



Pollution Incident Response Management Plan (PIRMP)

240 Cormorant Road Kooragang Island

This document outlines the considerations, risk assessments, and management and control measures associated with the environmental management of the Patrick Logistics Kooragang Island Depot and its associated infrastructure.

Contents

Background	3
Introduction	3
Definition ‘Pollution incident’	3
The definition of a pollution incident is:.....	3
Details included in this plan	4
Description and likelihood of hazards	4
Potential Environmental Hazards	4
Preparation of pollution incident response management plan	6
Pre-emptive actions to be taken	6
Air Quality	6
Soil Erosion	6
Flora & Fauna	6
Waste	7
Energy Use	7
Noise	7
Inventory of pollutants	7
Safety/Environmental equipment	8
Communicating with neighbours and the local community	8
Minimising harm to persons on the premises	8
Actions to be taken during or immediately after a pollution incident	8
Reporting Flowchart	10
HSE SUPPORT	10
SITE PERSONNEL	10
RESPONSIBILITIES	10
HSE Advisor	10
Employee / Contractor / Visitor	10
HSE Advisor	10
Operations Supervisor / Manager	10
HSE Advisor	10
Business Unit Manager (Eastern only) or their delegate	10
Regional HSE Manager	11
Regional Manager	11
(Eastern and Rural) or their delegate	11
National HSE Manager	11
General Manager	11
NSW/QLD or their delegate.....	11
Emergency Response & Communication	11
Staff training.....	14
List of Emergency Contacts	15
Environmental Management Auditing, Monitoring, and Reporting practices	16
Approval	16
Site Map/Plan	17

Background

Introduction

Patrick's site at 240 Cormorant Road, Kooragang, undertakes various activities. These activities include rail operations, material storage and warehousing, transport operations, and maintenance operations. External parties have leasing agreements on the site, such as Elgas, Auspac and PCC. These external parties work areas are excluded from the Environmental Protection Licence for the site.

The site at 240 Cormorant Road operates under EPL number 12521.

Definition 'Pollution incident'

The definition of a pollution incident is:

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.

A pollution incident is required to be notified if there is a risk of 'material harm to the environment', which is defined in section 147 of the POEO Act as:

- (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.

Industry is now required to report pollution incidents immediately to the EPA, NSW Health, Fire and Rescue NSW, SafeWork NSW and the local council. 'Immediately' has its ordinary dictionary meaning of promptly and without delay. These strengthened provisions will ensure that pollution incidents are reported directly to the relevant response agencies so they will have direct

access to the information they need to manage and deal with the incident in a faster time.

Details included in this plan

Description and likelihood of hazards

The following is a summary of the potential hazards to human health or the environment associated with the activity being undertaken at the premises, the likelihood of any such hazards occurring, including details of any circumstances or events that could, or would, increase that likelihood.

Potential Environmental Hazards

Is the Environmental issue applicable to the site?	Environmental Issues	Likely Impacts
✓}	Air Quality	<p>Photochemical smog is an important air quality issue in the metropolitan regions. Ground level ozone (largely resulting from motor vehicle emissions) is the major constituent of photochemical smog which can have adverse effects on human health, vegetation and building materials. Diesel fumes contribute to brown haze and reduced visibility.</p> <p>Impacts of dust (coarse particles) are generally local and more in terms of nuisance such as damage to or soiling of materials, or adverse effects on sensitive vegetation through surface coating. However, contaminated dust (e.g. lead) can cause adverse health effects.</p>

Is the Environmental issue applicable to the site?	Environmental Issues	Likely Impacts
✓}	Surface Water Quality	<p>Stormwater run-off carries loose soil particles from disturbed soil surface (soil erosion) into the receiving surface waters and causes turbidity which can reduce light penetration and limit plant growth, fish movement and the ability of predatory fish and birds to see their prey. It can also restrict fishing and recreational activities. Sediment run-off is also considered to be the most significant contributor to increasing nutrient levels in wet weather conditions.</p> <p>Elevated levels of nutrients (phosphorous and nitrogen) in water often promote excessive growth of algae. Algal blooms reduce light and may release toxic compounds into the water killing aquatic organisms as well as restricting fish migration, fishing and recreational activities.</p>
✓}	Noise	<p>Noise can affect human health in a number of ways such as annoyance reaction, sleep disturbance, interference with communication and hearing loss.</p>
✓}	Soil Erosion	<p>The rate of soil formation in Australia is very low, significantly less than the rate of soil loss. Even in the best - managed systems, rate of loss may exceed rate of formation. The movement of soil by wind and water occurs naturally but is significantly accelerated by human activities. Exposed bare soil is vulnerable to wind and soil erosion. The most immediate impact of soil erosion is the loss of nutrients carried away in the soil. These results in reduced soil productivity, and increased sedimentation (turbidity) and nutrient levels in the waterways.</p>
✓}	Waste	<p>Construction and demolition waste contributes 1.5 million tonnes of waste to landfill each year. Land is a scarce natural resource and landfills are expensive to establish and maintain. Furthermore, there are a lot of political issues attached in siting landfills, especially in large cities, as no one wants a landfill in their backyard. Hence, landfill space should be used sparingly. Landfills can adversely impact on the quality of soil and groundwater as well as greenhouse effect through emission of methane gas.</p>
✓}	Energy Use	<p>Australians are dependent on fossil fuels for their major source of energy. The world's fossil fuel reserves are limited and are considered to be non-renewable and scarce. The combustion of fossil fuels generates carbon dioxide, which is a greenhouse gas. The emission of greenhouse gases from power stations increases the greenhouse gas concentration in the atmosphere which in turn adds to the greenhouse effect and can potentially cause climate change/global warming.</p>

Preparation of pollution incident response management plan

Pre-emptive actions to be taken

The following pre-emptive actions have been considered and responsibility for their implementation identified.

Air Quality

Issue/Action	Implementation	
Environmental issues	Work Instructions/ Control Measures	Responsibility
<ul style="list-style-type: none"> Dust emission from exposed soil areas and stockpiles 	<ul style="list-style-type: none"> Dust emissions are to be monitored at regular intervals through visual assessment. Dust suppression is to be used should dust emissions rise to a level where product contamination or off site transfer of particles may occur to an unacceptable level. Site Traffic Management Plan to be complied with at all times. 	All site employees to observe. Operations Manager (or his delegate) to instigate.
<ul style="list-style-type: none"> Vehicle Fumes 	<ul style="list-style-type: none"> Regularly maintain machinery for maximum efficiency in accordance with TruckSafe standards. Minimise unnecessary movement of machinery on-site 	Individual machine operator/Maintenance Division
<ul style="list-style-type: none"> Other emissions 	<ul style="list-style-type: none"> N/A 	

Soil Erosion

Issue/Action	Implementation	
Environmental issues	Work Instructions/ Control Measures	Responsibility
<ul style="list-style-type: none"> Erosion caused by topsoil exposure 	<ul style="list-style-type: none"> Existing site settlement ponds should eliminate the impact of site erosion. Settlement ponds are to be properly maintained and inspected as required. Grass and native vegetation is to be planted in all areas of exposed topsoil where practicable. 	Operations Manager (or his delegate) to instigate.
<ul style="list-style-type: none"> Erosion caused by top soil exposure through vehicle activity 	<ul style="list-style-type: none"> Dedicated traffic flow areas are to be used wherever possible. Traffic areas are to be monitored for erosion. Dust/erosion suppression is to be used on a regular basis when erosion is identified. Minimise the period of any stockpiling topsoil. Spread the soil as soon as work is completed in each area and stabilise by revegetation. 	Operations Manager (or his delegate) to instigate.

Flora & Fauna

Planning	Implementation	
Environmental Issues	Work Instructions/ Control Measures	Responsibility

<ul style="list-style-type: none"> Tree preservation / weed Management 	<ul style="list-style-type: none"> The Business Unit Manager or the Industrial Services Manager must approve the removal of any trees from the site. All noxious and other weeds to be removed through the use of a suitable pesticide. 	Operations Manager (or his delegate) to instigate.
---	---	--

Waste

Planning	Implementation	
Environmental Issues	Work Instructions/ Control Measures	Responsibility
<ul style="list-style-type: none"> General 	<ul style="list-style-type: none"> Site vehicle clean out facilities to be established and maintained as required. All waste to be sorted and recycled where possible Keep the sorting area tidy. Record though purchase order the types and amounts of waste removed from site. i.e. recycled waste, waste sent to landfill, etc. 	Operations Manager (or his delegate)
<ul style="list-style-type: none"> Vegetation 	<ul style="list-style-type: none"> Collect all waste in a central location and ensure that it cannot be disturbed by wind or other factors. 	Operations Manager (or his delegate)
<ul style="list-style-type: none"> Exotic weeds 	<ul style="list-style-type: none"> Exotic weeds must not be spread and are to be treated with an appropriate pesticide. 	Operations Manager (or his delegate)

Energy Use

Planning	Implementation	
Environmental issues	Work Instructions/ Control Measures	Responsibility
<ul style="list-style-type: none"> Diesel used for heavy machinery and equipment used on site 	<ul style="list-style-type: none"> Record weekly fuel usage and types of machinery used. Minimise the unnecessary movement of heavy machinery on-site. Minimise machinery idling time. 	Maintenance Manager

Noise

Planning	Implementation	
Environmental issues	Work Instructions/ Control Measures	Responsibility
<ul style="list-style-type: none"> Noise emission from site activities 	<ul style="list-style-type: none"> Noise emissions from site do not generally present a noise emission issue. All practicable steps should be taken to reduce noise emissions from the site. <ul style="list-style-type: none"> During shipping transfers however the site is expected to operate 24 hours a day. 	Relevant Business Unit Manager (or his delegate)

Inventory of pollutants

An inventory of all bulk products stored on site is to be maintained. Total quantities of stored materials must be available should they be called for in the unlikely event of an environmental incident.

The attached site diagram identified storage areas across the site.

Safety/Environmental equipment

In an attempt to minimise the risk to humans and the environment from a safety and/or environmental incident, the following control measures are in place:

- **Implementation of the provisions of the Asciano Traffic Management Critical Safety Essentials (CSE).** Through compliance with this CSE, the possibilities of interactions between personal and equipment will be minimised. The implementation will also reduce the possibility of vehicle collisions with other vehicles and/or equipment through the establishment and maintenance of dedicated vehicle traffic flow practices.
- **Implementation of the provisions of the Asciano Road transport Critical Safety Essentials (CSE).** Through compliance with the CSE, Mountain Industries will ensure that all heavy vehicle operators are competent to perform their duties and have been appropriately training and assessed in the operation of their equipment.
- **The on-site Emergency Response Trailer (ERT).** The Patrick Maintenance Manager will be responsible for the maintenance and serviceability of the ERT. The Workshop Manager is responsible to ensure that the ERT is appropriately stocked at all times and available in the event of an environmental incident. The workshop manager is also to ensure that suitably trained and qualified staff are available to utilise the ERT at all times.

Communicating with neighbours and the local community

Communicating with neighbours and the local community is an important element in managing the response to any incident. Emergency and other contact details are provided at the Emergency Contact Details section of this document. The depot is located within an industrial area, not in any close proximity to residential neighbours.

Minimising harm to persons on the premises

Emergency response and management plans are provided at all visitors and staff through the Mountain Industries induction process. All visitors on site shall be escorted at all times and should follow the directions of their host or other site personnel in the event of an emergency.

Actions to be taken during or immediately after a pollution incident

In the event of an incident, the relevant Operations Manager is to assume responsibility for the site and is to coordinate all actions/activities under the guidance of emergency personal and relevant authorities' procedures/requests. This includes actions to combat pollution incident response.

All staff are to be aware of and understand the provisions of the emergency procedures, the location of the Emergency Response Plan, and the Assembly Areas.

Copies of the Site Emergency Response plan (including the contact list and site map) are to be held on site and controlled by the Operations Manager.

A Site map is included in the Site induction and clearly shows the locations of:

- Hazardous / flammable chemicals stored on-site,
- Safety Data Sheets (SDS),
- Emergency response equipment such as fire extinguishers,
- First aid kits, spill kits, etc.
- Assembly areas.

The Site map is also displayed in a number of buildings throughout the site. Copies of the plan can be obtained through the site manager.

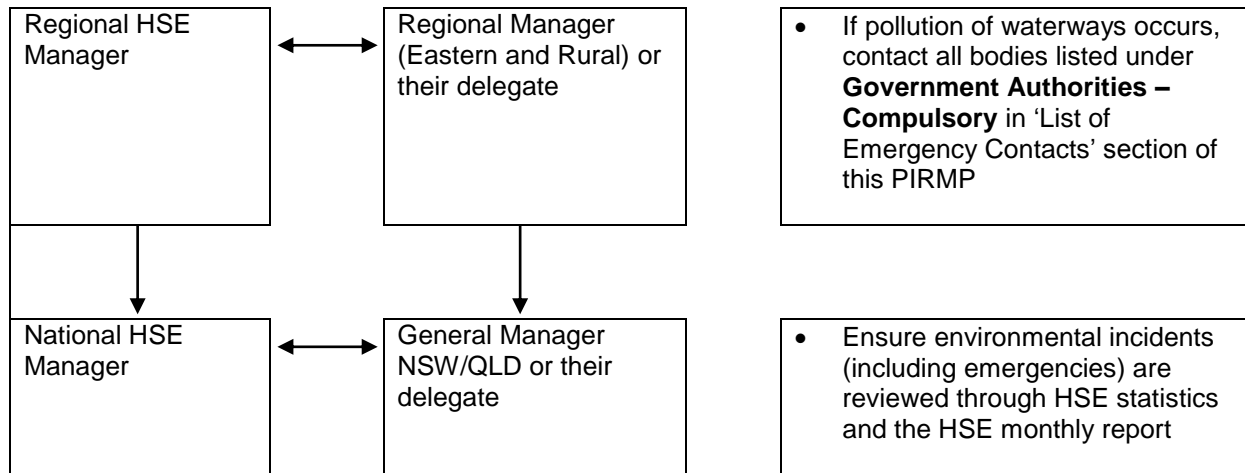
All emergency incidents shall be recorded and an investigation coordinated by the relevant Operational Manager and the HSE Advisor to determine the cause(s) of the incidents. An investigation report shall be developed explaining the causes and the corrective and preventative measures taken.

The Site Emergency Response equipment (e.g. first aid, fire extinguishers, spill kits) will be tested/inspected on a regular basis. It is the responsibility of the relevant Operations Manager to ensure that these tests/inspections are conducted and recorded within their area of control.

This PIRMP shall be tested annually in accordance with legislative requirements.

Reporting Flowchart





Emergency Response & Communication

The following emergency response & communication provisions are to be considered in response to an incident

POTENTIAL EMERGENCIES	WHAT TO DO?	RELEVANT AUTHORITIES & PERSONS
Injury caused by: <ul style="list-style-type: none"> Fire Explosion Machinery accidents Major injuries 	<ul style="list-style-type: none"> For serious injuries, the relevant Operations Manager (or a member of management) will ensure that the ambulance service has been called. Immediately inform a First Aider who can provide assistance. Follow the guidance provided through the Site map. For serious injuries and/or potential serious incidents, contact the Newcastle Business Unit Manager Ensure compliance with emergency personnel and relevant authorities procedures/requests. This includes actions to combat pollution incident response which is to be coordinated by the Operations Manager. The Regional HSE Manager and the Business unit Manager is to ensure that reportable environmental incidents are reported to the EPA within the relevant timeframe. 	<ul style="list-style-type: none"> Relevant Operations Manager HSE Advisor Refer to Reporting Flowchart
Fire <ul style="list-style-type: none"> Fire involving machinery Fire caused by vandalism 	<ul style="list-style-type: none"> Evacuate all personnel to the site muster point immediately. Relevant business unit manager to 	<ul style="list-style-type: none"> Relevant Operations Manager HSE Advisor

POTENTIAL EMERGENCIES	WHAT TO DO?	RELEVANT AUTHORITIES & PERSONS
	<p>ensure that the Fire Brigade (Emergency Services) has been called.</p> <ul style="list-style-type: none"> Follow the procedures as detailed in the Emergency Procedures. Ensure compliance with emergency personnel and relevant authorities procedures/requests. This includes actions to combat environmental incident response which is to be coordinated by the relevant Operations Manager. Regional HSE Manager is also to ensure that environmental incidents are reported to the EPA within the relevant timeframe. If it is safe and you have the necessary qualifications and experience, try to put the fire out using the fire extinguishers provided on the site (the locations of the fire extinguishers are shown on the site map attached to the Emergency Response Plan). Verbally report the incident to senior management and complete an incident report The Regional HSE Manager and the Business unit Manager is to ensure that reportable environmental incidents are reported to the EPA within the relevant timeframe. 	<ul style="list-style-type: none"> Refer to Reporting Flowchart
<ul style="list-style-type: none"> Explosion (e.g. rupture of gas tank) 	<ul style="list-style-type: none"> Evacuate all personnel to a safe area immediately. Call the Emergency Services immediately. Contact the neighbouring residents. If service related, call the relevant service provider (e.g. AGL) If site related, contact Elgas – Elgas has an emergency response team. Contact the Operations Manager The Regional HSE Manager and the Business unit Manager is to ensure that reportable environmental incidents are reported to the EPA within the relevant timeframe. 	<ul style="list-style-type: none"> Relevant Operations Manager HSE Advisor Refer to Reporting Flowchart
<p>Spills</p> <ul style="list-style-type: none"> Spill or release of other hazardous chemicals or 	<ul style="list-style-type: none"> For serious spills, immediately call the Fire Brigade. Identify the source of the spill. 	<ul style="list-style-type: none"> Relevant Operations Manager HSE Advisor

POTENTIAL EMERGENCIES	WHAT TO DO?	RELEVANT AUTHORITIES & PERSONS
<p>material.</p> <ul style="list-style-type: none"> Spill during on site refuelling of plant. 	<ul style="list-style-type: none"> Contact the relevant Operations Manager If the material is dangerous, evacuate the site immediately and notify the neighbours. If it is safe, stop the source of the spill immediately. Contain the spill and control its flow. Ensure the correct spill equipment is used (e.g. hydrocarbons). Block stormwater drains downstream of the spill. Refer to the Safety Data Sheet (SDS) for further spill management requirements and/or first aid requirements (if needed). Clean up small spills promptly to prevent run-off into the stormwater system. The Regional HSE Manager and the Business unit Manager is to ensure that reportable environmental incidents are reported to the EPA within the relevant timeframe. EPA and local council must be notified about the spills that are likely to threaten the environment. 	<ul style="list-style-type: none"> Refer to Reporting Flowchart
<p>Dust Spills/Escape</p> <ul style="list-style-type: none"> Spill or release of dust (e.g. flocculent and ALF₃) 	<ul style="list-style-type: none"> For serious spills, immediately call the Fire Brigade. Identify the source of the spill. Contact the relevant Operations Manager If it is safe, stop the source of the spill immediately. Contain the spill and control its flow. Do not allow product to enter drains or waterways. Ensure the correct spill equipment is used Refer to the Safety Data Sheet (SDS) for further spill management requirements and/or first aid requirements (if needed). <p><i>Note: Flocculent should not be wet down, unless necessary as wet product presents slip risk</i></p>	<ul style="list-style-type: none"> Relevant Operations Manager HSE Advisor Refer to Reporting Flowchart
<p>Discovery of items of conservation value (e.g. Flora & fauna, heritage)</p>	<ul style="list-style-type: none"> Fence off the area as a “no go” zone and contact the Operations Manager immediately for further action. 	<ul style="list-style-type: none"> Relevant Operations Manager HSE Advisor Refer to Reporting Flowchart

POTENTIAL EMERGENCIES	WHAT TO DO?	RELEVANT AUTHORITIES & PERSONS
Discovery of contaminated material on-site.	<ul style="list-style-type: none"> Fence off the area as a “no go” zone and contact the Operations Manager immediately for further action. 	<ul style="list-style-type: none"> Relevant Operations Manager HSE Advisor Refer to Reporting Flowchart
In the event of an incident that has the potential to impact on neighbours or others in the vicinity	<ul style="list-style-type: none"> Affected or potentially affected neighbours to be contacted by phone immediately after an incident has been identified which has the potential to impact on site neighbours. Once initial contact is made affected neighbours to be contacted once the incident has been addressed. Verbally report the incident to senior management and complete an incident report In the event of a prolonged incident, affected and potentially effected neighbours are to be contacted regularly and updated on the status of the incident. Additional contact may be necessary. Such decisions will be made by the Business Unit Manager in consultation with the Regional Business Managers. 	<ul style="list-style-type: none"> Relevant Operations Manager HSE Advisor Refer to Reporting Flowchart

Staff training

All site staff, contractors and visitors are provided with general environmental training in accordance with the provisions of this PIRMP. This training is delivered through a number of mediums including:

- Site induction and safety training,
- Familiarisation with this PIRMP and its content,
- Established company emergency response procedures,
- Equipment maintenance and operation practices and procedures, and
- Instruction in site operating practices.

This requirement for training is reviewed on an annual basis in accordance with established procedures. This review is to be undertaken by the HSE Advisor and Business Manager.

List of Emergency Contacts

NAME	CONTACT DETAILS
Internal Management	
Newcastle Business Manager – Paul Smith	0417 191 267
Transport Manager – Ryan Hazel	0448 258 741
Transport Supervisor – Owen Gartside	0439 081 883
Operations Supervisor – John Hinds	0400 228 133
Industrial Services Operations Manager – Ross Campbell	0407 452 076
Maintenance Manager – Peter Jenner	0417 421 882
Mechanics Mobile (Day/Night)	0437 633 913
HSE Advisor – Shauna Straney	0428 376 139
Government Authority – Compulsory	
NSW EPA	131 555
Emergency Services including Fire Brigade, Ambulance and Police	000
Local Council – Newcastle City Council	02 4974 2000
Fire and Rescue NSW (FRNSW)	1300 729 579
NSW Ministry of Health	02 9391 9000
SafeWork NSW	13 10 50
Emergency Contacts	
Nearest Medical: Centre Humanomics, 2/13 Arnott St, Edgeworth	02 4965 8199
Nearest Hospital: Corner of Edith & Platt Streets Waratah	02 4921 1211
Poison's Information Centre	131 126
Hunter Water	1300 657 000
AGL Electricity	Emergency Line: 132 080
AGL Gas	Emergency Line: 131 909
Waste Disposal and spill clean up services (Economy Sweepers)	0403 255 856
Neighbouring Sites:	
Auspac	4928 4338
Elgas	0401 987 757
PCP	4928 4144
KWS	4928 1513
PWCS	4907 2000
Linfox	0439 405 689
Orica	4908 9300
IPL	1800 033 111
Impact Fertilisers	1800 88 44 88
KBF	02 4928 2577
Neighbouring Patrick Sites:	
Heron Road Weighbridge	02 4928 0414
Raven Street Weighbridge	02 4923 4564 / 0407 184 841
Teal Street Weighbridge	02 4923 4560

Environmental Management Auditing, Monitoring, and Reporting practices

Auditing of the provisions of this PIRMP is to be conducted in accordance with legislative requirements. All environmental incidents are to be reported and investigated in accordance with the provisions of the company's Incident Reporting procedures. The relevant business unit manager is to ensure that the Newcastle Business Manager is advised of any incident that impacts or is likely to impact on the environment.

In addition to the above, environmental issues are to be included as a standard agenda item at all company Toolbox Meetings. Relevant managers are to ensure that environmental concerns are discussed in detail at these meetings and where necessary documented for further consideration.

Approval

Title	Name	Date
Newcastle Business Manager	Paul Smith	30/05/2016

