



POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN (PIRMP)

FOR

SUGAR AUSTRALIA – GLEBE ISLAND TERMINAL

EXTRACT

Site:

This plan covers the Glebe Island Terminal site.

Address:

Lot 1 Sommerville Road, Rozelle NSW 2036

Contacts – Occupier:

-Depot Manager – Scott Donnelly Ph. 02 8572 7628

-Shift Team Leader (manned 24/5): 02 8572 7622 or Mobile 0439 467 428

-Emergency Services (0) 000

note: This is an extract from GL-EHS-RD-002 Glebe Emergency Response and PIRMP dated 19/3/19 that relates to Pollution Incident Response

Contents List

Item No.	Contents	Page Number
1.0	Purpose	4
2.0	Scope	4
3.0	Definitions	4
4.0	Emergency Response Procedure	5
4.1	Discovery of an Emergency	5
4.1.1	Contacting Emergency Services	5
4.2	Lifts	5
4.3	Occupants and Visitors with a disability	6
5.0	Communication	6
5.1	Emergency Activation	6
5.2	Contacting Neighbouring Facilities	7
5.3	Communications Equipment	7
6.0	Emergency Planning Committee (EPC)	8
7.0	Emergency Control Organisation (ECO)	9
7.1	Chief Warden	10
7.2	Chief Warden – After Hours	11
7.3	Comms Officer	12
7.4	Area Warden (Ground Floor)	13
7.5	Warden	14
7.6	First Aiders	14
8.0	Emergency Contact List	15
9.0	Potential Emergency Scenarios / Incidents / Events	16
9.1	Medical	16
9.2	Dust Explosion	16
9.3	Fire	17
9.3.1	First Attack Fire Fighting	18
9.4	Confined Space	19
9.4.1	Confined Space Rescue	19
9.4.1.1	Rescue Equipment	19
9.4.1.2	Rescue Plan	20
9.4.1.3	Rescue Rehearsal	20
9.5	Work at Heights	20
9.5.1	Suspension Trauma	20
9.6	Environmental Incident (or loss of containment)	21
9.6.1	Sugar Spillage to Harbour	21
9.6.2	Chemical Spills to harbour	22
9.6.3	Particulate emissions	22
9.6.4	Loss in Containment	22
9.7	Natural Gas Leak	23
9.8	Person threat/intrusions/trespass	24
9.9	Neighbouring Site Fire/Explosion	25

Sugar Australia

Glebe Emergency Plan and PIRMP (EXTRACT)

Document No GL-EHS-RD-002



<u>Item No.</u>	<u>Contents</u>	<u>Page Number</u>
9.10	Neighbouring Site Chemical Spill	25
9.11	Traffic	26
9.12	Terrorist Threat/Bomb Threat	26
9.13	Maritime Security Incident	27
9.14	Storm Events	27
9.15	Other Incidents	28
10.0	Emergency Assembly Area	28
11.0	Site Security	28
12.0	Liaison with Emergency Services	29
13.0	Dealing with the Media	29
14.0	Containment of Fire Water and Debris	29
15.0	Salvage	29
16.0	Training Requirements	30
17.0	Debrief and Drills	30
17.1	Debrief	30
17.2	Drills	31
18.0	Records	31
18.1	Copies of Site Emergency Plan	31
18.2	ECO Equipment Location	31
18.3	Maintenance Records Location	32
18.4	Prescribed Documents / Records Locations	33
19.0	References and Supporting Documents	33

Appendix List

<u>Item No.</u>	<u>Appendix</u>	<u>Page Number</u>
A	Emergency Radio Protocol	34
B	Bomb Threat	35
C	Personal Emergency Evacuation Plan (PEEP) Template	38
D	Glebe Incident Flipchart	39
E	Evacuation List from Rapid Global Instructions	40
F	Glebe Maps	42
F-1	Glebe Map	42
F-2	Evacuation Routes – Ground Floor	43
F-3	Evacuation Routes – Roof to Ground Floor	44
F-4	Precinct Map showing secondary (Ports) assembly Area	45
F-5	Aerial View of Glebe Island Precinct	46
G	Environmental Risk Assessment and Management Plan	47
H	Combustibles and Potential Pollutants: List and Map	49

1.0 Purpose

The purpose of the Emergency Plan & PIRMP is to operate a quick and effective response to an emergency/incident/event so that injury to personnel, material or environmental damage and disruption to business continuity is minimised at the Glebe Island Terminal and neighbouring businesses.

This document also covers the requirements of the "Protection of the Environment Legislation Amendment Act 2011 (POELA Act)".

2.0 Scope

This Emergency Plan & PIRMP is applicable to employees, contractors and visitors at the Glebe Island Terminal and neighbouring businesses.

Potential Emergency/Incidents/Events identified that may threaten life, property or the environment, have been risk assessed and include:

- Medical emergency
- Dust Explosion (including system activation/malfunction)
- Fire
- Confined Space incident
- Work at Heights incident
- Environmental incident or loss of containment (Including: Chemical / Fuel Spill)
- Natural Gas Leak
- Neighbouring Site Fire/Explosion
- Neighbouring Site Chemical Spill
- Traffic incident
- Terrorist Threat/Bomb Threat
- Intrusion/trespass or personal threat
- Storm event
- Maritime security incident (See Maritime Security Plan-Depot Manager's Office)

3.0 Definitions

Assembly Areas	Convenient, safe locations where personnel gather and are accounted for in the event that an evacuation is required.
ECO	Emergency Control Organisation.
EWIS	Emergency Warning and Intercommunication System.
EPC	Emergency Planning Committee.
MCP	Manual Call Point – Break Glass.
PIRMP	Pollution Incident Response Management Plan

4.0 Emergency Response Procedure

4.1 Discovery of an Emergency

When an emergency situation is identified, the following steps shall be taken:

- Warn anyone in immediate danger.
- Make the area safe and shutdown plant / equipment, if safe to do so (e.g. isolate the source of any harmful energy).
- Immediately report the emergency, by at least one of the following methods:
 - 2 way radio using the standard “Emergency, Emergency, Emergency” repeated over the two-way radio, as per the Emergency Radio Call Protocol – Appendix A.
 - Phone the Shift Team Leader 0439 467 428.
 - Ask others in the area to raise the alarm.
 - Activate a Manual Call Point – Break Glass (MCP).
 - Contact Emergency Services (0) 000.

The Chief Warden shall:

- Ascertain the nature of the emergency and determine the appropriate action.
- Ensure emergency services have been notified – (0) 000.
- Ensure the Comms Officer and Area Warden has been advised of the situation (i.e. by face to face, 2-way radio, mobile phone).
- If necessary, proceed to Main Fire Panel or other MCP to activate the fire alarm and call the brigade.
- If necessary, proceed to the Control Room and the Citect Scada Emergency Evacuation page (F12) to activate the site Evacuation alarms or use the Emergency Warning Intercommunication System (EWIS) – intercom/microphone system. This will control stop the plant and initiate a site evacuation without calling the fire brigade.

Should the Chief Warden and / or deputies not be available, the most senior member of site operations shall assume the role of Chief Warden.

4.1.1 Contacting Emergency Services

Dial (0) 000 (or 112 as secondary, if unable to reach 000) for emergency services assistance, if required. The operator will ask what service you require **Fire – Ambulance – Police**. Remember preservation of life is the first priority.

On being connected to the emergency service state:

- The exact location and address;
- The nature of the emergency;
- The number of casualties and extent of injuries, if known; and
- If a fire is a likely result.

Follow any directions as indicated by the emergency services communications officer and remain on the phone until told otherwise.

5.2 Contacting Neighbouring Facilities

When an emergency situation arises that may pose a risk to Health, Safety or the Environment to a neighbouring site, and has the potential to affect neighbouring facilities and / or public safety, there is an obligation for key person(s) to be informed at neighbouring facilities to ensure duty of care obligations are met.

The contact details are located on the Incident Flipchart (see **Appendix D**). This will include Cement Australia; Gypsum Resources Australia; Port Authority of NSW (who can notify the Cruise Ship Terminal, Offices etc)

During business hours the Comms Officer is responsible to contact each key person at neighbouring facilities in the order they appear in the Incident Flipchart. After hours the Shift Team Leader will be responsible.

8.0 Emergency Contact List

See Glebe Incident Flipcharts located:

- Depot Manager's Office
- Control Room
- Maintenance Office (upstairs)
- Workshop
- Rear Emergency Exit (near lift)

See **Appendix D** for Copy

9.0 Potential Emergency Scenarios / Incidents / Events

9.6 Environmental Incident (or loss in containment)

An 'environmental incident' refers to any activity performed on site, whose consequences may adversely affect the surrounds in which the site operates (e.g. air quality, water, land, natural resources, flora, fauna, humans and their interrelation). Environmental incidents may include (but not limited to);

- sugar spillages and leaks into waterways
- chemical and fuel spills into waterways
- particulate emissions (sugar dust)
- loss in containment (on site)

An environmental incident with a potential to impact on local environment (i.e. waterways) may require a response on behalf of the Port Authority of NSW.

The Sydney Ports Incident Controller is the person appointed by Port Authority of NSW to direct the overall response operation and to co-ordinate the activities involved in the incident response or clean up. The Incident Controller has overall operational decision making responsibility and is supported by other operational and advisory personnel.

Unless delegated otherwise by the Chief Executive Officer of Port Authority of NSW this role is filled by the Senior Manager, Marine Operations or Manager, Marine Services.

9.6.1 Sugar spillages to harbour

Sugar (or sugar residues) spilled into the harbour in significant quantities may adversely impact on marine life as well as aquatic flora and fauna.

1. If sugar (or sugar residues) have spilled into the harbour during ship unloading operations, notify the ship's Master to stop the ship discharge and then contact the Chief Warden and Depot Manager.
2. The Chief Warden is to notify Harbour Control (Port Authority of NSW) and await further instructions.
3. The Depot Manager (following discussion with the National EHS Manager) is to notify the Environment Protection Authority (EPA). Depending on the severity of the event, other agencies (not limited to) NSW Roads and Maritime, NSW Fire and Rescue and Leichardt Council may also need to be contacted.
4. If sugar (or sugar residues) have spilled onto the wharf, the spillages shall be promptly contained to minimise its spread. Residues shall be disposed of in accordance with local government legislation.

9.6.2 Chemical spills to harbour

Chemical spills (e.g. diesel and other oil residues) into the harbour during shipping activity may adversely impact marine life, aquatic flora and fauna as well as impact on the quality of local waterways.

1. If chemicals (e.g. oil residues, diesel fuel) have leaked or spilled into the harbour during shipping operations, advise the ship's Master. The ship has spill response equipment such as dri-sorb, mats and pumps on board, which may be deployed during a spillage.

The ship also has a Shipboard Oil Pollution Emergency Plan (SOPEP) Manual to assist personnel in dealing with unexpected discharge of oil or noxious liquid.

Notify the Chief Warden and Depot Manager.

2. The Chief Warden shall notify Harbour Control (Port Authority of NSW) and await further instructions.
3. The Depot Manager (following discussion with the National EHS Manager) shall notify the Environment Protection Authority (EPA). Agencies (not limited to) NSW Roads and Maritime, NSW Fire and Rescue and Leichardt Council may also need to be advised depending on the severity of the event.

9.6.3 Particulate emissions

Particulate sugar dust emissions into the atmosphere from a dust collector (or related plant failure) may have short term impacts on the air quality in the immediate area. Dust collectors and filters shall be maintained regularly (as part of a preventative maintenance and inspection program) to minimise the risk of a failure and potential discharge into the atmosphere. (obscuration meters monitor the dust levels emissions whenever the dust collectors are in operation)

1. If sugar dust is emitted into the atmosphere, minimise the spread of the emission.
2. Shut down the plant and notify the Chief Warden and Depot Manager.
3. The Chief Warden is to notify Harbour Control (Port Authority of NSW) and await further instructions. The Depot Manager (following discussion with the National EHS Manager) may contact the Environment Protection Authority (EPA).
4. Clean up residual dust spilled in the area. Arrange for the repair of the damaged dust collection equipment.

9.6.4 Loss in containment

All internal Terminal ground floor drains are directed to the Trade Waste Tanks and contained. External drains are stormwater drains and flow to the harbour.

Resources on site include:

Spills Kits – Bulk Liquid Loading; Entry to the Pack Room; Level 8; Boilers

SDS (Safety Data Sheets) – Copies of all SDS are located in the Lab and on ChemAlert; other copies at point of use for some chemicals

SPILLS may be **minor** (usually **less than 1000 Litres** and is localised within an area of the site) or **major** (greater than 1000 Litres, extending beyond larger areas on the site or beyond the boundaries of the premises, with a potential to affect the local environment)

A loss in containment on site (from liquid sugar waste, chemicals, fuel or other residues) may have adverse effects on the local environment and/or may cause injury to persons (eg burns, fumes).

In the event of major spill, contact the Chief Warden and Depot Manager.

Evacuate the immediate area

Post sentries or barricade to prevent anyone entering the area

The Chief Warden is to:

1. Ensure the immediate area has been evacuated
2. Identify chemicals that are involved (see SDS for more information: consider risks to the environment; risks to people burns/fumes/vapours/reaction with other substances; spill response)
3. Shutdown plant/isolate supply if safe to do so. This may include shutting down air conditioning units to avoid drawing fumes into buildings.
4. Estimate quantity of chemical released
5. Determine whether the spill can be managed by the site or whether assistance is required from Emergency Services. Contact emergency services if required, Dial 000 and ask for Fire Brigade.
6. Determine whether a full or partial site evacuation is required
7. Utilise all appropriate slip/leak response equipment as per SDS and/or directing the source of the spillage into a bunded area (i.e. bulk weighbridges or pallet bunds).
8. Block or bund drainage pathways to prevent spill from entering any nearby waterways.
9. Establish a clear area for the Emergency Services to position their equipment.
10. Hand over control to and assist Emergency Services (provide them copy of the SDS).
11. Depot Manager to prepare a recovery program to deal with all released material.
12. Contact Wilmar Manager Environment and Sustainability to assist with advice.
13. The Depot Manager (following discussion with the National EHS Manager) is inform the EPA and Sydney Water is the spillage is suspected to have impacted on the local environment (eg spill has directly / indirectly entered surrounding waterways
14. Where required, arrange for the removal of waste material, using a licensed Trade Waste Contractor only.

9.9 Neighbouring Site Fire/Explosion

Neighbouring sites that could present fire and / or explosion hazards to Sugar Australia include: Cement Australia (Powdered Cement); CSR Gyprock (Powdered Gyprock); passing traffic (Cigarette butts).

An assessment shall be made of the prevailing winds, prior to ordering an evacuation of the site.

In the event of smoke or fumes being carried over the Sugar Australia site the Chief Warden shall consider options for alternative emergency assembly areas and engage the Area Warden to move evacuated employees as is considered appropriate.

Any decision to return to the workplace shall be undertaken by the Chief Warden in consultation with Emergency Services and neighbouring business representatives.

9.10 Neighbouring Site Chemical Spill

Neighbouring sites that could present chemical spill hazards to Sugar Australia include: Cement Australia (Powdered Cement); CSR Gyprock (Powdered Gyprock); Vehicle (rollover, spills of contents, fuel leak).

On receiving information of a chemical spill at any of these locations the Chief Warden shall make an assessment of the prevailing winds, prior to ordering an evacuation of the site.

In the event of fumes being carried over the Sugar Australia site the Chief Warden shall consider options for alternative emergency assembly areas and engage the Area Warden to move evacuated employees as is considered appropriate.

Any decision to return to the workplace shall be undertaken by the Chief Warden in consultation with Emergency Services and neighbouring business representatives.

9.13 Maritime Security Incident

Under the Commonwealth *Maritime Transport and Offshore Facilities Security Act*, a '**maritime security incident**' refers to any unlawful interference to maritime transport. 'Unlawful interference' can imply any act/s which causes interference, damage to, or compromises the safe operation of maritime personnel, facilities or property.

There are currently three (3) maritime security levels in place:

Maritime Security (MARSEC) Level	Description
1	Default level – no specific threat, but heightened level of awareness required.
2	Non specific threat against critical infrastructure.
3	Specific threat. A terrorist incident is imminent or has occurred.

All Port Security related incidents (e.g. trespass) should be referred to Harbour Control (Sydney Ports) in the first instance. Harbour Control (Port Authority of NSW) shall contact the Water Police (in the case of a "waterside" incident).

In the case of a major maritime security incident (e.g. a known terrorist threat)

1. Await instructions from Port Authority of NSW, (either via the Security Manager (SPC) or Port Facilities Security Officer (PFSO)).
2. Prepare to evacuate all personnel on the site by activating the alarm in the fire alarm panel.
3. Chief Warden shall ensure that all persons are accounted for.
4. In the case of unauthorised or unlawful access into a "secure port area", notify the White Bay/Glebe Island Security patrol.

Further detail can be found in the Maritime Security Plan located in the Depot Manager's Office

14.0 Containment of Fire Water and Debris

The Sugar Australia site is located on land that is environmentally sensitive given its close proximity to the Sydney Harbour. The site operates under an EPA licence.

In the event of an emergency where Emergency Services are activated, every reasonably practicable attempt to prevent fire water run off reaching the harbour must be taken.

Following stand down from an emergency situation involving the use of fire water, the Depot Manager shall assess potential environmental impacts and report any off site discharges to the EPA.

Appendix F-5 – Aerial View of the Glebe Island Precinct



Appendix G – Environmental Risk Assessment and Management Plan

Pollution Event	Consequence	Risk Score Before Control	Management plan to control risk.	Risk Score After Control
Potential for a major failure of the conveyance system from the ship to the shore to cause a spillage of sugar into the harbor.	Spillage to the harbor waterways.	M 6	Programmed Maintenance of conveyor and hopper. Designated flow rate for conveyor to avoid spillage. Communication between ship and shore based operations.	L 3
Potential for a significant quantity of sugar to be spilled at the base of the conveyor leading up to the silo. A pile of sugar could be deposited on the wharf. In rainy conditions sugar could then be washed into the harbor.	Spillage to the harbor waterways.	M 6	Programmed Maintenance of conveyor and hopper. Designated flow rate for conveyor to avoid spillage. Communication between ship and shore based operations. Site walks	L 3
There is potential for a sugar dust explosion where there are large quantities of dust in a restricted space such as the conveyor housing.	Spillage to the harbor waterways.	M 12	Regular conveyor wash downs after every ship discharge. Hazardous Area Compliant electrical equipment used in this area. Regular dust cleaning and inspections	L 3
Potential for leakage of sugar dust from dust extractors.	Emission of sugar dust to atmosphere	M 6	Use of dust monitoring equipment interlocked to the plant	L 2
Potential for a bulk liquid sugar tanker to either leak or be damaged and cause a spill to occur that could be washed into the waterways.	Spillage to the harbor waterways.	L 3	Fleet maintenance. One Way traffic flow. Spill kits on site	L 2
Potential for a bulk crystal sugar tanker to either leak or be damaged and cause a spill to occur that could be washed into the waterways in the event of rain.	Spillage to the harbor waterways.	L 3	Fleet maintenance. One Way traffic flow. Spill kits on site	L 2
Potential for dangerous goods that are delivered to the site to be dropped during unloading and spill into the storm water system that leads to the waterways.	Spillage to the harbor waterways.	M 9	Low order quantities, immediate transportation to designated storage area, use of bunding. Spill kits on site	M 4
Potential for incompatible dangerous goods to be stored together.	Generation of heat (possible fire) vapours and gas.	M 6	DG Segregation and use of bunding.	L 2
Potential for stored dangerous goods to be spilled within the site.	Generation of heat and gas. spillage to the harbor	M 6	DG Segregation and use of bunding. Spill kits Onsite	L 2
Potential for LPG to leak from stored fork lift gas bottles.	A sufficient concentration of spilled LPG could cause an explosion.	M 10	Storage of gas bottles in outdoor cage to allow for good ventilation	L 2

Risk Score Calculator		Consequence				
		Minor (1)	Moderate (2)	Serious (3)	Major (4)	Catastrophic (5)
Likelihood	Almost Certain (5)	(M) 5	(M) 10	(H) 15	(H) 20	(H) 25
	Likely (4)	(M) 4	(M) 8	(M) 12	(H) 16	(H) 20
	Possible (3)	(L) 3	(M) 6	(M) 9	(M) 12	(H) 15
	Unlikely (2)	(L) 2	(M) 4	(M) 6	(M) 8	(M) 10
	Rare (1)	(L) 1	(L) 2	(L) 3	(M) 4	(M) 5

Consequence	1. Minor	2. Moderate	3. Serious	4. Major	5. Catastrophic
Environmental	Minor emission or release immediately controlled and contained and not likely to cause environmental harm. Not reportable to regulatory authority. Includes public complaints.	Moderate Emission or release controlled with minimal loss offsite with very short term environmental harm and requiring no remediation, with impacts <1 day. Includes minor breach of licence condition or an event that may be reportable to regulatory authority. No fine or penalty.	Serious Emission or release resulting in short-term environmental harm (on or off-site) requiring minimal remediation and impacts <6 month. Fine or penalty notice from regulatory body possible.	Major emission or release resulting in environmental harm (on or off-site), requiring remediation but unlikely to have long term impacts of >6 months. Fine, penalty notice or prosecution from regulatory body likely.	Catastrophic emission or release which is toxic to humans or the ecosystem and is uncontrolled, resulting in long term environmental harm (on or off-site), requiring extensive remediation. Prosecution certain.

Likelihood	The likelihood that it will occur in a given year
Almost Certain	Continual or repeating experience.
Likely	Common occurrence.
Possible	Possible or known to occur.
Remote	Not likely to occur under normal circumstances.
Rare	Not expected to occur but still possible.