Pollution Incident Response Management Plan (PIRMP) Newcastle Grain Terminal

Rev No	Reviewer	Review Date
V8	J. Mann, C. Casey, S. Moore, A. Donnelly, C. Nixon, M. Kennedy	June 2019
V9	J. Mann, C. Casey, S. Moore, A. Donnelly, P. Bourke, M. Kennedy	June 2020
V10	J. Mann, M. James, P. Bourke, S. Moore, A. Costa, M. Kennedy	May 2021
V11	J. Mann, M. James, S. Moore, A. Donnelly, A. Costa	April 2022
V12	J. Mann, M. James. S. Moore, R. Hodges, A. Costa	Sep 2022
V13	J. Mann, M. James, A, Costa	Oct 2022
V13	J. Mann, M. James, A. Donnelly, G. Langlands, S. Moore, B. Dwyer, L. McDonnald, A. Costa	Sept 2023
V14	J. Mann, M. James & M. Anderton, M. Kennedy	May 2024
V15	J. Mann, M. James, M. Anderton, P. Carpenter, M. Kennedy	April 2025
V16	J. Mann, M. James, E. Stephens, M. Kennedy	April 2026

CONTENTS

TABLE OF FIGURES

TABLE OF TABLES

1. Purpose and Background

This Pollution Incident Response Management Plan (PIRMP) has been developed to satisfy obligations under the *Protection of the Environment Operations Act 1997 (POEO Act)* and associated *Protection of the Environment Legislation Amendment Act 2011 (POELA Act)* for licensed facilities.

Under GrainCorp's Emergency Management Plan, detailed emergency response procedure is already in place for the classification and management of incidents, across GrainCorp operational sites. Under the provisions of *Section 71 of the Protection of the Environment Operations (General) Regulation 2022*, to allow for the integration of requirements into existing plans in respect to pollution incident response, requirements under POEO legislation have been integrated into these existing plans where appropriate.

This document has been designed as a reference to existing emergency response plans and associated procedure. It also details additional supplementary site-specific information as required under the POEO legislation, in respect to the relevant Environment Protection Licence (EPL) holder.

2. Scope

This PIRMP covers GrainCorp's Newcastle (Carrington) Grain Terminal (the Terminal) located at 150 Denison St, Carrington NSW 2294. This plan applies to all activities, products and services on the site over which GrainCorp has operational control.

3. Legislative Requirements

Specific legislative requirements for the development and implementation of this PIRMP are provided below.

- Part 5.7A of the Protection of the Environment Operations Act 1997 (POEO Act)
- Protection of the Environment Operations (General) Regulation 2022
- Environment Protection License (EPL) 1296

In summary:

- All holders of Environment Protection Licences must prepare a Pollution Incident Response Management Plan (PIRMP) (section 153A, POEO Act).
- The plan must include the information detailed in the POEO Act (section 153C) and be in the form required by the POEO(G) Regulation 2022 (clause 71).
- Licensees must keep the plan at the premises to which the environment protection licence relates or, in the case of trackable waste transporters and mobile plant, where the relevant activity takes place (section 153D, POEO Act).
- Licensees must test the plan in accordance with the POEO(G) Regulation 2022 (clause 75).
- If a pollution incident occurs in the course of an activity so that material harm to the environment is caused or threatened, licensees must immediately implement the PIRMP (section 153F, POEO Act).

4. Terms and Definitions

4.1. Definition of a Pollution Incident

The dictionary of the POEO Act defines pollution as either 'water pollution, 'air pollution', 'noise pollution' or 'land pollution'.

A *pollution incident* means an incident or set of circumstances during or as a consequence of which there 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 a premises, but it does not include an incident or set of circumstances involving only the emission of any noise.

4.2. Definition of Clean-up Action

In relation to a pollution incident, *clean-up action* may include:

a) action to prevent, minimise, remove, disperse, destroy or mitigate any pollution resulting or likely to result from the incident, and

b) ascertaining the nature and extent of the pollution incident and of the actual or likely resulting pollution, and

c) preparing and carrying out a remedial plan of action.

It also includes (without limitation) action to remove or store waste that has been disposed of on land unlawfully.

4.3. Abbreviations

Table 1 - Terms and definitions relevant to the PIRMP

Abbreviation	Explanation
EPA	Environment Protection Authority
PIRMP	Pollution Incident Response Management Plan
POEO Act	Protection of the Environment Operations Act 1997
CLM Act	Contaminated Land Management Act 1997
EPL	Environment Protection License
ERP	Emergency Response Plan
EMS	Environmental Management System

5. Notification of a Pollution Incident

5.1. What must be notified

A pollution incident is required to be immediately notified if there is a risk of 'material harm to the environment', defined under 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 or an amount, or amounts in aggregate, exceeding $50,000 (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.

In order to determine if an incident causes or threatens material harm to the environment (i.e. Pollution Incident) the Incident Management Classification and Escalation Process (Appendix 3) must be implemented.

5.2. Responsibility to Notify

Under Section 148 of 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:

- The person carrying on the activity;
- An employee or agent carrying on the activity;
- An employer carrying on the activity;
- The occupier of the premises where the incident occurs.

Once determined that the incident causes or threatens material harm to the environment, notification must be given immediately, i.e. notification to be given to NSW EPA and Port of Newcastle promptly and without delay, after the person becomes aware of the incident.

All GrainCorp sites follow the GrainCorp Incident Management Classification and Escalation Process to determine the responsibilities for notifying authorities (Appendix 3).

5.3. Emergency Response

If an incident presents an immediate threat to human health or property, Fire and Rescue NSW, the NSW Police and NSW Ambulance Service should be contacted first for emergency assistance (**phone 000**).

Considering the actual or potential material harm to the environment or human health, the PIRMP (this document) must also be immediately implemented, and other response agencies must still be contacted in order to satisfy notification obligations.

5.4. Contaminated Land

Persons whose activities have contaminated land and owners of land who become aware, or ought reasonably to be aware, that the land has been contaminated must notify the EPA as soon as practicable after becoming aware of the contamination, if the contamination meets certain criteria. The duty to notify is a requirement under section 60 of the *Contaminated Land Management Act 1997* (CLM Act).

6. Reference Documentation

The following existing internal plans and procedure documentation underpin this PIRMP.

Table 2 – GrainCorp internal plans and procedures underpinning the PIRMP

Doc. No	Document	Format
HSE-3-01	Incident Management Classification and Escalation Process	Electronic & Physical copy on site
	Newcastle Site Emergency Response Plan	Electronic & Physical copy on site

7. Newcastle PIRMP

7.1. Description of Potential Hazards and their Likelihood

An environmental hazard is a term for any situation or state of events which poses a threat to the surrounding environment including human health as a result of an incident. Incident types that may occur at the Newcastle Grain Terminal are detailed below:

- Minor chemical spills and leaks
- Release of contaminants, including emissions, not in accordance with acceptable limits e.g. fumigant venting
- Uncontrolled release of emissions
- Dust from loading/unloading operations using ship, truck or train
- Spillage of material into stormwater drains
- Spillage of material into harbour from loading gantry and unloading activity

Potential hazards to human health and the environment that have been identified as a result of the above listed incidents include water pollution (including stormwater), air pollution and soil/ground pollution. Table 3 below identifies a list of foreseeable hazards that could occur on this site as a result of routine operational activities and the consequence and likelihood of each with current controls

A Risk Assessment Matrix (Appendix 2) is used to score the residual risk associated with any particular hazard. The purpose of rating risk is to guide decision making on risk management and to eliminate or otherwise reduce the risk to an acceptable level.

Table 3 – Likelihood and consequences assessment of hazards around Newcastle Grain Terminal

Hazard	Type of pollution	Potential Impact	Consequence	Likelihood	Risk Score	Circumstances which may increase the potential of environment or health impact
Spillage of material into harbour from loading gantry and unloading activity	Water	Contamination of surface water from bulk material being spilled into the harbour from loading gantry	Moderate	Rare	**5**	• Rainfall and/or wind would reduce capability to capture and contain any spill event. • Non-operating periods where there are limited personnel on site.
Minor chemical spills and leaks	Soil & Water	Contamination of soil from Hydraulic hose failure	Moderate	Possible	**12**	• Rainfall would reduce capability to capture and contain any spill event. • Non-operating periods where there are limited personnel on site.
	Soil & Water	Contamination of soil and ground water from Application and handling of contact insecticides	Moderate	Unlikely	**6**	• Rainfall would reduce capability to capture and contain any spill event. • Non-operating periods where there are limited personnel on site.
	Soil & Water	Contamination of soil and ground water from Fuel and chemical storage areas	Moderate	Unlikely	**6**	• Rainfall would reduce capability to capture and contain any spill event. • Non-operating periods where there are limited personnel on site.
	Soil & Water	Contamination of soil and ground water from Fuel and chemical dispensing	Moderate	Unlikely	**6**	• Rainfall would reduce capability to capture and contain any spill event. • Non-operating periods where there are limited personnel on site.
Spillage of material into stormwater drains	Soil & Water	Contamination of surface water entering stormwater drains	Moderate	Possible	**12**	• Rainfall would reduce capability to capture and contain any spill event. • Non-operating periods where there are limited personnel on site.

Hazard	Type of pollution	Potential Impact	Consequence	Likelihood	Risk Score	Circumstances which may increase the potential of environment or health impact
Dust from loading/unloading operations using ship, truck or train	Air	Generating dust through truck, train wagon unloading, loading	Moderate	Possible	**12**	• Wind may transport dust to neighbouring site and communities.
	Air	Generate dust through product transfer on conveyor	Minor	Unlikely	**5**	• Wind may transport dust to neighbouring site and communities.
	Air	Generate dust through loading grain ships	Moderate	Unlikely	**6**	• Wind may transport dust to neighbouring site and communities.
Uncontrolled release of emissions	Air	Degrade air quality through release of fumigants	Major	Unlikely	**9**	• Wind may transport dust to neighbouring site and communities. • Non-operating periods where there are limited personnel on site.
Release of contaminants, including emissions, not in accordance with acceptable limits e.g. fumigant venting	Air	Contamination of air and human health exposure through unexpected or not acceptable release of Methyl Bromide or Phosphine	Major	Unlikely	**9**	• Wind and rain may transport emissions to neighbouring site and communities.

7.2. Pre-emptive Actions to be Taken

The following table details descriptions of the pre-emptive actions to be taken to minimise or prevent any risk of harm to human health or to the environment arising from activities occurring at the Newcastle Grain Terminal.

Table 4 - Pre-emptive actions arising from activities at Newcastle Grain Terminal

Activity / Pre-emptive Actions	Figure
<u>Minor Chemical Spill/Leak</u> Only minor quantities of chemicals are stored onsite and any major maintenance activities are undertaken by third party contractors. Chemicals are stored with the appropriate bunding and spill kits are located in areas where there is a potential for a spill to occur including: • Chemical Store; • Oil Store • Maintenance Workshop; • Locomotive Service Area; • Rail Unloading Shed • Western Storage Road Hopper • Main Road Hopper • Wharf	 *Figure 1 - Spill Kit in Chemical Store*
<u>Release of contaminants / emissions not in accordance with acceptable limits</u> All fumigation activities are to be carried out in accordance with applicable requirements (as outlined in the site's EPL). This includes real time monitoring of emission concentration in the silo prior ventilation. A warning red light is triggered if the operating status of the flowmeter is not adequate.	 *Figure 2 - Monitoring Point 2 (fumigation ventilation)*

Activity / Pre-emptive Actions	Figure

Uncontrolled Release of Gas

There is some storage of fumigant gasses onsite, including methyl bromide and phosphine.

All gas cylinders are located and restrained in secured, fenced facilities with restricted access to licensed operators, and appropriate signage in place. All fumigations and subsequent venting activities are carried out by licensed fumigators.

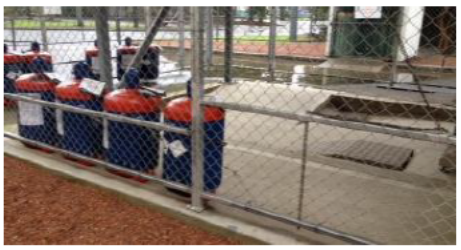

Figure 3 - Methyl Bromide storage

Figure 4 - Facility signage

Dust Generation

Newcastle Grain Terminal has in place an Operational Dust Response Program to mitigate potential dust emissions resulting from various activities onsite. Initiatives and improvements introduced to date under the Operational Dust Response Program include:

- Improvements to ship loader spouts;
- Installation of dust systems at rail-receiver hoppers;
- Installation of rail receival shed water spray systems;
- Installation of exhaust stack broken bag detector systems (with automatic shutdown if high level of TSS is detected)
- Installation of Tapered Oscillating Microbalance (TEOM) Particle Monitoring stations and alarm system.

Figure 5 - Rail receival shed water spray

Storm Water Grates/Mesh

A site stormwater risk assessment has been completed and stormwater grates/mesh have been installed at drain locations which represent the highest risk of spilled grain entering the stormwater system.

Figure 6 - Stormwater drain equipped with sediment mesh

Activity / Pre-emptive Actions	Figure
Spillage of grain into harbour from loading gantry The ship loaders have to be lowered horizontally for the loading belts to run. The loading belts have overload and alignment sensors.	 *Figure 7 - Ship being loaded at Carrington Grain Terminal*

Other pre-emptive actions taken to minimise the likelihood of potential environmental hazards include:

- The implementation of a site-specific Environmental Management Plan (EMP);
- Onsite inductions for employees, contractors and suppliers;
- Monthly environmental inspections.

7.3. Inventory of Potential Pollutants

The main potential pollutants associated with the site activities are the various types of bulk grains (as listed in Table 5) which can generate excessive dust in the absence of dust minimisation controls. Total capacity of throughput for the terminal is approximately 1 million tonnes per annum. This throughput is impacted by the weather conditions season to season.

Table 5 - Potential grain pollutants

Name of Shipped Bulk Material
• **Durum Wheat**
• **Bread Wheat**
• **Sorghum**
• **Barley**
• **Chickpeas**
• **Canola**

In addition, an inventory of all chemicals is maintained in an online database, and monthly audits are undertaken to determine actual volumes stored onsite (Table 6). There are no underground storage facilities at the Newcastle Grain Terminal site. Chemical storage locations are detailed on Appendix 1.

Table 6 - Chemicals stored on site at Newcastle Grain Terminal

Chemical	Quantity	Max Quantity
Dryacide	Approx. 25kg	Approx. 50kg
Chlorpyrifos-methyl (Reldan & Bichlor)	Approx. 40L	Approx. 40L
Methoprene (Rizacon & IGR)	Nil	Approx. 40L
Deltamethrin (K-Obiol Combi)	Nil	Approx. 40L
Phosphine (EcoFume)	Approx. 200kg	Approx. 500L
Methyl bromide	Approx. 800kg	Approx. 500kg
Insectigas	Approx. 80kg	Approx. 80kg
Spinosad (Conserve)	Approx. 70L	Approx. 70L

Chemical	Quantity	Max Quantity
Fenitrothion (Sumithion)*	Approx. 190L	Approx. 190L
Glyphosate	Nil	Approx. 100L
Ethyl formate (Vapourmate)	Approx. 30kg	Approx. 60kg
LYNX WB	Nil	Approx. 500gr
CAVALIER	Approx. 10L	Approx. 10L
EXCALIBUR	Nil	Approx. 1kg
VICTORY	Nil	Approx. 2kg
PULSE PENETRANT	Approx. 5L	Approx. 5L
URAGAN	Approx. 5kg	Approx. 5kg
ROTARY MAX	Approx. 5L	Approx. 5L
FIREPOWER	Approx. 5L	Approx. 5L
HASTEN	Approx. 20L	Approx. 20L
CONTRAC BLOX	Nil	Approx. 10kg
RAMPAGE	Nil	Approx. 5L
GEN FIRSTSTRIKE	Nil	Approx. 5L
SELONTRA	Approx. 10kg	Approx. 10kg
Oils / Fuels / Grease	**Quantity**	**Max Quantity**
Gear Box Oil	Approx. 80L	Approx. 80L
Hydraulic Oil	Approx. 360L	Approx. 360L
Comp Oil	Approx. 80L	Approx. 80L
Torque Con Oil	Approx. 40L	Approx. 40L
EP Oil	Approx. 40L	Approx. 40L
Diesel Fuel	Approx. 300L	Approx. 3,500L
Transformer Oil	Approx. 20L	Approx. 2000L
Grease	Approx. 70kg	Approx. 70kg

7.4. Safety Equipment

Under GrainCorp's Safety Management Program and 'Zero Harm – Safe for Life' campaign, minimum Personal Protection Equipment (PPE) requirements are in place for all Port Terminal Operations for all employees, contractors, visitors and transport operators. Minimum PPE at the Carrington Terminal includes high visibility clothing, enclosed safety footwear, hard hats and safety glasses. Additional PPE (e.g. hearing protection, gloves and RPE) may be required in certain areas on the site – these areas are clearly signed, or as required, based on activity/ risk assessment.

Other onsite safety-related equipment includes:

- Onsite safety sign-in and inductions for all employees, contractors and suppliers;
- Gas monitoring meters (static and hand-held);
- Dust monitoring and alarm systems;
- Emergency stop/shut down and alarm points;
- Chemical wash stations/showers;
- Spill kits;
- Online SDS Register
- Appropriate process and chemical identification signage;
- First aid facility and kits;
- Restricted chemical access.

7.5. Notification Procedure

Incident notification is detailed under the GrainCorp Incident Reporting and Investigation Standard (HSE-3-01) (Appendix 3). Refer to this procedure to determine what information is required to be immediately reported to authorities in the event of a pollution incident.

In response to requirements under changes to 5.7 of the POEO Act regarding pollution incident notifications, the following specific information and contact details are provided for Newcastle Grain Terminal, in the event of an environmental incident.

Excerpt from NSW EPA Website - Protocol for Industry Notification of Pollution Incidents:
https://www.epa.nsw.gov.au/reporting-and-incidents/report-pollution/contacts-chemical-radiation-pollution/notification-protocol

Recent changes to Part 5.7 of the Protection of the Environment Operations Act 1997 (POEO Act) specify new requirements relating to the notification of pollution incidents. The changes take effect from 6 February 2012 and require the occupier of premises, the employer or any person carrying on the activity which causes a pollution incident to immediately notify each relevant authority (identified below) when material harm to the environment is caused or threatened. The following information and procedures may assist those responsible for reporting a pollution incident.

If, under application of internal incident classification procedures, an environmental incident is determined to have caused or threatened material harm to the environment at the Newcastle Grain Terminal, the following internal and external stakeholders must be contacted immediately, in alignment with internal notification and escalation procedures.

Firstly, call 000 if the incident presents an immediate threat to human health or property. Fire and Rescue NSW, the NSW Police and the NSW Ambulance Service are the first responders, as they are responsible for controlling and containing incidents.

If the incident does not require an initial combat agency, or once the 000 call has been made, notify the relevant authorities in the following order. The 24-hour hotline for each authority is given when available:

- **the Appropriate Regulatory Authority (ARA)**
- **the EPA, if it is not the ARA**
- **the SafeWork NSW**
- **the local authority, if this is not the ARA**
- **Fire and Rescue NSW**

Complying with these notification requirements does not remove the need to comply with any other obligations for incident notification, for example, those that apply under other environment protection legislation or legislation administered by SafeWork NSW (previously WorkCover).

7.6. Contact Details

7.6.1. Internal Notification Contact Details

The following table (Table 7), lists the names, positions and 24-hour contact details of those key individuals who:

- are responsible for activating the plan; and
- are authorised to notify relevant authorities under section 148 of the Act; and
- are responsible for managing the response to a pollution incident.

Table 7 - Internal notification contact details

Internal Notifications		
Contact Position	**Contact Name**	**Contact Details**
GrainCorp Carrington Site (*Business Hours Only*)	Site phone number	(02) 4961 8100
Port Operations Manager	[redacted]	[redacted]
Site Manager	[redacted]	[redacted]
Operations Supervisors	[redacted]	[redacted]
	[redacted]	[redacted]
	[redacted]	[redacted]
Pest Control Supervisor	[redacted]	[redacted]
Maintenance Supervisor	[redacted]	[redacted]

7.6.2. External Notification Contact Details

In response to the introduction of changes to 5.7 of the POEO Act, and as part of this PIRMP, in the event of a notifiable pollution incident, and dependent upon nature and scale, decisions to notify neighbours and the local community will be made in consultation with regulatory authorities (Table 6).

After consultation with the regulatory authorities, if required the Site Manager will undertake the early warning of the immediate neighbours in the first instance by phone. The initial notification will be brief and contain only a description of the environmental threat together with instructions what to do. For example:

- Due to a fire on site, we are experiencing elevated dust emissions from the site. Please keep your doors and windows closed until further notice.
- An accidental discharge occurred from the site. Emergency vehicles may possibly be present on roads leading to the terminal.
- Uncontrolled release of chemicals into waterway. Please avoid fishing or utilising the waterway for recreational purposes until the waterway is deemed safe.

Table 8 - External relevant authority contact details

Authority	Local Authority	Contact Details
Fire and Rescue NSW		000
Port of Newcastle		(02) 4908 8200 (Business Hours)
NSW Environment Protection Authority (Pollution Hotline)		131 555
NSW Safe Work Authority		131 050
Local Council	Newcastle City Council	Phone: (02) 4974 2000

7.6.3. Other Key Stakeholders / Immediate Neighbour Notification Contact Details

Table 9 lists nearby neighbours and key stakeholders that may need to be contacted following a pollution incident.

In the event where the site is evacuated as a result of an emergency, generally the NSW Police and Fire and Rescue NSW will take over the site to respond to the incident. For this instance, instructions for coordinating the evacuation of neighbouring residents would be directed by the relevant authorities.

Table 9 - Other key stakeholders and neighbours contact details

Stakeholder	Contact Name	Contact Details
Port of Newcastle Environment Manager (requires immediate notification)	Office	[redacted]
Port Authority of NSW		[redacted]
ONRSR (Rail Authority)	Office	[redacted]
Moda Marine Newcastle	[redacted]	[redacted]
Svitzer	Office	[redacted]
Thales	Office	[redacted]
Anderson Environment and Planning (AEP)	Office	[redacted]
Residents	Not disclosed due to Privacy Act	Not disclosed due to Privacy Act

7.6.4. Newcastle Grain Terminal Contact Details

Contact details for Newcastle's Grain Terminal are publicly available via local directories, from http://www.graincorp.com.au and via signage on the outer security gate. GrainCorp operates a telephone complaint line during business hours. The contact details for Newcastle Grain Terminal are as follows:

Address: 150 Denison Street, Carrington NSW 2294
Phone: (02) 4961 8100

Table 10 - Procedure for stakeholder's communication including existing ERPs

Document	Format
Newcastle Grain Terminal Emergency Response Procedure	Physical Copy on site
GrainCorp Incident Reporting and Investigation Standard (HSE-3-01)	Controlled document on SharePoint

8. Minimising Harm to Persons on Premises

The following section includes actions or arrangements that will be in place to minimise the risk of harm to any persons who will be on the premises or who are likely to be on the premise should an incident occur. Persons likely to be on site include employees of GrainCorp, contractors and sub-contractors.

At all times, minimising harm to persons on premises shall be a priority and is achieved through Engineering, Training, Administrative and PPE controls as the last line of defence. Regular health monitoring of fumigation staff is also undertaken.

Training is provided to GrainCorp employees and any other person entering the site so that they are aware of site hazards and processes in the event of a pollution incident. Training includes inductions (online), toolbox talks and simulated desktop scenarios and simulated exercises. A record of site inductions is recorded on the eLearning online database. A record of the most recent simulated desktop scenario and the attendees are located on the Newcastle Network Drive. A full training matrix for personnel at Newcastle Grain Terminal is maintained on site, including the requirement for attendance at the PIRMP toolbox and spill response fundamentals training.

8.1. Emergency Response – activation of a warning alarm

As a standard on site, the alarm may be raised by anyone noting an emergency situation. It is also crucial that personnel notify the Operations Supervisor or Site Manager of what has occurred, what your actions have been and any identified issues. Response actions will be initiated based on this information.

A combination of communication methods are available. They include:

- Verbal communication between employees and others
- Radio communication
- Audible alarm
- Loud-speaker system
- Siren(s)
- Telephone - including mobiles

Electronic alarms are tested and maintained at regular intervals. Practice evacuations are conducted regularly to meet the requirements of the OHS Management System Program. The alarm system is covered during training and induction processes. Details of evacuation points are provided in Appendix 1.

8.2. STANDARD SITE CONTROLS

8.2.1. Engineering controls

- Fire extinguishers located throughout plant
  - 173 x CO2 3.5kg
  - 53 x CO2 5kg
  - 8 x dry chemical 9kg
  - 4 x dry chemical 4.5kg
  - 1 x dry chemical 2.5kg
  - 3 x dry chemical 1.5kg
  - 3 x external air and water 9L
  - 1 x foam 9L
  - 44 hose reels
- Safety showers and eyewash stations located at the Pesticide and Oil Store, and at the FCOJ Plant
- Caged areas for gassed cylinders located at the Maintenance Workshop and the Fumigation Compound
- Early warning smoke detection system

8.2.2. Administrative controls

Administrative controls to minimise harm to persons on site include;

- Risk assessments for tasks undertaken on site
- JSEAs
- Safety Signage across the site
- Online SDS register
- Site safety, health and environment inspection checklists
- Site Emergency Procedures booklet
- Toolbox talks, safety alerts

8.2.3. PPE

As outlined in Section 7.4, GrainCorp has minimum Personal Protection Equipment (PPE) requirements in place for all Port Terminal Operations. Minimum PPE at the Carrington Terminal includes:

- high visibility clothing;
- enclosed safety footwear;
- hard hats; and
- safety glasses.

Additional PPE may be required on a task-specific basis or in certain areas on the site, which are clearly signed.

Other onsite safety-related equipment includes:

- Onsite safety sign-in and inductions for all employees, contractors and suppliers;
- Gas monitoring meters (static and hand-held);
- Dust monitoring and alarm systems;
- Emergency stop/shut down and alarm points;

- Chemical wash stations/showers;
- Spill kits;
- Online SDS Register
- Appropriate process and chemical identification signage;
- First aid facility and kits;
- Restricted chemical access.

9. Actions Taken During or Immediately After a Pollution Incident

Internal incident management procedures, including the Notification and Escalation Flowcharts and ERPs provide detailed procedure as to immediate action to be undertaken during or immediately after an incident, dependent upon type and classification.

1. Assess and notify of incident if required: Follow the internal incident management procedures. This provides detail on immediate action to be undertaken during or after an incident, dependent upon type and classification.

2. Control the incident (if safe to do so) with available response equipment and procedures.

3. Classify incident and escalate: Follow internal notification requirements and classify incidents according to the Group Incident Notification & Escalation Procedure. The procedure provides details on classifying emergency incidents as either Level One, Two, Three or Four where Four is the most critical incident.

4. Report the Incident: Follow the GrainCorp Incident Reporting and Investigation Standard (**HSE-3-01**) and report to Sphera.

As outlined in Section 7.1, the main hazards to human health and the environment that have been identified at the terminal are:

- Minor chemical spills/leaks
- Uncontrolled gas release e.g. Methyl bromide
- Release of contaminants/emissions not in accordance with acceptable limits
- Dust from loading/unloading operations ship/truck/rail
- Spillage of bulk grain into stormwater drains
- Spillage of bulk grain into the harbour from loading gantry

The following table (Table 11) details the actions to be taken in response to the events listed above. In the event of a pollution incident for the hazards above, the following actions are to be taken:

Table 11 - Site Hazard, potential impact and expected site response

Hazard	Potential Impact	Expected Response
Use and storage of bulk chemicals on site	**Minor Chemical Spills/Leaks causing Soil and/or Water Pollution.** - Generally, small quantities of hazardous materials are held on site and are managed following strict procedures and used by trained and experienced staff. Spill kits are provided as appropriate	• Raise the alarm to alert the site supervisor • Contain spillage to minimise impact • Follow escalation/ notification and PIRMP procedures • Clean up spillage • Work with authorities, as required
Fumigation activities carried on site	**Release of contaminants / emissions not in accordance with acceptable limits causing Air Pollution.** This type of incident is most likely to be a release to air or water. The receiving environment including sensitive receptors may be impacted.	• Cease release immediately • Determine what fumigant that has been released and refer to SDS for appropriate response • Qualify level of exceedance against relevant criteria • Determine if communities/ environment has been harmed ○ If required, call 000 to assist with residents evacuation (refer to evacuation maps in Appendix 1) • Follow escalation/ notification and PIRMP procedures
Use and storage of gas vessels on site (mainly for fumigation activities)	**Uncontrolled Gas Release causing Air Pollution.** This type of emergency will, most likely, include escape of fumigant gases from faulty equipment in the event of a breached storage.	• Alert the site supervisor • Identify the leak location if possible, isolate the system and contain in accordance with SDS, if it is safe to do so. • **If unable to contain** / stop, raise the alarm. **Dial 000** and give name, location and details to the operator, secure the area and, if required, evacuate the site and residential area (refer to evacuation maps in Appendix 1) • Ensure access and guidance for emergency services • Follow GrainCorp OHS and PIRMP reporting requirements

Hazard	Potential Impact	Expected Response
Loading and Unloading operations (ship truck or rail)	**Dust from loading/unloading operations Ship/Truck/Rail causing Air Pollution** Dust generated as a result of grain movement	• Cease operation • Assess dust extraction systems functionality • Assess dust suppression systems functionality • Analyse Weather Station data • Recommence as appropriate • Follow escalation/ notification and PIRMP procedures
Loading and Unloading operations using the conveyors systems on site (ship, truck, rail)	**Spillage of bulk grain into stormwater drains causing Water Pollution** Spills generally contained within storage and conveyor areas (internal). Minimal opportunity for grain to be in proximity to drains.	• Raise the alarm to alert the site supervisor • Contain spillage to minimise impact • Follow escalation/ notification and PIRMP procedures • Clean up spillage • Work with authorities, as required
Loading and Unloading operations using the loading gantries	**Spillage of grain into harbour from loading gantry causing Water Pollution** The ship loaders have to be lowered horizontally for the loading belts to run. The loading belts have overload and alignment sensors.	• Raise the alarm to alert the site supervisor • Contain spillage to minimise impact • Follow escalation/ notification and PIRMP procedures • Clean up spillage • Work with authorities, as required

10. Staff Training and PIRMP Testing

Site staff will be trained in the PIRMP every year via Toolbox, lead by management. Training is provided to GrainCorp employees and any other person entering the site so that they are aware of site hazards and processes in the event of a pollution incident. Training includes inductions, toolbox talks and simulated desktop scenarios and when required simulated exercises. A record of site inductions is recorded on the online eLearn database. A record of the most recent simulated desktop scenario and the attendees are located on the Newcastle Network Drive. A full training matrix for personnel at Newcastle Grain Terminal is maintained at the terminal, including the requirement for attendance at the PIRMP toolbox and spill response fundamentals training.

This PIRMP will be tested annually through a desktop review and/or a practical exercise simulating where a spill or a release of chemical/gas has occurred. The practical exercise will determine the practical effectiveness of the ERP and the PIRMP and any areas for improvement.

The PIRMP will also be tested and reviewed within one month of any pollution incident occurring in the course of the site activities where it can be assessed whether the information included in the PIRMP is accurate and up to date, and the plan is still capable of being implemented in a workable and effective manner.

Table 12 - History of PRIMP testing

PIRMP Testing	
Date	**Method**
Mark Farnham/Peter Lino – 09/05/2014	Desktop Review and Simulation
Mark Farnham/Martin Sierszycki – 18/05/2015	Desktop Review and Simulation
Mark Farnham/Martin Sierszycki - TBA	Desktop Review and Practical exercise
Mark Farnham/Jade Mann/Craig Casey – 11/05/2017	Desktop Review and Simulation
Mark Farnham/Jade Mann/Craig Casey/Anne-Maree Hurst/Paul Thew/Mark Jelbart – 08/05/18	Desktop Review and Simulation
J. Mann, C. Casey, S. Moore, A. Donnelly, C. Nixon, M. Kennedy – June 2019	Desktop Review and Simulation
J. Mann, C. Casey, S. Moore, A. Donnelly, P. Bourke, M. Kennedy – June 2020	Desktop Review and Simulation
J. Mann, M. James, S. Moore, P. Bourke, A. Costa, M. Kennedy – April 2021	Desktop Review and Simulation
J. Mann, M. James, S. Moore, A. Donnelly, A. Costa – April 2022	Desktop Review and Simulation
J. Mann, M. James, S. Moore, R. Hodges, A. Costa – 20 September 2022	Desktop Review and Simulation
J. Mann, M. James, A. Donnelly, C. Casey, G. Palmer, A. Costa – 26 October 2022	Desktop Review and Simulation
J. Mann, M. James, A. Donnelly, G. Langlands, S. Moore, B. Dwyer, L. McDonnald, A. Costa 27/9/2023	Desktop Review and Simulation
J. Mann. J Foreman, P. Carpenter, M. Kennedy, M. Anderton 8 May 2024	Desktop Review and Simulation
J. Mann, M. James, M. Anderton, P. Carpenter, M. Kennedy 10 April 2025	Desktop Review and Simulation

PIRMP Testing	
Date	**Method**
J. Mann, M. James, E. Stephens, P. Carpenter, J. Forman, M. Kennedy 24/02/2026	Simulated Desktop Review (Annual Review)
J. Mann, M. James, C. Casey, E. Stephens, M. Kennedy, J. Pengelly 31/03/2026	Simulated Desktop Review (Post-Incident Review)

APPENDIX 1: MAPS

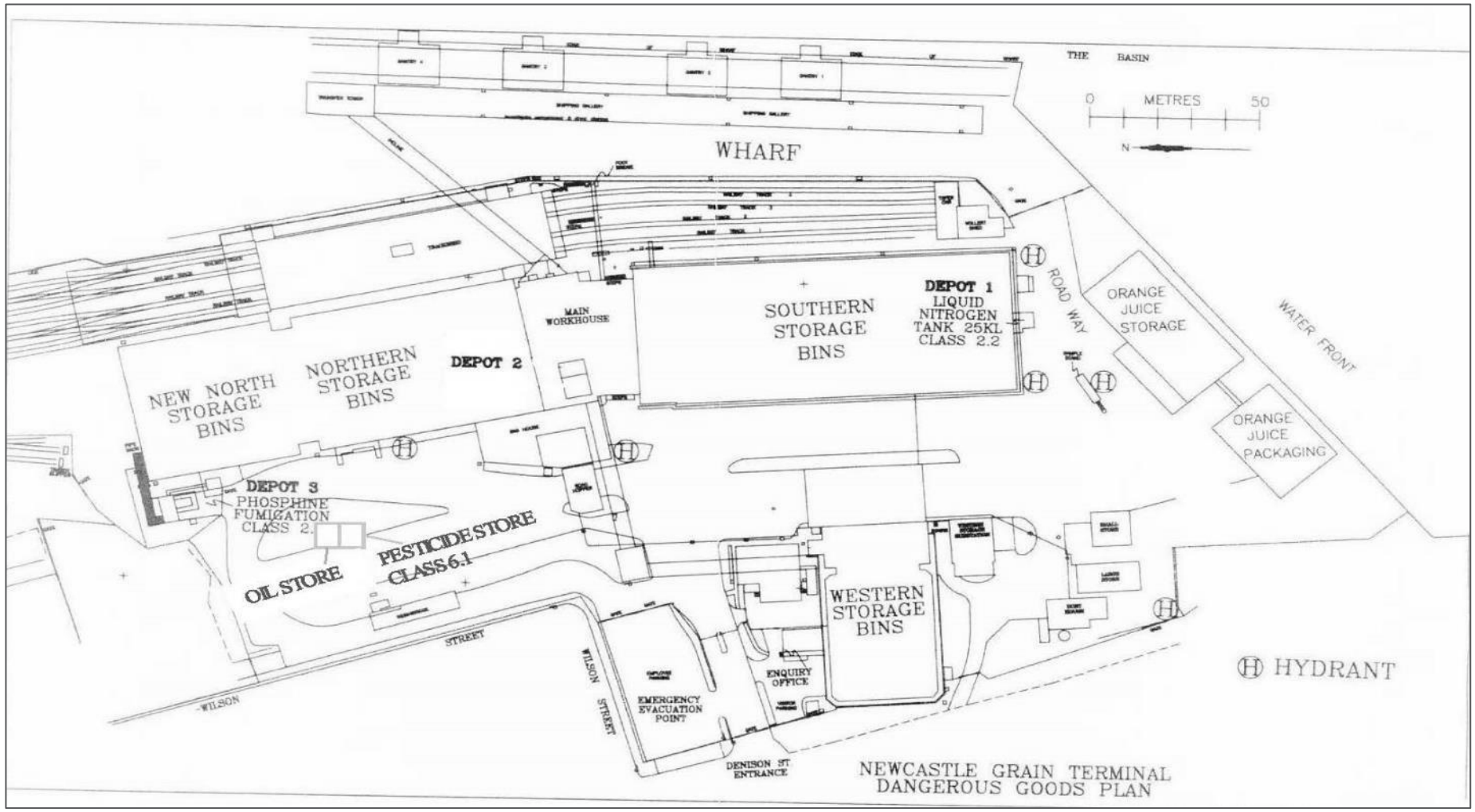

Figure 8 – Map of Newcastle Grain Terminal Site

Figure 9 – Map of Site Monitoring Points (potential sources for air emissions)

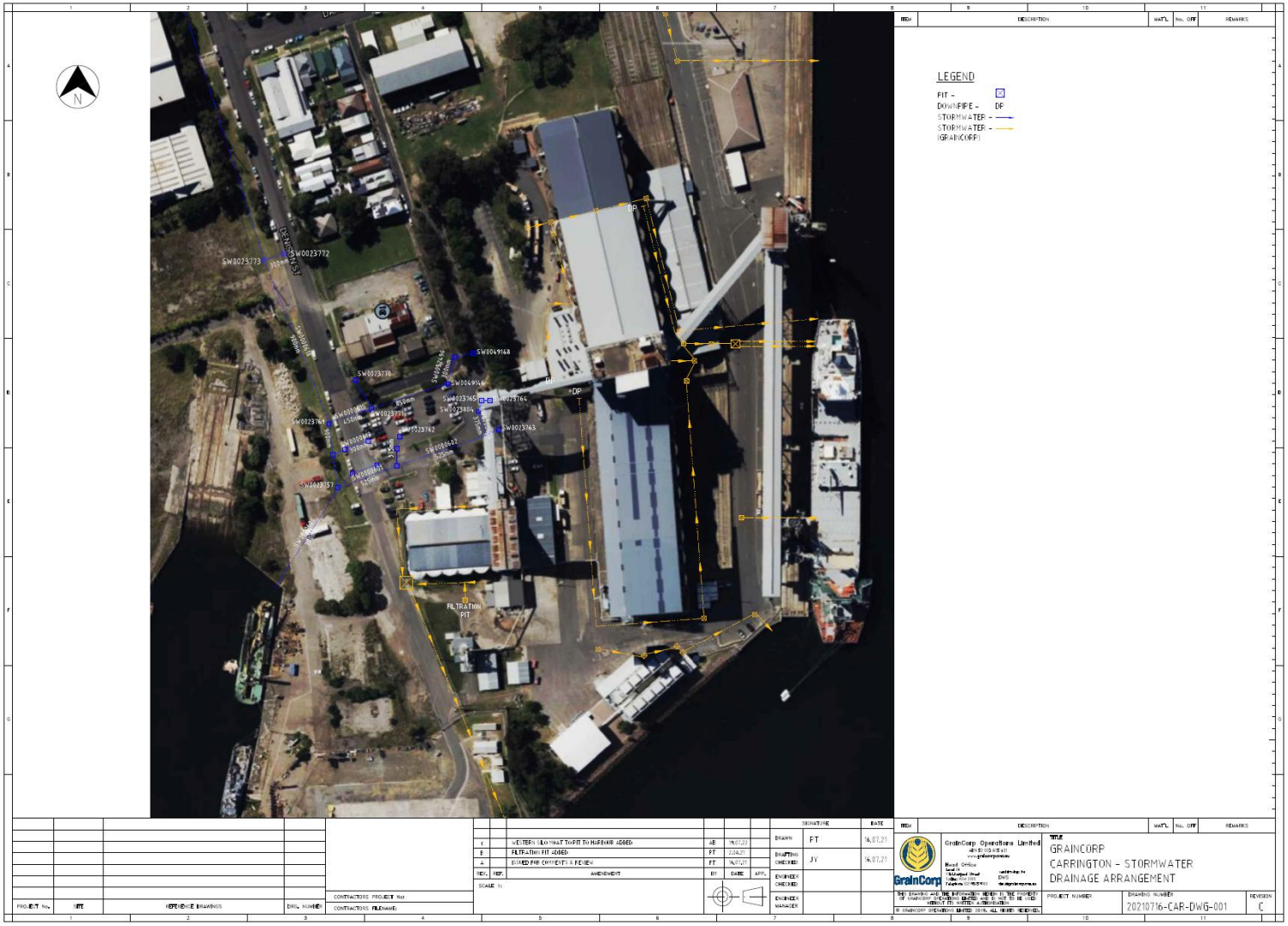

Figure 10 – Map of Newcastle Grain Terminal Stormwater Drains.

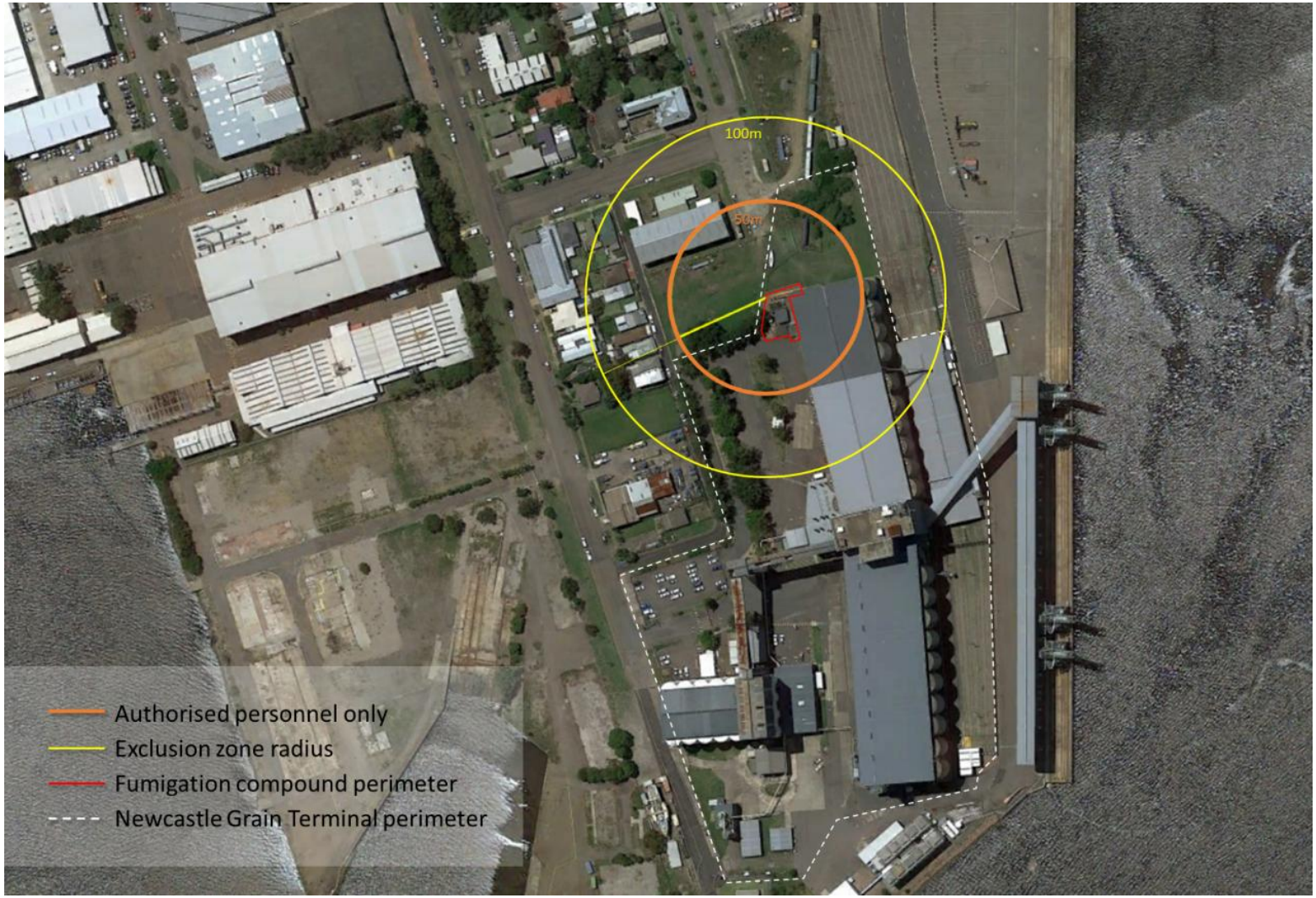

Figure 11 - Fumigation Incident - Exclusion Zones

Figure 12 - Fumigation Incident - Major Leak Exclusion Zone

Figure 13 – Newcastle Grain Terminal LEP Zoning

APPENDIX 2: GRAINCORP RISK ASSESSMENT MATRIX

RISK ASSESSMENT MATRIX

LIKELIHOOD / MOST LIKELY CONSEQUENCE	**Almost certainly will occur** (Occurrence expected to occur on a weekly basis or more frequently)	**Good chance it could occur** (Occurrence expected to occur more than once in 3 months, but less than once a week)	**Likely to occur** (Occurrence expected to occur more than once a year, but less than once in 3 months)	**Unlikely to occur** (Occurrence expected to occur more than once in 3 years, but less than once a year)	**Extremely unlikely to occur** (Occurrence has not occurred and is expected to occur less than once in 3 years)
Disastrous	**Score 25**	**Score 24**	**Score 22**	**Score 19**	**Score 15**
Critical	**Score 23**	**Score 21**	**Score 18**	**Score 14**	**Score 13**
Serious	**Score 20**	**Score 17**	**Score 12**	**Score 9**	**Score 6**
Moderate	**Score 16**	**Score 11**	**Score 8**	**Score 5**	**Score 3**
Minor	**Score 10**	**Score 7**	**Score 4**	**Score 2**	**Score 1**

Level of Risk	Risk Score	Recommended Action
High Risk	**20-25**	Immediately notify Site Manager Immediately implement controls to reduce risk before task commences Long-term control strategies to be implemented & documented in Site Improvement Plan
Medium Risk	**13-19**	Notify Site Manager Dept mgers to review risk ass to ensure all possible control measures are identified & implemented Communicate hazard/aspect details to affected personnel Control hazard/aspect before task commences Communicate/review risk ass at appropriate consultative committees (may also be in SHE IMP)
Low Risk	**7-12**	Notify Department Manager Implement controls where possible Communicate hazard/aspect details to affected personnel Review risk assessment as scheduled or as change occurs
Very Low Risk	**1-6**	Notify your direct manager/team leader Communicate hazard/aspect details to affected personnel Review risk assessment as scheduled or as change occurs

HIERARCHY OF CONTROL

Engineering Controls

1st Elimination / Design Out - Try to ensure that hazards/aspects are "designed out" when new materials, equipment and work systems are being planned for the workplace.

Substitution/ Replacement - Remove the hazard/aspect or substitute with less hazardous materials, equipment or substances

3rd Safer / Redesigned Process - Adopt a safer/less environmentally harmful process.

4th Isolation - Enclose or isolate the hazard/aspect through the use of guards or remote handling techniques.

5th Effective Ventilation - Provide effective ventilation through local or general exhaust ventilation systems.

Administrative Controls

6th Administration - Establish appropriate administrative procedures such as:

- Process documentation & SOPs
- Job rotation to reduce exposure or boredom; or timing the job so that fewer workers are exposed;
- Routine maintenance and housekeeping procedures;

or

- Training on hazards and correct work procedures.

Personal Protective Equipment

7th Personal Protective Equipment - Provide suitable and properly maintained Personal Protective Equipment and training in its use.

APPENDIX 3: GRAINCORP INCIDENT MANAGEMENT CHART

Incident Management Classification and Escalation Process

This matrix is designed to ensure that critical incidents are immediately notified and appropriately escalated within the organisation. The matrix allows our people at the front line to manage the incident while ensuring that senior management and, if appropriate, the CEO and members of the Board, are informed in a timely manner.

Step 1: Use the **Incident Classification Matrix** below to classify the incident (default to the higher level if in doubt).

Step 2: Use the **Incident Notification Table** below to determine who needs to be notified.

- ***Please note*** that some trigger events need another trigger in that section to apply.

Note: a 'Critical Incident' is defined as a level 4 or 5 incident.

INCIDENT CLASSIFICATION MATRIX Actual or Potential (Worst Credible) Consequence	**Extreme (Level 5)**	**Major (Level 4)**	**Moderate (Level 3)**	**Minor (Level 2)**	**Negligible (Level 1)**
Safety	Fatality or significant permanent injury. Involves a fire, explosion or smoulder (smoke or fumes) and one other trigger in this level 5 section.	Injury resulting in a loss of one or more full shifts – (ie a Lost Time Injury – LTI) Involves a fire, explosion or smoulder (smoke or fumes) and one other trigger in this level 4 section.	Injuries requiring Medical Treatment (MTI) but where no time was lost. Involves a fire, explosion or smoulder (smoke or fumes) and one other trigger in this level 3 section.	Injury requiring First Aid treatment only. Involves a fire, explosion or smoulder (smoke or fumes) and one other trigger in this level 2 section.	Injury requiring no treatment – report only.
Health	Severe illness or chronic exposure resulting in fatality or significant life shortening effects.	Illness or significant adverse health effect needing a high level of medical treatment or management.	Mild illness or health effect and/or some functional impairment that needs some treatment but is usually easily managed, medically.	Minor illness or health effect with no functional impairment, treatment is optional, with no medical intervention.	Illness or effect with limited or no impact on ability to function – no treatment necessary.
Environment	Loss of containment / spills outside site boundary meeting any of the Property Damage, Regulatory or Community / Reputation criteria below. Destruction of, or permanent damage to, important populations of habitat, species, or natural environment.	Loss of containment / spills outside site boundary meeting any of the Property Damage, Regulatory or Community / Reputation criteria below. Localised and measurable medium-term (e.g. temporary) impact on habitat, species or natural environment.	Loss of containment / spills within site boundary meeting any of the Property Damage, Regulatory or Community / Reputation criteria below. Localised and measurable short-term (e.g. temporary) impact on habitat, species or natural environment.	Loss of containment / spills meeting any of the Property Damage, Regulatory or Community / Reputation criteria below. Localised but immaterial impact on or impairment of habitat, species or natural environment.	Loss of containment / spills meeting any of the Property Damage, Regulatory or Community / Reputation criteria below. No discernible impact on or impairment of habitat, species or natural environment.
Property Damage	Damage to or loss of GrainCorp or third-party property, products, plant or equipment, including clean-up costs, remedial / corrective actions, cumulatively >$500,000.	Damage to or loss of GrainCorp or third-party property, products, plant or equipment, including clean-up costs, remedial / corrective actions, cumulatively between $50,000 and $500,000.	Damage to or loss of GrainCorp's or third-party property, products, plant or equipment, including clean-up costs, remedial / corrective actions, cumulatively between $10,000 and $50,000.	Damage to or loss of GrainCorp's or third-party property, products, plant or equipment, including clean-up costs, remedial / corrective actions, cumulatively <$10,000.	Damage to or loss of GrainCorp's or third-party property, products, plant or equipment, including clean-up costs, remedial / corrective actions, deemed negligible.
Assets and Supply Chain	Extended loss of use of assets, significant supply chain / business interruption or widespread and sustained electronic systems outage with a time impact of >24 hours or total financial impact >$1M.	Extended loss of use of assets, significant supply chain interruption / business interruption or widespread and sustained electronic systems outage with a time impact of >12 hours or total financial impact between $1M and $500,000.	Loss of use of assets, supply chain / business interruption or sustained electronic systems outage with a time impact of >6 hours or total financial impact of between $500,000 and $200,000.	Loss of use of assets, supply chain / business interruption or electronic outage with a time impact of >2 hours or total financial impact of between $200,000 and $50,000.	Loss of use of assets, supply chain / business interruption or electronic outage with negligible time impact or financial impact <$50,000.
Regulatory & Legal	Is 'notifiable' to an Authority / Regulator AND the Authority / Regulator attends the scene of the incident AND/OR commences an investigation. Involves a non-compliance of a licence, authority, permit, approval or law that has either the actual / potential for a civil penalty or fine the maximum of which is > $50,000 or a criminal penalty. All incidents of suspected or actual fraud, bribery or corruption, events of significant illegal activity, or data breach / privacy breach events.	Is 'notifiable' to an Authority / Regulator or the Authority / Regulator issues a notice or intends to/or attends the scene / conducts an inspection. Involves a non-compliance of a licence, authority, permit, approval or law that has either the actual/potential for a civil penalty or fine the maximum of which is <$ 50,000. Significantly exceeded legislated criteria or state policy limit.	Involves a non-compliance of a licence, authority, permit, approval or law that may result in a minor penalising action (quantum not determined), and any intervention by an Authority or Regulator is limited to a field report (or similar). A visit by a regulator following a complaint that results in no penalty but where a report is issued with follow up action. Exceeded legislated criteria or state policy limit.	Involves a non-compliance of a licence, authority, permit, approval or law with no penalising action, and no intervention by an Authority or Regulator. A visit by a regulator following a complaint that results in no penalty or follow up action. Legislated criteria or state policy limit at risk of not being met.	Minor breaches of company policy or procedure by individual staff members with no external actions or impact.
Community / Reputation	Extended national adverse media coverage. Brand devalued. Customers/ suppliers abandon relationship..	Sustained adverse, local to national media reference. Brand image has potential of being tarnished. Minor disruption to public activities or a third party's or our own business operations.	A clustering of complaints. Potential adverse local media reference. Potential for brand to be questioned.	Isolated complaint from an individual with the potential for adverse community discussion. Isolated adverse local media reference.	Isolated complaint from a local individual.
Product Safety, Quality or Contamination	A product recall or product withdrawal is planned or has been initiated following determination that the affected product could harm human health.	A product contamination, product specification or product quality failure event that has the potential to impact customers or the public with a financial impact >$200,000.	A contamination, specification or quality incident that results in a potential or actual claim (or rework) of up to $100,000 and can be resolved internally (i.e. without external expert support).	A customer complaint or incident resulting in a potential or actual claim (or rework) under $5,000 (e.g. credit note or product reject), which has no harm to human health or the public.	Minor incident with no resulting impact on the customer.

INCIDENT ESCALATION	**CRITICAL INCIDENTS**		**NON-CRITICAL INCIDENTS**		
	Extreme (Level 5)	**Major (Level 4)**	**Moderate (Level 3)**	**Minor (Level 2)**	**Negligible (Level 1)**
Safety **Health** **Environment**	**CRITICAL SHE INCIDENT** Site/Plant/Terminal Manager to immediately notify: • SHE Manager/ Environmental Advisor (for environmental incidents) • Health and Wellbeing Manager (for injuries) • Regional Operations Manager or Ports Operations Manager in ECA • National Operations Manager National Operations Manager to follow **Critical Incident Escalation Process**		**NON-CRITICAL INCIDENT** Incident to be managed by local management as part of BAU activities. Standard Incident Management investigation and resolution protocols apply.		
Property Damage **Assets and Supply Chain** **Regulatory & Legal** **Community / Reputation** **Product Safety, Quality or Contamination** **External Disasters**	**CRITICAL INCIDENT** Site/Plant/Terminal Manager to immediately notify: • Regional Operations Manager or Ports Operations Manager in ECA • National Operations Manager National Operations Manager to follow **Critical Incident Escalation Process**				

Incident Management Chart

INCIDENT OCCURS

If an immediate threat to life, property or environment exists, manage / control the threat of situation **immediately**.
Call emergency services or regulatory authorities as required.

Is the incident an **ACTUAL** or **POTENTIAL** level 4 or 5 or Recordable Injury?

NO → **Manage in accordance with business requirements**

YES

Site Manager to notify:

- Relevant Line Manager
- Relevant Head of Ops/ Commerical
  - Group General Counsel
  - GM Ops/ Commercial
  - COO
  - GM Risk
- CEO (informed of Level 5 and LTI)

For SHE Incidents, (additional)

- Site SHE Manager / H&W Manager (for injuries)
- SHE Business Partner/ Environmental Manager
- GM of SHE
- Chief People and Transformation

Within 24 hours – Site Manager to Complete SHE Incident Escalation Report by email

Report "notifiable" incidents to relevant regulatory body

Notify Legal Team Incidents as appropriate

Are critical functions, activity, business disruption potentially impacted >24-hours?

NO → **Incident Investigation Process initiated as per GNC-STD Incident Reporting and Management**

YES → **Crisis Management Team (CMT) initiated by GM Risk**

Escalation / notification to occur immediately as made aware via phone or text (which must be acknowledged).

GrainCorp