

POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

EPL 1967 NEWCASTLE BULK TERMINAL

5 March 2025

Revision H – 2025

Document: A347212

MORE THAN A PORT

*Australia's Deepwater
Global Gateway*

REVISION HISTORY

Revision	Revision Date	Details
A	11-Jul-2012	Draft
B	13-Aug-2012	Draft (updated following NPC comments)
C	27-Aug-2012	Final Working Copy
D	04-Sep-2012	Final copy following NPC update of internal procedures
E	23-Dec-13	Improvements identified from annual PIRMP test conducted on 20.12.13
F	26-June-14	Updated to reflect the Port of Newcastle transition and new procedures
G	29-Jan-18	Updated to reflect the merging of K2 and K3 into one EPL
H	05-Mar-25	Updated to reflect the requirements of the Protection of the Environment Operations (General) Regulation (2022)

CONTENTS

1. LICENCEE DETAILS.....	1
1.1 POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN.....	1
2. BUSINESS DETAILS	2
2.1 ENVIRONMENT PROTECTION LICENCE (EPL) DETAILS	2
3. POLLUTION INCIDENT – PERSONS RESPONSIBLE	3
3.1 PERSONS RESPONSIBLE CONTACT DETAIL	3
4. POLLUTION INCIDENT RESPONSE.....	6
4.1 POLLUTION INCIDENT RESPONSE PROCEDURE	6
4.2 COMPLIMENTARY PROCEDURES.....	7
4.3 GENERAL RESPONSE PROCEDURES.....	7
5. NOTIFICATION REQUIREMENTS.....	8
5.1 RELEVANT AUTHORITIES	8
5.2 EPA NOTIFICATION REQUIREMENTS.....	9
5.2.1 Regulatory Definitions.....	9
5.3 NEIGHBOUR AND LOCAL COMMUNITY NOTIFICATION	10
6. SITE HAZARDS.....	12
6.1 DESCRIPTION AND LIKELIHOOD OF HAZARDS	12
6.2 PRE-EMPTIVE ACTIONS	14
6.3 SITE INVENTORY	15
7. TESTING AND UPDATING THE PIRMP.....	24
7.1 PIRMP TEST REQUIREMENTS.....	24
7.2 PIRMP TEST HISTORY	25
7.3 STAFF TRAINING	26
7.4 PIRMP UPDATES.....	26
APPENDICES.....	27
APPENDIX A: FIGURES	28
FIGURE 1: K2/K3 SITE MAP	28
FIGURE 2: K2 SITE MAP CLOSE UP.....	29
FIGURE 3: K3 SITE MAP CLOSE UP.....	30
FIGURE 4: POLLUTION INCIDENT IMPACT ZONE.....	31
APPENDIX B: QUICK REFERENCE – INCIDENT RESPONSE FLOWCHART ...	32

I. LICENCEE DETAILS

I.1 POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

Licence number: 1967

Approved by:

Signature:

Position/Title:

Date: 5 March 2025

Purpose:

The Port of Newcastle Operation Pty Ltd holds an Environment Protection Licence with the NSW Environment Protection Authority (EPA) for the Port of Newcastle (PON) Newcastle Bulk Terminal (K2 and K3 berths), located on Heron Road, Kooragang. As per the *Protection of the Environment Operations Act 1997* (the POEO Act), the holder of an Environment Protection Licence must prepare, keep, test and implement a pollution incident response management plan (PIRMP) that complies with Part 5.7A of the POEO Act in relation to the activity to which the licence relates.

If a pollution incident occurs in the course of an activity so that material harm to the environment (within the meaning of section 147 of the POEO Act) is caused or threatened, the person carrying out the activity must **immediately** implement this plan in relation to the activity required by Part 5.7A of the POEO Act.

A copy of this plan is kept in the Bulk Terminal Superintendent Office and at the Security Gatehouse at the licensed premises and will be made available on request by an authorised EPA officer and to any person who is responsible for implementing this plan.

In accordance with Section 74 of the Protection of the Environment Operations (General) Regulation 2022 the plan is publicly available on the Port of Newcastle website ([Policies & Compliance - Port of Newcastle](#)).

2. BUSINESS DETAILS

2.1 ENVIRONMENT PROTECTION LICENCE (EPL) DETAILS

Name of licensee: (including ABN)	Port of Newcastle Operations Pty Limited ABN: 13 165 332 990
EPL number:	1967
Premises name and address:	<p>Newcastle Bulk Terminal Heron Road, Kooragang NSW 2304</p> <p>The premises excludes the areas marked and shown on the plan (attached to the EPL) as:</p> <ul style="list-style-type: none"> • Park Fuel's pipeline below ground and above ground" • Park Fuel's temporary flexible hose (only when used during ship discharge operations) • Kooragang Bulk Facilities and Conveyor • Cement Australia Lease • Orica Pipeline • Cement Australia Land and Pipeline • Cargill Australia Lease and Pipeline • Qube Conveyor and Agri Loader • Incitec Pivot
Company or business contact details	Name: Position or title: Contact number: Email:
Website address:	Home - Port of Newcastle www.portofnewcastle.com.au
Scheduled activity/activities on EPL:	Shipping in Bulk
Fee-based activity/activities on EPL:	Shipping in bulk - >500,000T of annual capacity to load and unload

3. POLLUTION INCIDENT – PERSONS RESPONSIBLE

3.1 PERSONS RESPONSIBLE CONTACT DETAIL

Given the 24/7 nature of operations at the berth, contact details for multiple people/roles have been provided in the below section. Response to a pollution incident at the premises is typically a collaborative effort across the business positions detailed below and if a vessel is in berth will also involve the stevedores (refer to Section 4.1 for more information).

PIRMP activation – Business Hours (Mon to Fri, 6am -6pm)	Primary Contact Name of person responsible: Position or title: Contact number: Email: Secondary Contact Name of person responsible: Position or title: Contact number: Email: Tertiary Contact Name of person responsible: Position or title: Contact number: Email:
PIRMP activation – Outside Business Hours	Primary Contact Position or title: Contact number: Secondary Contact Position or title: Contact number:
Notifying relevant authorities – Business Hours (Mon to Fri, 6am -6pm)	Primary Contact Name of person responsible: Position or title: Contact number:

	Email: Secondary Contact Name of person responsible: Position or title: Contact number: Email: Tertiary Contact Name of person responsible: Position or title: Contact number: Email:
Notifying relevant authorities– Outside Business Hours	Primary Contact Position or title: Contact number: Secondary Contact Position or title: Contact number:
Managing response to pollution incident – Business Hours (Mon to Fri, 6am -6pm)	Primary Contact Name of person responsible: Position or title: Contact number: Email: Secondary Contact Name of person responsible: Position or title: Contact number: Email: Tertiary Contact Name of person responsible: Position or title: Contact number:

	Email:
Managing response to pollution incident – Outside Business Hours	Primary Contact Position or title: Contact number:
	Secondary Contact Position or title: Contact number:

4. POLLUTION INCIDENT RESPONSE

4.1 POLLUTION INCIDENT RESPONSE PROCEDURE

During vessel unloading and loading operations, stevedores have operational control of the berth. The stevedores' operational control of the berth is defined as the Operational Control Access Period (OCAP) in the Stevedore Licence agreement between the stevedores and PON. During the OCAP, stevedores will be responsible for undertaking the below steps and implementing any pollution incident procedures as directed by their company.

The following steps should be followed when responding to an environmental incident (in the corresponding order):

1. Take immediate action to ensure the safety of people at the site and minimise the impact of the incident if safe to do so
2. If the incident presents an immediate threat to human health or property call Emergency Services (000)
3. Secure the area and contain the spill (if applicable), protect drains
4. Notify Vessel Traffic Services (VTS) on 02 4929 3890 (24/7 – Port Wide Emergency Line). Provide the following information:
 - a. Time, date, location of incident
 - b. Type of incident (e.g. chemical spill, water pollution)
 - c. Extent of incident (e.g. volume of product loss, affected area etc.)
 - d. Action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution
5. Inform Security at the site entrance if expecting incoming emergency services or other response agencies.
6. Notify the person nominated under 'Managing response to pollution incident' in Section 3.1 of this PIRMP.
7. If incident is deemed to be a pollution incident, notify relevant authorities (as per Section 5.1 of this PIRMP).
8. Continue clean up of incident.

Subsequent steps to be undertaken by person '**Managing response to pollution incident**' as defined in Section 3.1 of this PIRMP. It is noted that the below does not include neighbour notification. Neighbour notification is generally not undertaken by PON. VTS have a SMS system that provides notification of incidents to tenants across the Port.

9. Notify PON Executive Manager Marine and Operations.
10. If the stevedores have not already undertaken regulatory notification, notify relevant authorities (as per Section 5.1 of this PIRMP).
11. Report the incident in [Myosh](#) (PON's incident reporting platform). When reporting the incident in MyOSH, ensure that the section: Classification (Outcomes) is nominated as 'Environment'. This will ensure that the PON Environment team is notified of the incident. If the incident is unable to be logged in MyOSH within 24hrs of the incident, please ensure that verbal or email notification is provided to the Environment team within 24hrs of the incident occurring.
12. If products have been used from the spill control kit, notify Wharf Officers to ensure that the spill control kit is replenished in a timely manner. It is noted that Wharf Officers undertake weekly inspections of the berth, and spill kit checks form part of the scope of this inspection.

Any subsequent steps would depend on the nature of the incident and any direction received from regulatory authorities. Subsequent steps may include the development of a written report to be provided to the EPA, remedial actions and validation sampling.

The above steps may be undertaken in tandem if multiple staff are available to respond to the incident.

4.2 COMPLIMENTARY PROCEDURES

In addition to the PIRMP, other PON emergency procedures may be necessary depending on the nature of the incident. Potentially relevant emergency and incident response procedures include:

- Environment Incident Response and Reporting Procedure ([EMS-009](#))
- Emergency Environmental Response Procedures ([EMS-010](#)).
- Kooragang Bulk Terminal Emergency Management Plan ([VHS-3006](#))
- [Kooragang Precinct Sub Plan](#)

4.3 GENERAL RESPONSE PROCEDURES

The response mechanism to an environmental incident will depend on the specifics of the incident. The general principles of managing a spill (excluding reporting notifications) are as follows:

- **Stop** – stop the spill at its source to prevent further spillage of product.
- **Contain** – contain a spill in as small an area as possible and away from stormwater drains and surface waters.
- **Clean up** – the focus of this step is to remove the spilt material and restore affected areas to its pre-spill condition.

5. NOTIFICATION REQUIREMENTS

5.1 RELEVANT AUTHORITIES

Dependent on the scale and nature of the incident, some or all of the following authorities may be required to be notified. If, at the time of making the notification, you believe that some of these authorities do not need to attend the incident, you may provide that advice. However, you must still provide all the information you have regarding the incident to each authority. It is the responsibility of each authority to decide whether they need to attend the incident. Where authorities decide not to attend, the incident notification enables each authority to respond to enquiries about the incident and provides them with initial information in the event that the incident escalates or their involvement in managing the incident is required at a later stage.

Authority	When to Notify	Timing of Notification	Contact Number
Emergency Services/ Fire and Rescue NSW	If the incident presents an immediate threat to human health or property	Immediately – first agency to be contacted	000
Vessel Traffic Services (VTS)	For all incidents	Immediately	02 4929 3890
EPA	Pollution incident that causes or threatens to cause material harm to the environment (definition provided in Section 5.2.1 of this PIRMP)	Immediately	131 555
SafeWork NSW	If there is a serious injury or illness, death or dangerous incident	Immediately	131 050
NSW Health	Pollution incident that may adversely impact human health	Immediately	Newcastle Public Health Unit 1300 066 055 (business hours) (02) 4924 6477 (after hours – diverts to John Hunter Hospital, ask for public health officer on call)
City of Newcastle	Pollution incident that causes or threatens to cause material harm to the environment (definition provided in Section 4.1 of this PIRMP)	Following EPA notification	(02) 4974 2000 or website form

5.2 EPA NOTIFICATION REQUIREMENTS

Under the POEO Act, the following people have a duty to notify a pollution incident occurring in the course of an activity that causes or threatens material harm to the environment:

- a) the person carrying on the activity
- b) an employee or agent carrying on the activity
- c) an employer carrying on the activity
- d) the occupier of the premises where the incident occurs

Notification must be given immediately, i.e. promptly and without delay, after the person becomes aware of the incident. Under Section 151 of the POEO Act, you do not have to report if you are aware that the incident has already come to the notice of each person or authority required to be notified. Only persons engaged in the activity resulting in the pollution incident, and occupiers of the land where the incident occurs, have a duty to report the incident.

EPL 1967 specifically states under Condition R2 Notification of environmental harm:

- R2.1 Notifications must be made by **telephoning** the Environment Line service on 131 555.
- R2.2 The licensee must provide **written** details of the notification to the EPA within **7 days of the date on which they became aware of the incident**.

The initial notification to the EPA by telephone will be made by the relevant person nominated in Section 3. The PON Environment Team will be responsible for submitting the subsequent written notification to the EPA. The PON Environment team will require the support of the PON Operations team and any other parties involved in the incident to compile pertinent information for the written report to the EPA. The written notification will receive the approval of PON General Counsel and Executive Manager Marine and Operations prior to being sent to the EPA.

5.2.1 Regulatory Definitions

- **'Immediate'** means licences need to report pollution incidents promptly and without delay.
- **'Pollution incident'** means an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.
- **'Material harm to the environment'** is defined in section 147 of the POEO Act.
 - (1) For the purposes of this Part—
 - (a) harm to the environment is material if—
 - (i) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or

- (ii) it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations), and
- (b) loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.
- (2) For the purposes of this Part, it does not matter that harm to the environment is caused only in the premises where the pollution incident occurs.

Further information regarding the duty to notify can be found on the [EPA website](#).

5.3 NEIGHBOUR AND LOCAL COMMUNITY NOTIFICATION

The licenced area is located in an industrial precinct on Walsh Point. There are no sensitive premises located in a 1km radius of the site. The closest residential area is located at Stockton, approximately 1.5km from the site, across the Hunter River. The communication response to be used in the event of a pollution incident would depend on the circumstances of the event, and any direction that may be provided by the EPA. It is noted that EPA may direct PON to notify neighbours and it is an offence to not comply with such direction.

If the pollution incident is being coordinated by emergency services, communication to neighbours would be under control of emergency services. Emergency services can send out SMS messages to defined catchment areas to alert and advise the community if required. PON's Executive Manager Marine & Operations and/or appropriate persons would work with emergency services to provide communications assistance and support, including direct doorknocks if they were required.

VTS run a SMS incident notification system across the Port for all types of incidents. Notification of an environmental incident to VTS, ensures that tenants within the Port receive a SMS that provides notification of incidents to tenants across the Port.

If communication is not coordinated by emergency services or VTS, notification to the owners or occupiers of premises in the vicinity of K2 and K3 would be coordinated by PON's Executive Manager Marine & Operations. PON has in place mechanisms for providing early warnings and regular updates to the owners and occupiers of premises in the vicinity of the berths, and the community. The mechanisms available include:

- SMS messages to immediate neighbours.
- Media releases to the broader community (radio and television).
- Incident notification on the PON website.
- Emails to community representatives; and
- Doorknocking of affected community members.

PON's Executive Manager Corporate Affairs (or delegate) is available to be contacted 24/7 if a media release is required. Media updates may be required on an ongoing basis depending on the incident.

PON conducts a consultative meeting with various Newcastle Port users every three months (Newcastle Port User Group). This two-way consultative meeting can also be a forum for PON to report on any progress, updates or changes following an incident to Port users.

Walsh Point Tenant	Distance & Direction from the Site*	Contact Number
Orica	550 m south east	
Cement Australia	Located within the EPL site premises	
Cargill	Located within the EPL site premises	
Kooragang Bulk Facilities	Located within the EPL site premises	
Incitec Pivot	400 m north east	
Linx	1.9 km north	
Newcastle Stevedores	Located within the EPL site premises	
Origin Energy	850 m north east	
Tasmania Mines	850 m south east	
Park Fuels	600 m east	
Viterra Australia Adelaide Head Office	770 m north east	08 8304 5000
Custom Transportable Buildings (CTB)	850 m north east	
Qube Ports	Located within the EPL site premises	
Port Waratah Coal Services	450 m north west	
Vue	70 m south	
Kooragang Industrial Services	Located within the EPL site premises	
*Distance and direction measured from the K2 site entrance gate		

6. SITE HAZARDS

6.1 DESCRIPTION AND LIKELIHOOD OF HAZARDS

The site is used for the shipping of bulk goods. Products that may be present transiting through the site, stored on the site or on the ship at berth are detailed in Section 6.3 Site Inventory. The predominant environmental risk posed by the site is the unintentional release of products into the Hunter River during unloading/loading operations. Loose bulk product (e.g. fertilisers, soybean meal etc) is typically unloaded from the vessel using the ship unloader and hopper and then transferred directly into a truck and driven off-site. Liquid products including diesel, sulphuric acid and various plant based oils are typically transported from vessels through existing pipelines to either storage tanks on the berth or to neighbouring facilities on Walsh Point.

The following environmental incidents may occur at the Site.

Environmental Incident	Likelihood	Rationale
Spill/leak of products that impact receiving waters (stormwater at the Site drains to the Hunter River)	Low	<ul style="list-style-type: none"> The entire site excluding a small grassed area at the front of the site offices comprises a sealed hardstand Berth graded away from the Hunter River towards the centre of the berth Bunding around stormwater drains Environmental tarps are used when loading/unloading ship to capture and dropped product and prevent it from entering Hunter River Liquid products are handled through existing pipelines which are regularly subjected to pressure tests and checked for leaks prior to and during operation by the infrastructure owner
Spill/leak of products onto neighbouring sites	Low	<ul style="list-style-type: none"> Operations do not occur in close proximity to the neighbouring property boundaries The site is graded towards the centre of the berth
Spill/leak of products onto the berth or on the vessel	Moderate	<ul style="list-style-type: none"> Depending on the product, packaging (e.g. bulka bags) may be damaged during shipping to the berth

		<ul style="list-style-type: none"> Equipment used to unload and load product may damaging packaging. Loose bulk cargo is not contained in packaging and therefore there is a higher risk of product loss during loading/unloading operations
Fire	Low	<ul style="list-style-type: none"> Various vegetables oil are flammable at their specific flash points (i.e. extremely high temperatures generally 300°C +) Regular safety drills and emergency drills practised onsite with security and operations team
Explosion	Low	<ul style="list-style-type: none"> The volume of ammonium nitrate permitted to be received at the premises is limited to 3000 t Ammonium nitrate is handled in accordance with PON Emergency Response Procedures for Ammonium Nitrate WHS WI-614 Comprehensive hazard analysis and safety procedures followed during AN operations

It is noted that there is numerous infrastructure present on site that is not owned, operated or maintained by PON and therefore they have not been considered in the above table. The below infrastructure is also excluded from the licenced premise in EPL 1967. However, there is the potential for a pollution incident from the below infrastructure to impact on PON's licenced premises. For completeness, the infrastructure has been summarised below and its' locations are shown in the Figures provided in Appendix A:

K2

- Cement Australia has a lease for a portion of the K2 berth which contains 30,000 tonne storage facility which stores cement, fly ash and slag. All product is delivered to/from the storage facility via truck.
- There are underground diesel fuel lines present at the berth, owned, operated and maintained by Park Fuel for the importation of diesel.
- Carbon dioxide gas lines are present outside of the EPL premises in the footpath at the front of the K2 on Heron Road. The gas lines are owned by BOC.
- There are underground stainless steel pipelines present at the berth, owned, operated and maintained by Orica for the transportation of ammonia gas to/from the berth to Orica's Kooragang Island facility.

K3

- KBF have a lease over a portion of the K3 berth. They import predominantly alumina and petroleum coke. These products get loaded directly into KBF silos and then trucked off-site,
- Vue, trading as East Coast Cement, import cement. The cement is loaded onto the gantry, via vacuum, which crosses Heron Road to transfer cement to the East Coast Cement depo.
- Pipelines are present transporting sulfuric acid from ship to Insittec Pivot. The pipelines are present on the surface of the site and painted in a mauve colour.
- There are underground diesel fuel lines present at the berth, owned, operated and maintained by Park Fuel for the importation of diesel.
- Cargill lease area.

It should be noted that two Major Hazard Facilities (MHF) are located near the site, within the Kooragang Precinct:

(a) Orica

The Orica Kooragang Island site is an industrial chemical manufacturing facility that produces ammonia, nitric acid and ammonium nitrate. Manufacturing processes at the site produce a range of hazards that classifies Orica Kooragang Island as a MHF, due to the range of chemicals with various toxic, flammability and explosive properties. The most likely emergency affecting the site would be the release of ammonia gas, in the case of an emergency at the Orica Plant a siren lasting 3 minutes will sound. This alarm is tested at 10am every Wednesday by Orica.

(b) Origin Energy

The terminal facilitates the storage and transfer of Liquefied Petroleum Gas (LPG) with a maximum storage capacity of 200 tonnes.

Emergency equipment installed at the site includes the following:

- Fire hose reels and hydrants
- Emergency evacuation alarms
- Defibrillators

6.2 PRE-EMPTIVE ACTIONS

The following pollution prevention controls are in place at the Site, and it is noted that a number of controls form part of the site design:

- Design of the site:
 - The site slopes away from the Hunter River and has a raised kerb along the edge of the berth
 - The site is sealed beneath an asphalt hardstand, with the exception of a small unsealed grassed surface at the front of the site offices (ie. non-operational area)
 - Stormwater drains on site have a raised kerb around the drain to prevent spills from entering the stormwater system
 - At the K3 berth a biofiltration pit is in place to improve water quality before stormwater is discharged to the Hunter River

- Environmental tarps are used between the ship and the berth when ships are being unloaded/loaded to capture dropped material and reduce/eliminate the volume that may fall into the Hunter River.
- There is a weather station present at the K3 berth that allow the Bulk Superintendent to access live data readings of wind speed and direction to assist with implementation of suitable controls during loading and unloading activities and to also facilitate the Bulk Superintendent to determine when works may need to be ceased in accordance with EPL requirements for wind speed.
- A number of spill control kits are in place across the berth, as shown in Figure 1 to Figure 3 in Appendix A.
- A PA system is being installed across the two berths in 2025, which will allow for immediate communication of incident information to users on the berth.

6.3 SITE INVENTORY

The premises is used for bulk shipping. The majority of products listed in the site inventory are either exported or imported through the K2 and/or K3 berth and are not stored on site. The maximum quantity represents the maximum quantity of product that a single vessel can import/export of that product at a time. If Emergency Services are responding to an incident they will need to liaise with operational staff to confirm what products and quantities are present on the premises or in the vessel at berth at the time of the incident.

Location/precinct	Max. quantity	Contents	Potential Human Health & Environmental Impact	Comments
K2 & K3	50,000 T	Potash	Human Health <ul style="list-style-type: none"> • Ingestion can cause vomiting and stomach purging. If a large amount is swallowed, you should seek medical attention. • Can irritate the skin, eyes, and respiratory tract. • Chronic consumption of potash can lead to hypernatremia, electrolyte imbalance, haematological problems, and liver and kidney failures. • Potassium hydroxide can be corrosive to the skin, eyes, and gastrointestinal and respiratory tracts. Concentrations of 0.5–2.0 % are irritating to the skin, while a concentration greater than 2.0 % is corrosive. Environment <ul style="list-style-type: none"> • No clear environmental impact. It is noted that fertiliser runoff can cause eutrophication in water. 	
	45,000 T	Soya bean meal	Human Health	

			<ul style="list-style-type: none"> May cause respiratory irritation if inhaled. Environment <ul style="list-style-type: none"> No ecological information available on SDS. 	
	50,000 T	Urea	Human Health <ul style="list-style-type: none"> Prolonged or repeated contact may result in mild irritation of the skin. Contact may result in mild irritation, lacrimation and redness of the eye. Environment <ul style="list-style-type: none"> Urea can cause eutrophication (excessive plant and algal growth) in surface water. 	
	50,000 T	Sulphate of ammonia (SOA)	Human Health <ul style="list-style-type: none"> Exposure to airborne ammonium sulfate can irritate the nose, throat, and lungs. Individuals with asthma may be at a higher risk. Prolonged contact with ammonium sulfate can irritate the skin. Ingesting ammonium sulfate can cause gastrointestinal irritation, including nausea, vomiting, diarrhea, and abdominal pain. Large quantities can cause systemic ammonia poisoning. If applied to the eyes will cause severe eye damage. Environment <ul style="list-style-type: none"> Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. 	
	50,000 T	Super sulphate	Human Health <ul style="list-style-type: none"> Irritates gastrointestinal tract if swallowed. May cause mild, transient irritation to eyes. Inhaled dusts may cause transient irritation. Contact with skin may result in mechanical irritation, redness and rash. Environment <ul style="list-style-type: none"> Harmful to the marine environment if discharged in extremely high concentrations. 	

			<ul style="list-style-type: none"> May stimulate weed and algal growth if lost to static surface waterways. Algae affect water quality and taste. 	
	50,000 T	Monoammonium phosphate (MAP) fertiliser	<p>Human Health</p> <ul style="list-style-type: none"> Inhalation may irritate nose and upper respiratory tract. Inhalation of vapours may cause drowsiness and dizziness which may be accompanied by narcosis, reduced alertness, loss of reflexes and lack of coordination and vertigo. Prolonged skin contact may cause some irritation including redness and itching. Ingestion of large amounts may give rise to gastrointestinal irritation with symptoms such as nausea, vomiting, diarrhea. May cause eye irritation. <p>Environment</p> <ul style="list-style-type: none"> May cause long-term adverse effects in the aquatic environment. Ammonia biodegrades rapidly to nitrate, producing a high oxygen demand. Non-persistent in water (half-life 2 days). Moderately toxic to fish under normal temperature and pH conditions and harmful to aquatic life at low concentrations. Phosphate causes eutrophication processes in lakes and ponds. 	
	50,000 T	Di-ammonium phosphate (DAP) fertiliser	<p>Human Health</p> <ul style="list-style-type: none"> Dust may irritate respiratory system, skin and eyes. <p>Environment</p> <ul style="list-style-type: none"> Contains nitrogen and phosphorus, both of which can stimulate weed and algal growth if lost to static waterways. Excessive algal growth can affect water quality and taste. In soil, ammonium is 	

			converted to nitrate. Nitrate is susceptible to leaching and may contaminate groundwater. Water soluble.	
	30,000 T	Cement	Human Health <ul style="list-style-type: none"> Mildly abrasive and corrosive to mouth and throat if swallowed. Irritating and corrosive to the eyes and may cause alkaline burns. Irritating and drying to the skin. Direct contact with wet cement may cause serious skin burns. Cement dust is irritating to the nose, throat and respiratory tract. Environment <ul style="list-style-type: none"> Forms an alkaline slurry when mixed with water. Product is persistent and would have a low degradability. 	
	50,000 T	HiCAL 30 Mineralising Carbon	Human Health <ul style="list-style-type: none"> Ingestion of finely divided carbon may produce gagging and constipation. May cause inflammation of the skin on contact. May cause eye irritation and damage in some persons. Environment <ul style="list-style-type: none"> No environmental details provided in SDS. 	
	50,000 T	Other manufactured fertilisers	Human Health <ul style="list-style-type: none"> Irritates eyes. Environment <ul style="list-style-type: none"> SDS notes to prevent the material from contact with soil, entering surface water or sanitary sewer system and to not discharge directly to a water source. Impact on environment not stated in SDS. 	
	20,000 L	Diesel	Human Health <ul style="list-style-type: none"> Harmful if inhaled Skin irritant 	Diesel is transported across the

			<ul style="list-style-type: none"> Irritating to mouth, throat and stomach if ingested. May cause damage to organs through prolonged or repeated exposure. Vapour, mists or fumes may contain polycyclic aromatic hydrocarbons some of which are known to produce skin cancer. Vapour, mists or fumes may contain polycyclic aromatic hydrocarbons some of which are known to produce skin cancer. Suspected of causing cancer. Risk of cancer depends on duration and level of exposure. Environment <ul style="list-style-type: none"> Toxic to aquatic life with long lasting effects. Spillages may penetrate the soil causing ground water contamination. May accumulate in sediments. Spills may form a film on water surfaces causing physical damage to organisms. <p>Oxygen transfer could also be impaired.</p>	premises in Park Fuel diesel lines.
K2	3,000 T	Sunflower seed oil	Human Health <ul style="list-style-type: none"> No impact. Environment <ul style="list-style-type: none"> In liquid form vegetable oil spills can smother plants and animals. Most environmental damage reported in literature is by contact with birds' feathers and secondly by smothering of intertidal organisms. Will float in water. Vegetable oil spills can foul shorelines. 	Pumped to conveyor gantry and underground lines which transport the oil directly into tanks on Cargill's lease.
	3,000 T	Vegetable oils	As per sunflower seed oil.	Pumped to conveyor gantry and underground lines which transport the oil

				directly into tanks on Cargill's lease.
	5,800 T	Ammonia anhydrous (gas form) or aqueous	Human Health <ul style="list-style-type: none"> Exposure to high levels of ammonia can cause irritation and serious burns on the skin, and in the mouth, throat (laryngitis), lungs (pulmonary oedema) and eyes (conjunctivitis). Exposure at very high levels of ammonia can lead to death. Swallowing concentrated solutions of ammonia can cause burns in the mouth, throat and stomach. Splashing ammonia into the eyes can cause burns and blindness. Individuals that may be more sensitive to ammonia are those with reduced liver function, corneal disease, glaucoma or respiratory diseases (e.g. asthmatics). Environment <ul style="list-style-type: none"> Ammonia can increase soil pH and ammonia concentrations, which can harm soil microbes and make the soil hostile to them. Ammonia can be harmful to aquatic species, even in small amounts. Ammonia can burn the leaves of plants and crops 	Transported within the Orica pipelines, as shown in Figure 2.
	30,000 T	Magnetite	Human Health <ul style="list-style-type: none"> Powder may irritate skin. Particles in the eyes may cause irritation. In high concentrations dust may irritate the respiratory system. Environment <ul style="list-style-type: none"> Not regarded as dangerous for the environment. Low mobility in soil and not readily biodegradable. 	
	3,000 T	Canola oil	Human Health <ul style="list-style-type: none"> No impacts. Environment	Pumped to conveyor gantry and underground

			<ul style="list-style-type: none"> In liquid form vegetable oil spills can smother plants and animals. Most environmental damage reported in literature is by contact with birds' feathers and secondly by smothering of intertidal organisms. Will float in water. Vegetable oil spills can foul shorelines. 	lines which transport the oil directly into tanks on Cargill's lease.
	3,000 T	Ammonium nitrate	Human Health <ul style="list-style-type: none"> Dust may irritate respiratory system and skin. Serious eye irritation. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Environment <ul style="list-style-type: none"> May stimulate excessive algae growth which can deplete oxygen levels in the water, harming fish and other aquatic organisms 	
K3	20,000 T	Alumina	Human Health <ul style="list-style-type: none"> Abrasive eye and skin irritant. Environment <ul style="list-style-type: none"> Unknown. 	
	10,000 T	Petroleum coke	Human Health <ul style="list-style-type: none"> Ingestion may cause irritation and malaise. Dust may irritate respiratory system and eyes. No adverse effects due to skin contact are expected. Environment <ul style="list-style-type: none"> Not expected to be harmful to aquatic organisms. Not readily biodegradable. 	
	3,500 T	Sulphuric acid	Human Health <ul style="list-style-type: none"> Corrosive and harmful if swallowed. Ingestion may produce severe burns to the mouth, throat and stomach. Ingestion can cause severe swelling of the larynx and skeletal paralysis affecting the ability to breathe, circulatory shock and 	Transported from the vessel via the Incitec pipelines, The pipelines are used to transfer sulphuric acid to

			<p>convulsions. Circulatory shock is often the immediate cause of death.</p> <ul style="list-style-type: none"> • Harmful if inhaled. Inhalation may produce severe irritation and chemical burns to the nose, throat and respiratory tract. • Skin contact may produce severe skin burns. • Severe tissue burns may occur with contact with eyes. <p>Environment</p> <ul style="list-style-type: none"> • Sulfuric acid will exist as particles or droplets in the air if released to the atmosphere. It dissolves when mixed with water. It has moderate acute (short-term) toxicity on aquatic life. • Sulfuric acid is very corrosive and would badly burn any plants, birds or land animals exposed to it. It has moderate chronic (long-term) toxicity to aquatic life. Chronic effects on plants, birds or land animals have not been determined. • Small quantities of sulfuric acid will be neutralised by the natural alkalinity in aquatic systems. Larger quantities may lower the pH for extended periods of time. • Toxic effect for fishes and algae. 	<p>and from ships to the Incitector Pivot site on the east side of Heron Rd. Pipelines present on the berth are depicted in Figure 3.</p>
Other hazardous materials that could be on site include:				
	Minor quantities less than 200 L combined total	Fuels/oils/lubricants	<p>Note: Specific human health and environment risk depends on the specific product, some more common risks are listed below.</p> <p>Human Health</p> <ul style="list-style-type: none"> • May cause skin dryness and irritation. • Ingestion of large quantities may cause nausea and diarrhoea. • Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract. <p>Environment</p>	Minor quantities stored in the General storage shed as shown in Figure 2.

			<ul style="list-style-type: none"> • Spillages may penetrate the soil causing groundwater contamination. • Spills may form a film on water surfaces causing physical damage to organisms. 	
		Sewerage/waste	<p>Human Health</p> <ul style="list-style-type: none"> • Accidental ingestion may be harmful. • Skin contact may be harmful. • May be a carcinogen. <p>Environment</p> <ul style="list-style-type: none"> • Raw sewerage has a high biological oxygen demand and ammonia levels that may be detrimental to ecological health. 	K2 and K3 sewerage goes into a septic system and discharges into transpiration pits.
		Asbestos	<p>Human Health</p> <ul style="list-style-type: none"> • Human carcinogen. Chronic effects may include cancer, pulmonary fibrosis, pulmonary chronic lung disease. • Exposure to dust on skin and eyes may cause mechanical irritation. <p>Environment</p> <ul style="list-style-type: none"> • No data available. 	As per the PON asbestos register .

7. TESTING AND UPDATING THE PIRMP

7.1 PIRMP TEST REQUIREMENTS

Testing requirements are outlined in Section 75 of the Protection of the Environments Operations (General) Regulation 2022, which specifies:

- (1) A PIRM plan must be tested –
 - (a) routinely at least every 12 months, and
 - (b) if a pollution incident occurred during an activity to which an environment protection licence relates, which caused or threatened material harm to the environment, within the meaning of the Act, section 147 – within 1 month of the incident occurring
- (2) The test must be carried out in a way to ensure the following –
 - (a) the information provided in the PIRM plan is accurate and up to date,
 - (b) the PIRM plan is capable of being implemented in a workable and effective way.
- (3) A test carried out under subsection (1) (b) must assess the matters specified in subsection (2) in light of the incident.

Within the EPA's Environmental Guideline for PIRMPs, Section 2.2.3 stipulates that there are two usual methods of testing and are as follows:

- Desktop exercises or scenario; and
- Practical exercises or drills.

Testing is required to cover all components of the plan. Additional matters to be included in the plan are outlined in Section 72 of the POEO (General) Regulation 2022:

- (n) the dates on which the PIRM plan has been tested and the name of the person who carried out the test,
- (o) the dates on which the PIRM plan is updated,
- (p) the way in which the PIRM plan must be tested and maintained.

For this site with a premises-based EPL the type of testing should reflect the:

- Nature of activities undertaken at the premises
- Risk level determined for the licence under the EPA's risk based licencing system – the risk level for this EPL is Level 1 (i.e. the lowest risk category)
- Environmental context – location, sensitive/protected waterways (water catchment), air quality, land habitat, sensitive receivers who are close by.

7.2 PIRMP TEST HISTORY

The PIRMP is tested at least once every 12 months at PON. Testing has historically and will continue to comprise a mixture of both desktop and practical exercises. At times testing has been for a combined scenario that included testing of environmental, security and safety management plans. Since October 2024, testing has been scheduled into the PON Environmental Calendar to ensure testing dates are not missed. Pertinent details such as the testing date, personnel involved, scenario and response by relevant personnel are included in the test records, linked below.

Test Date	Conducted By	Testing Record
20.12.13		-
26.06.14		-
08.12.15		-
21.11.16		-
03.12.17		-
13.07.18		2018 PIRMP Test
10.12.19		2019 PIRMP Test
14.10.20		2020 PIRMP Test
08.12.21		2021 PIRMP Test
19.12.22		2022 PIRMP Test
24.01.24		2024 Jan PIRMP Test
02.10.24		2024 Oct PIRMP Test

7.3 STAFF TRAINING

As a minimum annual testing of the PIRMP is undertaken. One of the objectives of this annual testing is to develop and refresh staff knowledge in environmental incident management and notification protocols, with the ultimate goal being to minimise the impact to human health or the environment as a result of an environmental incident. Following completion of PIRMP testing, staff involved in the exercise and other relevant staff participate in a debrief session to understand the strengths and weaknesses of their response to the simulated incident and to determine where their responses were not in accordance with the PIRMP.

7.4 PIRMP UPDATES

Version control of the PIRMP is maintained at the front of the document.

The PIRMP is reviewed and, where required, updated annually following completion of a PIRMP test exercise and within a month following a pollution incident. The PON Environment Manager is responsible for ensuring annual updates of the PIRMP.

Any updates made to the PIRMP will be in consultation with PON Terminal Superintendents, Senior Manager Terminals and Logistics and Senior Manager Operations. It is the responsibility of PON Terminal Superintendents to notify and provide updated versions of the PIRMP to relevant staff on the berth (e.g. Security, Stevedores etc.).

APPENDICES

APPENDIX A: FIGURES

FIGURE 1: K2/K3 SITE MAP

Note that Park Fuel's fuel line, Kooragang Bulk Facilities lease, Cement Australia lease, Orica Pipeline, Cargill Australia Lease and Pipeline and Qube Conveyor and Agri Loader and Incitec Pivot pipeline do not form part of the licenced area.

FIGURE 2: K2 SITE MAP CLOSE UP

FIGURE 3: K3 SITE MAP CLOSE UP

FIGURE 4: POLLUTION INCIDENT IMPACT ZONE

It is noted that the extent of the surrounding area likely to be affected by a pollution incident at the premises would vary dependent on the type and scale of the incident. Figure 4 has been designed as a tool to assist incident responders in understanding the distance between the premises and neighbouring areas and in determining what level of neighbour notifications may be required. The sensitive receptor must likely to be impacted by pollution incidents at the premises is the Hunter River.

APPENDIX B: QUICK REFERENCE – INCIDENT RESPONSE FLOWCHART

