk assessment conduct a *Pratique* inspection covering waste and ballast water management. Random inspections are conducted by the DAWE on all other vessels. The inspection includes checking if the vessels waste is secured in animal- and leak-proof containers or within a sealed room, and also the garbage record books.

Waste management measures for Mayfield Berth No. 4 are outlined in Table 16.

Table 16: Waste Management Measures

Key Environmental Performance Objectives
<ul style="list-style-type: none"> • Ensure responsible disposal of all waste generated on site, and recycle where possible • Minimise environmental impacts related to waste management
Key Environmental Issues
<ul style="list-style-type: none"> • Handling and transportation of waste
Environmental Action and Management Measures
<ul style="list-style-type: none"> • All skips and containers would be labelled with their content, would be well maintained to ensure they do not leak and would be emptied on a regular basis to ensure they do not overflow • All domestic and industrial waste to be disposed of into proper industrial bins for collection and disposal at a licensed offsite facility • No open or ground rubbish is permitted • Appropriate receptacles will be provided for the depositing of litter and other waste materials and their contents will be sent for reuse, recycling or disposal on a regular basis. • A 3 metre skip bin has been provided for general waste, paper and cardboard – the bin is located adjacent to the Stevedore amenities and are emptied fortnightly. • Waste should be classified according to EPA’s <i>Waste Classification Guidelines</i> and sorted into waste streams where possible • All waste contractors and receiving waste facilities shall be appropriately licensed (and/or DAWE approved) • Appropriate signage, awareness and encouragement of staff and contractors to minimise waste generation and promote use of recycling practices • Routine visual inspections (refer to Section 4.1)

7.11. Meteorological Monitoring

In accordance with the requirements of EPL 13181 PON maintain an automated weather station onsite. Meteorological conditions are to be monitored during loose bulk cargo operations.

L5.1 Loose bulk cargo operations must cease for a period of at least 15 minutes:

- (a) if the average wind speed exceeds 7 metres per second for a 5 minute period, or
- (b) if a wind gust exceeds 12 metres per second

After loose bulk cargo operations have ceased, they must not recommence until the above wind speed limits are not exceeded in the preceding 15-minute time period.

L5.2 The wind speed and direction limits specified in Condition L5.1 do not apply when the following loose cargoes are loaded or unloaded from the premises:

- (a) Cottonseed pellets;
- (b) Ferro-alloys;
- (c) Magnetite;
- (d) Mineral sands;
- (e) Nut coal;
- (f) Urea granules;
- (g) Wet silica sands; and
- (h) Whole soya beans

7.12. Security

In response to the risk of terrorism, the Federal Government introduced the *Maritime Transport and Offshore Facilities Security Act 2003 (MTOFSA) and Regulations* to safeguard against unlawful interference with maritime transport including ports, port facilities, ships and offshore vessels. The Port of Newcastle is a security regulated Port. The Mayfield No.4 Berth and hardstand area is located within the Security Regulated Port Boundary.

The Mayfield No. 4 Berth and hardstand is a secure site, fenced at the perimeter with locked entry/ exit gates. When there are no vessels berthed at Mayfield No. 4 Berth and hardstand, the site will be patrolled by PON Wharf Officers. When a vessel is berthed, a security guard will be posted at the entry / exit gate to manage site access in accordance with PON's Level 1 Access Induction.

The MTOFSA places responsibilities on every person within the Port to report any security incidents including suspicious activities. Suspicious activities or occurrences could include:

- holes in fences;
- unauthorised people or vehicles;
- unknown objects;
- theft or break-ins; and
- people taking photographs or notes.

All suspicious activities regardless of the severity MUST be reported to the Police and then PANSW's VTIC advised on phone number 02 4929 3890 of the action taken.

All inductees are advised of their obligations under MTOFSA as part of PON Level 1 induction.

Management measures for the security of Mayfield No. 4 Berth are addressed in Table 17.

Table 17: Security Management Measures

Key Environmental Performance Objectives
<ul style="list-style-type: none"> • Prevention of vandalism and unlawful access • Prevention of security risks to vessels, adjacent residents and industry/ landholders
Key Environmental Issues
<ul style="list-style-type: none"> • Crime and other security risks
Environmental Action and Management Measures
<ul style="list-style-type: none"> • Perimeter fencing to be maintained • All areas are security controlled to prevent unlawful access • Security systems and patrols are in place to guard against unauthorised entry • No staff shall be housed on site • Visitors to be accompanied by an inducted person at all times • Site inductions to be undertaken by all PON employees, Stevedores and Port Users

7.13. Landscaping and Lighting

No landscaping is planned for Mayfield No. 4 Berth. The area is covered entirely by hardstand and wharf area that provides no opportunity for landscaping.

The final landform is in accordance with the Contaminated Site Management Plan considerations. The Contaminated Site Management Plan recognises that the wharf is covered by existing structures and sealed pavements which provide a low level of permeability.

The permeability of the final landform has been assessed and approved by the Site Auditor.

Landscaping will be considered as part of the future developments of the remaining Closure Area.

Lighting is required for 24/7 operation, as well as for safety and security reasons. Lighting provided on site includes wharf flood lighting, exterior lighting, bulkhead lighting, fender lighting and edge lighting. Lighting would be adjusted to suit operational uses including use of lighting during cargo loading activities, the limiting of flood lighting (where appropriate), and reducing light intensity when no ships are docked. Impacts from lighting would be similar to the existing surrounding environment which is industrial and largely used for port related activities.

The maximum height of lighting will be 30 m and lighting spill will be limited to the edge of the wharf and hardstand area to minimise disturbances to other river users.

Management measures for landscaping and lighting of Mayfield Berth No. 4 are outlined in Table 18.

Table 18: Landscape and Lighting Management Measures

Key Environmental Performance Objectives
<ul style="list-style-type: none"> • Prevention of lighting impacts on nearby receivers • Prevention of visual disturbance and degradation of amenity
Key Environmental Issues
<ul style="list-style-type: none"> • Lighting impacts on nearby receivers • Safety and security internal to the site

Environmental Action and Management Measures

- Large floodlights would not be used other than for emergency lighting
- Lighting will utilise the minimum level of illumination necessary for safety and security
- Security lighting would be mounted, screened and directed (where possible) to ensure lighting would not spill onto existing residences

7.14. Heritage

The operation of the Mayfield No. 4 Berth would not impact on heritage items due to the following:

- No listed items of heritage significance are located on the Mayfield No. 4 Berth site;
- The site is a hardstand area;
- The site has been previously capped isolating the subsurface material; and
- No excavation will be allowed on site without an excavation permit and / or excavation notification form being completed.

The Mayfield No. 4 Berth and hardstand will comply with heritage requirements.

7.15. Dangerous Goods

In accordance with conditions 7.1, 7.2, 7.3 and 7.4 of DA 290-00-08:

The Container Terminal and General Cargo Handling Facility shall neither receive as cargo nor dispatch as cargo any material classified as a "Class 7 dangerous good" (radioactive material) under the Australian Dangerous Goods Code.

Usage, storage, temporarily or otherwise, of any dangerous good of Class 1 (explosives) on the site is not permitted without the prior written approval of the Secretary-General.

All dangerous goods received as cargo at either the Container Terminal or the General Cargo Handling Facility shall be dispatched from the site within 72 hours of receiving those goods.

Stevedores handling dangerous goods shall maintain documentation that includes the following information in relation to dangerous goods:

- *the date and time of arrival of all dangerous goods to the site;*
- *the exact location of all quantities of dangerous goods on the site;*
- *details of all dangerous goods classes on the site, packaging specifications and UN number; and*
- *the date and time of dispatch of all dangerous goods from the site*

A Dangerous Goods Register has been implemented in the PON EMS in cooperation of several areas of the business, including WHS, Property, Planning, and Marine & Operations.

8. EMERGENCY RESPONSE AND CONTACT DETAILS

8.1. Communication

PON has prepared and submitted an Emergency Plan for the Mayfield No.4 Berth and hardstand operations to DPIE (WHS 3003 Mayfield Site Precinct Emergency Plan). All PON operations and maintenance employees are trained and competent to carry out their responsibilities under the Emergency Plan. Upon receipt of emergency advice, the applicable person based at the Mayfield No. 4 Berth and hardstand would initiate the Emergency Plan.

8.2. Emergency Procedures

Each emergency shall be actioned as deemed required (depending upon magnitude and situation) and handled in accordance with the procedures detailed in the Mayfield No. 4 Berth Emergency Plan.

In the event of an emergency, the following procedure shall apply:

1. **PHONE 000 (TRIPLE ZERO) AND DESCRIBE THE EMERGENCY AND LOCATION**
2. **PHONE THE PANSW VESSEL TRAFFIC INFORMATION CENTRE (VTIC) on (02) 4929 3890 and DESCRIBE THE EMERGENCY AND LOCATION.**

Upon identifying any emergency, it is essential the personnel are aware of their immediate actions. This is essential so the appropriate personnel / emergency services are notified and to confirm what immediate actions need to be put in place.

After contacting the emergency services, personnel working within the area need to be notified about the immediate danger. Depending upon the situation, this will usually be completed by sounding the emergency siren trying to notify individuals. All personnel shall then evacuate to the designated Emergency Evacuation Assembly Point.

The Emergency Evacuation Assembly Point is posted on notice boards and can generally be identified by a green and white sign. Personnel are to remain there until a company representative and / or emergency services give the "all clear" and direct personnel to return to the site.

Hazard and safety studies for the operation of the site have previously been undertaken for the Mayfield No.4 Berth and hardstand area. As per Condition 7.9 of the Conditions of Consent (**Appendix A**), Pre-operation Hazard studies have been prepared and were approved by the Department of Planning on 23 October 2009.

8.3. Notification of Significant Environmental Events to Authorities

The PON Duty Manager will task designated persons to **immediately** follow the protocol below as per the Protection of the Environment Operations Act 2011 Amendment.

The agencies must be contacted in the following order:

As per Section 8.2 in the case of an **emergency, fire and rescue (000)** should be contacted in the first instance, otherwise:

Table 19: Environmental Event Contacts

Contact	Phone Number
EPA Environment Line	131 555
The Ministry of Health via the Newcastle Public Health Unit	Ph: 02 4924 6477 Select Option 3 – General Enquiries (after 5pm calls divert to John Hunter Hospital - ask for the Public Health Officer on call) 1300 066 055 will also connect to the local Public Health Unit
SafeWork NSW	13 10 50
Newcastle City Council	Water pollution incident reporting: 02 4974 2525 (during business hours) After hours phone the call centre: 4974 2000 (ask for the Compliance Duty Officer)
Fire and Rescue NSW	000

Section 150 of the POEO Act requires that the following information will need to be provided:

- time, date, location and likely duration of incident;
- location of place where pollution is occurring or likely to occur;
- type of incident (eg chemical spill, water pollution etc.);
- extent of incident (eg magnitude of spill, area covered etc.); and
- action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution.

8.3.1. FOLLOW UP ACTIONS

Debrief and Resumption of Normal Operation

All incidents and emergency response actions are reviewed, and appropriate debriefs performed, to ensure all staff are adequately informed. Resumption of normal operations is approved by the EMMO or delegated person as specified by the EMMO. The information will be relayed to staff via staff meetings and incorporated into toolbox talks (where applicable).

Review and Improvement of the Emergency Procedure

PANSW and PON conduct regular emergency response exercises as part of the incident control plan and Pollution Incident Response Management Plan (PIRMP under EPL 13181). A report detailing the findings from the exercise is prepared and maintained by both parties. Results from exercises are used to improve and update PANSW and PON's incident control mechanisms and / or emergency plans where required.

8.4. Emergency Contacts

Emergency response and other contacts for the berth are listed in Table 20.

Table 20: Emergency Response Contacts

Contacts 24 hr Contact Numbers Port Authority NSW (PANSW) – (02) 4985 8301 OR (FRECALL – 1 800 048 205) Port of Newcastle (PON) 02 4908 8281		
Emergency Contacts		
Service	Address	Contact Details
Fire		000
Ambulance		
Police		
Hospital	John Hunter Hospital Lookout Road, NEW LAMBTON NSW 2305	(02) 4921 3000
Workcover		13 10 50
Australian Maritime Safety Authority - Newcastle Office	8 Cowper Street, CARRINGTON NSW 2294	(02) 4961 3277 1800 627 484
Utilities and Government Contacts		
Utility/Agency	Contact Details	
Ausgrid Emergency Service	131 388	
Jemena Gas Faults and Emergency	131 909	
Hunter Water	1300 657 000	
Telstra	132 203	
City of Newcastle	(02) 4974 1399	
EPA - Report Pollution Incident (24hrs) - Newcastle Office	131 555 (02) 4908 6800	

9. RECORDS MANAGEMENT

All PON records are maintained in accordance with a Records Management Program which incorporates a Records Management Policy, Records Management System, associated guidelines and conventions. All records, regardless of format or origin, are maintained in the PON Records Management System. PON uses Box for the management of all hard copy and electronic records.

All records are sentenced (classified) in accordance with the NSW State Records General Retention and Disposal Authorities and are retained for the appropriate minimum retention period. It is of note that general records pertaining to project management of construction works will be retained in a format which can be reproduced for a minimum of 7 years after completion of construction. Any records related to the identification and remediation of hazardous materials identified during construction will be retained for a minimum period of 75 years.

Individuals involved with the environmental management of the site are responsible and trained to ensure all electronic and hard copy correspondence is scanned (where necessary) and filed in the correct folder.

10. WORK HEALTH AND SAFETY

10.1. General

The PON Safety Policy commits PON to providing a safe and healthy workplace for all employees and contractors. The site shall be operated and maintained in a manner that will not adversely affect the health and safety of employees, Stevedores, contractors, Port Users, visitors or the environment. PON is committed to ensuring that relevant legislation in relation to health and safety is complied with, and that all employees, Stevedores, Port Users and contractors are trained in understanding their environmental, health and safety roles and responsibilities.

10.2. Personal Protective Equipment

All personnel accessing the site shall as a minimum be required to wear at all times the following personal protective equipment (PPE):

- Appropriate safety footwear;
- High visibility clothing;
- Long sleeve shirt and long pants;
- Eye protection;
- Hearing protection (if in the vicinity of power tools, equipment & machinery or any area indicated by signs);
- Hard hat; and
- Life jacket must be worn when within 2 metres of the water's edge.

As discussed in Section 6, all operating and maintenance personnel are required to be suitably qualified, trained and experienced to accepted industry competency levels. PON personnel shall be trained in the requirements and use of PPE to an appropriate level according to responsibilities.

While on site inductees must have access to their own approved First Aid kits. First Aid Kits must be in accordance with those prescribed in the Work Health and Safety Regulation 2017. If first aid is administered the VTIC must be notified on (02) 4929 3890. All accidents / incidents must be reported.

10.3. Hazard and Risk

PANSW maintain the role as the regulator of dangerous goods in the Port of Newcastle, as previously conferred by the *NSW Dangerous Goods (General) Regulation 1999, Part 11 – Special requirements relating to ports*.

A revised Final Hazard Analysis (FHA), commissioned by then-NPC in March 2014, details hazard identification, risk analysis and mitigation management. The revised 2014 FHA was approved by then-Department of Planning and Environment in June 2014.

The Mayfield No. 4 Berth and hardstand will be used for the handling of goods passing through the Port of Newcastle. PON will implement a process to ensure all storage and transfer systems at the site will be designed so that hazardous materials remain within the containment systems. Any dangerous goods handled at Mayfield 4 Berth will be handled in accordance with the revised Final Hazard Analysis, PANSW dangerous good regulations and AS3846-2005: *The handling and transport of dangerous cargoes in port areas*.

Transport of ammonium nitrate has been considered as part of the Mayfield Berth Risk Assessment prepared for NPC (2012) as the dangerous goods regulator for port areas. The assessment concluded that the individual risk levels outside the berth boundary are low given the low frequency and risk of ammonium nitrate explosion. Onsite precautions are outlined in the assessment and include ensuring that

the required safety equipment and management systems are in place before the berth is used for shipments of ammonium nitrate.

Additional information has been provided to Port Lessor in January 2021 following an incident at the Port of Beirut regarding ammonium nitrate. In brief, Ammonium Nitrate AN (DG Class 5.1) and explosives (DG Class 1) are only onsite at M4 for the time required to transfer the DG from a truck to the ship, or from the ship to a truck. Ammonium nitrate is provided in Bulkabags and is therefore not considered loose bulk cargo at M4. Other DGs (Other than DG Class 7) may be stored at Mayfield No. 4 Berth for up to 3 days (72 hours). A DG register is implemented at PON as part of the EMS.

PON is also required to perform a Hazard Audit every 3 years as a requirement of the M4 planning approval, *Consolidated Instrument of Approval for Development Application No. 293-08-00*. The audit involves assessment of hazard risk management compliance procedures essentially applied by PON across the Port.

The NSW Work Health and Safety Regulation 2017, Chapter 9 Major Hazard Facilities, Division 1 530 2(a) states that port operational areas under the control of a port authority are not considered major hazard facilities.

II. REFERENCES

Advitech 2014. Final Hazard Analysis Report, Mayfield No. 4 Berth Rev v05 - prepared for Newcastle Port Corporation

HDC, 2016. *Contaminated Site Management Plan, Port Lands, Former BHP Steelworks Mayfield, Newcastle*

Lloyd's Register, 2012. *Mayfield Berth Risk Assessment* prepared for Orica Australia and Newcastle Port Corporation

Sinclair Knight Merz (SKM), 2009. *Mayfield Wharf Refurbishment and Hardstand Construction, Construction Environmental Management Plan*

FIGURES

Figure F1: Site Location

Figure F2: Site Layout

Figure F3: Mayfield No. 4 Berth Responsibility and Organisation Structure

Figure F4: Water Supply System Arrangement (Plan View)

Figure F5: Stormwater Management System

APPENDIX A – CONDITIONS OF CONSENT

**APPENDIX B – ENVIRONMENT PROTECTION LICENCE (EPL)
13181**

APPENDIX C – OEMP COMPLIANCE CHECKLIST

APPENDIX D – CONTAMINATED SITE MANAGEMENT PLAN

APPENDIX E – HEAVY VEHICLE ROUTE PLAN

APPENDIX F – CAPPING DIAGRAMS