

Pollution Incident Response Management Plan

Cargill Narrabri

26 July 2022



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MJM Environmental Pty Ltd

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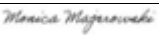
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Appendix A: Emergency and Community Contact List

Appendix B: Plant Neighbours

1.1 Cargill Narrabri

Cargill Processing Limited Narrabri, herein referred to as Cargill, is located on Baranbar Street, Narrabri West, New South Wales. Cargill operate under Environmental Protection Licence (EPL) number 902, with production activities categorised as general agricultural processing. Cargill processes seeds to extract oils, which can include cottonseed and canola.

This Pollution Incident Response Management Plan (PIRMP) has been revised and prepared by MJM Environmental Pty Ltd (MJM) for Cargill Narrabri.

The facility is currently not in operation, and now has gone through a process of moth balling equipment onsite. Cargill holds Environmental Protection Authority (EPA) Environmental Protection Licence (EPL) number 902.

This Pollution Incident Response Management Plan (PIRMP) has been revised and prepared by MJM Environmental Pty Ltd (MJM) for Cargill.

The Narrabri Cargill facility has been moth balled since November 2018. There are currently no cotton seed, meal, hulls, or oil stored onsite. Further as processing has stopped, there are no chemicals or wastes stored onsite. The moth balling tasks which have now been completed, included removing all potential pollutants from site.

1.2 PIRMP Availability Requirements

A copy of the plan is kept onsite and made available on request to an authorised officer. A copy will be made available to any person who requests a copy, at no charge.

A version of this PIRMP is available to the public in line with the POEO requirement. The plan is made available within 14 days after preparation, on Cargill's publicly accessible website at:

<https://www.cargill.com.au/en/environmental-monitoring>

As there are security issues related to making the whole plan publicly available, only certain parts of the plan need to be made publicly available.

The website version of the plan contains the following:

Procedures to notify and provide information to neighbours and relevant authorities in the event of an incident

Mechanisms used to provide early warnings and regular updates to the owners and occupiers of premises who may be affected by an incident

1.3 Definition of a Pollution Incident

A pollution incident is defined as *'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 as per Section 147 of the POEO Act is required to be reported if there is a risk of 'material harm to the environment' defined as:

"The incident involved actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial",

or

"It results in actual or potential loss or property damage of an amount or amounts in aggregate exceeding \$10,000.00 (or such other amounts as is prescribed by the regulations)", and

"Loss includes the reasonable costs and expenses that will be incurred in taking all reasonable and practicable measures to prevent, mitigate, or make good harm to the environment."

The *Protection of the Environment Legislation Amendment Act 2014* commenced on 1 January 2015 and amends the *Protection of the Environment Operations Act 1997*.

The amendments are to provide that material harm pollution incidents involving only odour are required to be notified to the EPA in the same manner as other environmental incidents. The POEO Act describes offensive odour as:

offensive odour means an odour:

that, by reason of its strength, nature, duration, character or quality, or the time at which it is emitted, or any other circumstances:

is harmful to (or is likely to be harmful to) a person who is outside the premises from which it is emitted, or

interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises from which it is emitted, or

that is of a strength, nature, duration, character or quality prescribed by the regulations or that is emitted at a time, or in other circumstances, prescribed by the regulations.

When becoming aware that an odour emitted from activities conducted by Cargill has impacted human health, Cargill will immediately activate the PIRMP.

1.4 PIRMP Objectives

Cargill is required to prepare a PIRMP in accordance with the *Protection of the Environment Operations (POEO) (General) Amendment (Pollution Incident Response Management Plans) Regulation 2012*, Chapter 7-part 3A. The POEO Act states that a PIRMP may form part of another document that is required to be prepared under or in accordance with any other law, as long as the information required to be in the PIRMP is readily identifiable.

The objectives of the PIRMP for Cargill include, but are not excluded to:

Identify the hazards to human health and environment onsite to which the EPL relates

Consider and outline the likelihood of any such hazards occurring, and risks involved

Detail pre-emptive actions to be taken to prevent or minimise risks

Outline the possible pollutants onsite in an inventory, showing quantity and storage

Outline safety equipment and devices used to control a pollution incident

Contact details of each authority Cargill must contact following an incident

Outline details of sites early warning mechanisms

Measures to minimise the risk of harm to workers

Maps indicating matters outlined in the EPL and surrounding areas, locations of potential pollutants and stormwater drains onsite

Outline staff training programs

Manner in which the plan is to be tested and maintained

1.5 Other Relevant Documentation

This PIRMP is to be used in conjunction with, but not limited to the following:

Cargill's EPL 902

Cargill's *Emergency Action Plan* (EAP)

Cargill's *Environmental Management Plan* (EMP)

Cargill's *Surface Water Management Plan* (SWMP)

2 Site Overview

Cargill Processing Limited owns and operates an oilseed crushing and refining facility, and is part of Cargill, Incorporated. The facility is located at Baranbar Street, Narrabri West NSW. The facility is currently not in operation. The facility has undergone moth balling and shut down of all plant and equipment. Cargill holds Environmental Protection Authority (EPA) Environmental Protection Licence (EPL) 902.

The plant has a coal fired boiler which is currently not in operation. Seeds can be stored onsite in vertical steel silos and refined oils can be stored in bulk storage tanks.

A map of the local area and an aerial photo of the Cargill facility are shown in **Error! Reference source not found.** and [Figure 2.2.](#)



Site Boundary —

Figure 2.1 Cargill Processing Limited site map (Google Earth 2012)



Figure 2.2 Aerial photograph of Cargill's facility and EPA monitoring points (Google Earth 2012)

3 Site Details and Contacts

3.1 EPA Scheduled Activities

As aforementioned, Cargill holds EPL number 902. The Scheduled Activities in the EPL are the following:

Agricultural Processing >30,000 T processed

Cargill's EPA monitoring points are shown in [Figure 2.2](#) and below in [Figure 3.1](#).

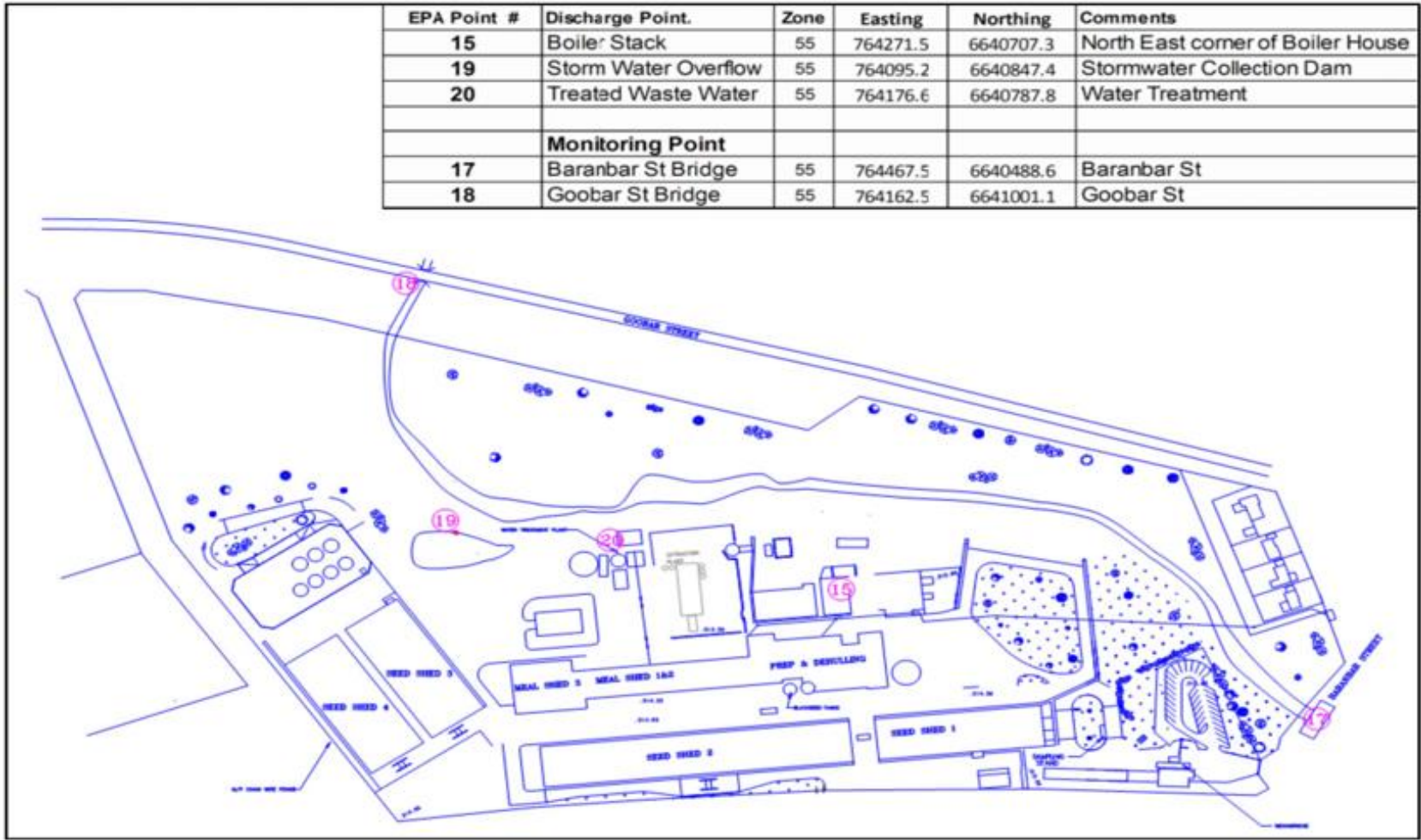


Figure 3.1 Cargill's facility and EPA monitoring points

3.2 Site Details and Contact Authorities

The following [Table 3-1](#) outlines Cargill personnel responsible for activating the plan, notifying relevant authorities, and managing the response to a pollution incident.

Table 3-1: Cargill's site details and contact authority

Item	Details
Person responsible for the PIRMP, address for site and a 24-hour contact phone number for that person	Cargill Processing Limited Plant Manager: Owen Warren Baranbar Street Narrabri NSW 2390 Site: 02 67928160 Mobile: 0408 387 647
The name of a natural person who is authorised to act on behalf of the corporation in relation to the control of the PIRMP	Plant Manager: Owen Warren
Street address of the storage site	Baranbar Street Narrabri NSW 2390
Land title particulars of the land facility is situated	Lot 162 DP 757093, Lot 189 DP 757093
Details of access to the site and details of any locks, gates and fences	<p>Cargill's underground storage systems extraction plant yard is completely fenced.</p> <p>The fence's gates are not locked due to USA National Fire Protection Association (NFPA) Document NFPA-36 (2001), which is a standard for solvent extraction plants. The area is attended and monitored 24 hours 7 days by the Extraction Plant Operator.</p> <p>A boundary fence follows the site's boundary, with entry and exit into the plant via the weighbridge. The front gate is locked when the weighbridge is not manned.</p>
Early warning mechanisms and update protocols for site personnel and persons living and working in the vicinity of the facility	<p>Hexane Tanks – The underground Hexane tanks were removed by Cargill as a part of the company's maintenance procedures, while still in operation. New underground hexane storage tanks were then put in place, with the view of continuing operations. Before the tanks were connected to the plant via pipe work, Cargill made the commercial decision to moth ball the Narrabri plant. This has resulted in the new hexane underground tanks not being connected to the plant, and not at any time storing hexane. The tanks are instead filled with water.</p> <p>Neighbours – Persons working and living close by are informed and updated by phone and/or driving to the neighbouring facility. An Emergency and Community contact list is included in Appendix D.</p>

3.3 Authority Contact Details

If the emergency is an environmental incident which causes or threatens to cause material harm to the environment or human health firstly call 000 if the incident presents an immediate threat. Fire and Rescue NSW, the NSW Police and the NSW Ambulance Service are the first contacts, as they are responsible for controlling and containing incidents.

If the incident does not require an initial combat agency, or after 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.

If the emergency is an environmental incident which causes or threatens to cause material harm to the environment or human health, the following authorities are to be informed **immediately**:

Appropriate Regulatory Authority (ARA) is EPA NSW Environment Line (131 555) and the EPA North West Armidale (02 6773 7000)

The Ministry of Health via the local public health unit (137 788)

SafeWork NSW (13 10 50)

Narrabri Council (02 6799 6866), or after-hours emergency (0429 911 111)

Fire and Rescue NSW ([02 9265 2999](tel:0292652999) – Headquarters, [02 6792 5107](tel:0267925107) Narrabri)

3.4 PIRMP Distribution

Copies of the PIRMP will be located in the following areas:

Front Office

Weighbridge

Emergency Services Box

Narrabri Fire Brigade

4 Roles and Responsibilities

4.1 Roles and Responsibilities during an Environmental Incident

In the event of an Environmental Incident the following people have been allocated responsibilities to effectively co-ordinate the PIRMP.

4.1.1 PLANT MANAGER – INCIDENT RESPONSE LEADER

The Plant Manager (or shift supervisor in their absence as aforementioned) is to take overall command of the environmental incident, specifically with:

Clean-up or containment of the incident as per the PIRMP

Contact relevant authorities and emergency services

Ensuring the safety of all personnel on-site

Ensuring the correct procedures are carried out

Maintaining the safety of persons and the environment on or about Cargill premises, whether authorized or not, is the primary purpose of the PIRMP. Cargill employees and temporary contractor employees shall provide no services in relation to an emergency other than those covered in their job description and for which they have been appropriately trained and, if necessary, licensed. This prohibition includes firefighting, hazardous material spill clean-up, personnel rescue and security- related services including defence of facilities from vandalism or activist intervention.

5 Potential Hazards, Risk Reduction Procedures and Likelihood of Event Occurring

The following tables outline the potential hazards, likelihood of occurrence, consequence and significance using a Qualitative Risk Matrix. The aspects that been identified as a high or significant risk have been included in Cargill's Aspects and Impacts summary Table 4.4. The summary outlines the calculated risk, and the controls implemented by Cargill to control the risk.

Table 5-1: Qualitative measures of likelihood

	Level	Description
A	Almost Certain	The event is expected to occur in most circumstances
B	Likely (1/year)	The event will probably occur in most circumstances
C	Moderate	The event should occur at some time
D	Unlikely (1/5 years)	The could occur at some time
E	Rare	The event may only occur in exceptional circumstances

Table 5-2: Qualitative measures of significance/consequence of impact

	Level	Description
1	Insignificant	No injuries, low financial loss, no off – site effects
2	Minor	First aid treatment required, on-site release immediately contained, medium financial loss
3	Moderate	Medical treatment required, on-site release contained without outside assistance, huge financial loss
4	Major	Extensive injuries, loss of production capability, off-site release with no detrimental effects, major financial loss
5	Catastrophic	Death, toxic off-site release with detrimental effect, huge financial loss

Table 5-3: Qualitative risk analysis matrix

Likelihood	Significance / Consequence				
	Insignificant	Minor	Moderate	Major	Catastrophic
A	S	S	H	H	H
B	M	S	S	H	H
C	L	M	S	H	H
D	L	L	M	S	H
E	L	L	M	S	S

H – represents high risk; detailed research and management planning required at senior levels

S – represents significant risk; senior management attention needed

M – represents moderate risk; management responsibility must be specified

L – represents low risk; managed by procedure

Table 4-4: Cargill’s Aspects and Impacts summary

AREA	ACTIVITY	ASPECT	IMPACTS	REGULATION COMPLIANCE	CONSEQ	PROB	RISK	CONTROL
EMS	EMP	Currently being updates – not implemented yet	EMS and EMP not up to date	ISA 14001	3	C	S	Implement EMP into EMS
Legislative Compliance	POEO Amendments	Unaware	Noncompliance, prosecution	POEO Act 2011	5	A	H	EPA web page reporting has been set up as per POEO 2011 and is in use PIRMP in progress, to be completed by 1 September 2012
Legislative Compliance	Pollution Incident Notification (PIRMP)	Respose plan currently being completed	Noncompliance, prosecution	POEO Act 2011	5	A	H	Will be completed by September 2012
Legislative Compliance	Publish monitoring data	Website set up to publish results online	Noncompliance, prosecution	POEO Act 2011	4	A	H	Has been completed
EPL	Water	Monitoring requirements	Noncompliance, fine, prosecution	EPL 5810	4	B	H	Consultants remind with calendar, list of requirements in EMP in progress
EPL	Air	Monitoring requirements	Noncompliance, fine, prosecution	EPL 5810	4	B	H	Consultants remind with calendar, list of requirements in EMP in progress
EPL	Odour	Offensive odour at boundary	Complaints, noncompliance, fine, prosecution	EPL 5810	3	C	S	Reports sent to EPA upon compliant. Employee site awareness of odours from standing water
EMS	Chemical Delivery	Storage/ Spill	Contamination, health and safety, prosecution	Environmentally Hazardous Chemicals Act 1985	4	B	H	Renewed bunding and plans for further chemical bunding is in progress
EMS	Annual return	Missed, late, incomplete	Fine	EPA Licence	4	C	H	Consultant’s calendar and internal Cargill calendar have completion dates. Consultants complete EPL monitoring within required

AREA	ACTIVITY	ASPECT	IMPACTS	REGULATION COMPLIANCE	CONSEQ	PROB	RISK	CONTROL
								periods. Annual Return is stored onsite as per requirements.
Site	General product transfer	Oil Spill	Contamination, health and safety, prosecution	POEO	5	B	H	Focus on spills at Cargill includes: - Environmental awareness training - Housekeeping - Spill training - Improved bunding and inspections
Site	Boiler Operation	Breakdown/ Operation	Financial, loss of time	EPL, Internal	4	D	S	
EMS/EPL	Retention Pond and Surface Water	Leak /Spill	Contamination, prosecution	POEO	4	C	H	There are risks involved with the site runoff with current state of retention dam. Contaminated water may flow to dam at this stage Upgrades are planned, as per Surface Water Management Plan (SWMP) completed by end of July 2012. SWMP will give timelines for plans to be put in place to better manage the site's surface water
EMS	Emergency Preparedness	ESP and Updating plan	Out-dated procedures, health and safety	POEO Act 2011	5	D	H	The EAP is updated annually, or when a significant change occurs. The PIRMP is currently in place. The emergency is a low risk, but of high consequence due to possible meal silo explosion risks
EMS	Water Pollution/ Ground	Leak or spill to groundwater	Contamination, prosecution	POEO	4	B	H	Consultants remind with monitoring calendar, list of requirements as per EPL
EMS	Oil Spill/ Vegetable	Spill	Contamination, health and safety, prosecution	POEO	4	B	H	Controlled via spill procedure, implementing PIRMP
EMS	Oil Spill/ Mineral/ synthetic	Spill	Contamination, health and safety, prosecution	Environmentally Hazardous Chemicals Act 1985	4	B	H	Controlled via spill procedure, implementing PIRMP
Site	Product Smoulder	Product loss Smoulder	Explosion	OH&S	5	C	H	- Procedures for smoulders in EAP - Process control procedures - Safety and awareness training - In all areas sprinkler systems are installed, and a deluge system in extraction plant

AREA	ACTIVITY	ASPECT	IMPACTS	REGULATION COMPLIANCE	CONSEQ	PROB	RISK	CONTROL
								- Inspections of sprinkler and deluge system is tested during shutdown period - Online monitoring as PLC
EMS	Product Seed/ Meal	Spill	Contamination, health and safety, prosecution	POEO	4	B	H	Controlled via spill procedure, implementing PIRMP
Site	NPI	Incomplete, incorrect	Fines, carbon tax	NPI	3	C	S	NPI performed by consultants and checked by Cargill
EMS	Laboratory Operation	Waste Disposal	OH&S	Waste Regulations	3	C	S	- Waste data form for laboratory waste completed. Waste is collected in a 15-litre drum, then collected by a licenced third-party waste contractor - Disposed of approximately annually - Training and procedure for waste data form completed - Training of lab personnel to handle the work completed
EMS	Water	Spill	Contamination, health and safety, prosecution	POEO	4	B	H	Controlled via spill procedure, implementing PIRMP, Consultants remind with calendar, list of requirements in EMP in progress
Maintenance	Oil	Spill	Contamination, health and safety, prosecution	POEO	4	B	H	Controlled via spill procedure, implementing PIRMP, Consultants remind with calendar, list of requirements in EMP in progress
EMS	Traffic	Roads and Transport	Non compliance	OH&S , Due Dilligence	4	D	S	-Traffic occurs with plant operation with trucks in and out - Cargill exercise a lot of control over contracted transport providers, which is assessed regularly and audited annually - Cargill completed a transport checklist before leaving site; thus, an oil spill from a truck from contracted company should technically be the transport company's fault - A Traffic Management Plan will be in place by October 2012, to be reviewed every 3 years or as necessary

AREA	ACTIVITY	ASPECT	IMPACTS	REGULATION COMPLIANCE	CONSEQ	PROB	RISK	CONTROL
Site	Site Opertaion	PCB's	EPL, Health and Safety	Occupational Health and Safety Act 2000	4	D	S	No PCB's onsite
EMS	Environmental Policy	Not Upated	Due Dilligence	ISO:14001	3	C	S	Cargill perform regular internal audits, which are incentives to keep on track with all corrective action requests. Management review practices and reports are completed annually. Environmental training annually
EMS	Environmental Management System documents	Not Updated	Due Dilligence	ISO:14001	3	C	S	Cargill perform regular internal audits, which are incentives to keep on track with all corrective action requests. Management review practices and reports are completed annually. Environmental training annually
EMS	Environmental targets	Not Updated	Due Dilligence	ISO:14001	3	C	S	Cargill perform regular internal audits, which are incentives to keep on track with all corrective action requests. Management review practices and reports are completed annually. Environmental training annually
Personnel	Environmental Training	Not completed	Negligence, fine, due diligence	ISO:14001	3	C	S	<ul style="list-style-type: none"> -Training completed rotationally and recorded annually - Incident response personnel are delegated - Employees are made aware of their responsibilities and consequences of action and processes - Weekly and monthly inspections for bunding issues - Repair programs as required
EMS	Management Review	Not done	Due Dilligence	ISO:14001	4	C	H	Management Review Report completed annually by Management and circulated to staff - Internal and external audits regularly - Regular management meetings, site meetings held weekly and monthly - Most documents are reviewed annually

AREA	ACTIVITY	ASPECT	IMPACTS	REGULATION COMPLIANCE	CONSEQ	PROB	RISK	CONTROL
EMS	Communication; Meeting Agendas	Not done	Due Dilligence	ISO:14001	4	C	H	-Internal and external audits regularly - Regular management meetings, site meetings held weekly and monthly
EMS	Operational Control	Not done	Unmanaged	EPA, EPL, ISO:14001	4	D	S	-Process control procedures - Regular and compliance monitoring - EPL
Site	Tank Bunding	Damage	Appearance; leaks	POEO	3	C	S	Regular inspections completed, upgrades to bunding in progress
EMS	Legal obligations and documents	Updated or not	Unmanaged	ISO:14001	4	C	H	Completed through management reviews, audits, regular meetings and annual document reviews
EMS	Legislation	Updated or not	Unmanaged	ISO:14001	4	C	H	Discussed during management reviews, audits, regular meetings and annual document reviews
EMS	Environmental Action Plan	Updated or not	Unmanaged	ISO:14001	4	C	H	Issues discussed during management reviews, audits, regular meetings and annual document reviews
Personnel	Managers responsible	Updated and aware	Not complete	ISO:14001; Licenece 12014	4	D	S	Manger's responsibilities are outlined in job description
OEMS	Chemical inventory/MSDS	Updated	Not complete	OH&S	4	D	S	MSDS Register is updated regularly All new chemical products assessed prior to use with purchasing procedure
Site	NGER	Incomplete, incorrect	Fines, carbon tax	NGER	4	C	H	Consultants complete NGER, however Cargill's NGER data records will need to be addressed following the NGER department audits in May 2012 NGER is a federal initiative and holds high legal obligations for Cargill
Process Plant	Environmental vandalism	Media	Bad press	POEO; OH&S	5	D	H	-Cargill site is fenced and locked during out of hours - Extraction is locked from outside - Employee training awareness of intruder performed - Media policies in place

AREA	ACTIVITY	ASPECT	IMPACTS	REGULATION COMPLIANCE	CONSEQ	PROB	RISK	CONTROL
Site	Product stored on soil	Spill	Fine	POEO; OH&S	4	B	H	Consultants remind with calendar, list of requirements in EMP in progress Controlled via spill procedure, implementing PIRMP
Site	Spill Kits	Not monitored	Emergency	EPL	3	C	S	Spill kits checked monthly by external contractors and refilled Maintenance (external) inspections
Site	Hexane UPSS	Leak; missed monitoring	Explosion	UPSS, POEO	4	E	L	Historical hexane storage tanks have been removed. New underground hexane storage tanks contain water only.

6 Pre-emptive Actions to Minimise Risk of Harm from an Environmental Incident

Cargill has safety equipment including alarm systems located throughout the plant to minimise the risks to human health and the environment.

6.1 Spills and Process Upsets

The following procedures are to be carried out in relation to spills and process upsets onsite. The procedures are designed to minimise the risk of harm to personnel and the environment arising from an environmental incident. In order to minimise the outcome of process upsets or chemical spills, all aboveground tanks onsite at Cargill are bunded, and historically high alarms and auto shut off systems are attached to the underground hexane tanks.

As a result of moth balling the hexane storage tanks presently onsite do not contain hexane but are instead filled with water.

6.1.1 LIQUID CHEMICAL SPILL

In the event of a liquid chemical spill Cargill has a flammable liquid spill EAP flowchart.

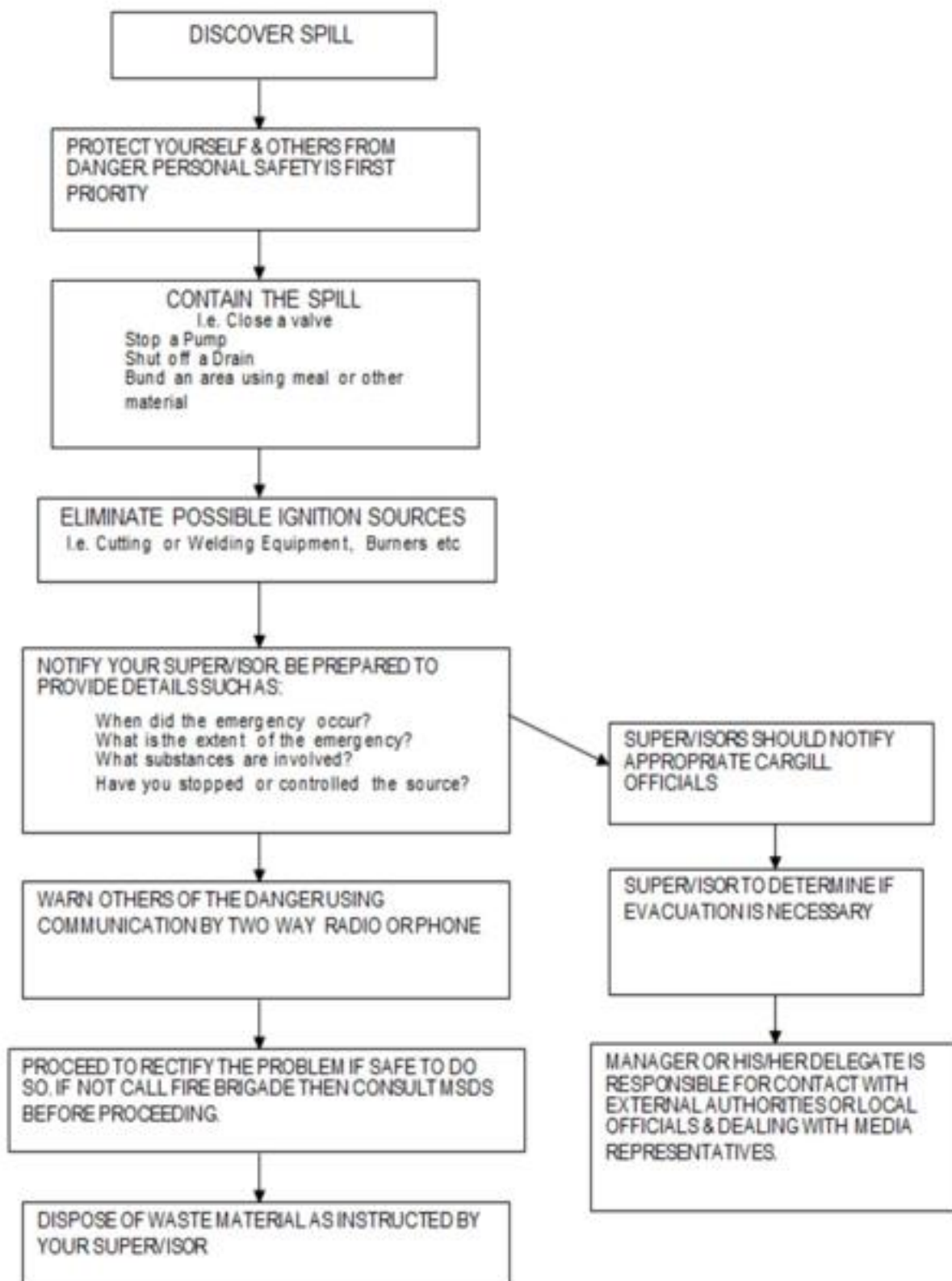
Concrete bunds are constructed around the chemical tanks such that the bund will hold the capacity of the largest tank it surrounds. A spill within the bund will be dealt with according to supervisors' instructions. Keep all personnel away from the area.

Since the instigation of moth balling equipment, all liquid chemical has been removed from site. Liquid chemical will not be stored onsite in the future.

6.1.2 SOLVENT SPILL

As the solvent plant is no longer in operation, hexane has been removed from the facility. Removal of hexane from the facility has removed the hazard of a hexane spill.

The following flowchart outlines the correct response for a liquid chemical spill.



6.1.3 PROCESS UPSETS

In the event of a major process upset where an evacuation is not required, the plant will be shut down (if critical safety devices have not already done so) and the plant superintendent or senior supervisor are then contacted to bring the process under control. Once under control the plant is inspected for possible damaged equipment, vessels, ducting or pipe work. The plant is not to be re-started until the plant superintendent has given all clear.

If an evacuation is required, the entire plant should be shut down and evacuated in accordance with emergency procedures.

Resumption of work is permitted once the Plant Superintendent has declared the site safe and free from the emergency situation.

6.1.4 PRODUCT SPILL

In the event of a product spill, it is important that everything possible is performed to control the risk of personal injury, property damage or environmental change. Quick action is required to stop the spill as close to the source as possible.

Follow the EAP flowchart for Flammable liquid spills with the exception that ignition sources do not need to be eliminated.

Concrete bunds are constructed around oil tanks such that the bund will hold the capacity of the largest tank it surrounds. A spill within the bund will be dealt with according to supervisors' instructions. Product may be reclaimed and reprocessed after inspection for food safety risks.

6.2 Site Monitoring and Management

6.2.1 WATER SAMPLING AND MANAGEMENT

In accordance with EPL Condition M2.3, Cargill has three (3) points requiring water sampling. The locations of the water sampling points are shown in [Figure 2.2](#) and [Figure 3.1](#), and it is noted that Long Gully is a nearby waterway. To ensure that the Cargill's operations have not had an adverse impact on the environment, Cargill must continue to ensure that discharge water quality is within 100 percentile concentration limits outlined in the following tables.

Ambient water quality monitoring is required for Points 17 and 18, with parameters and sampling frequency outlined in [Table 6-1](#) below.

Table 6-1: Cargill's Water Monitoring Requirements Points 17 and 18 as per EPL 902

EPA ID Points	Frequency	Pollutant	Sampling Method	Percentile Concentration Limit
17 and 18	Special Frequency 1 ¹	Oil and Grease (mg/L)	Representative Sample	N/A
	Special Frequency 1 ¹	pH (pH unit)	Representative Sample	N/A
	Special Frequency 1 ¹	Total Suspended Solids (mg/L)	Representative Sample	N/A

¹Special Frequency 1 requires collection of samples within 24 hours after any discharge from Point 19

Discharge water quality monitoring is required for EPL Point 19. Sampling parameters, frequency and 100 percentile concentration limits are outlined in Table 6-2 below. In addition to water quality, water quantity for Point 19 includes compliance with the following liquids and/or solids applied and discharged:

Liquids discharged to water must not exceed 2,000 kilolitres per day

Volume of solids or liquids applied to the area must not exceed 2,000 kilolitres per day

Table 6-2: Cargill's Water Monitoring Requirements Point 19 as per EPL 902

EPA ID Points	Frequency	Pollutant	Sampling Method	Percentile Concentration Limit
19	Daily during any discharge	BOD (mg/L)	Representative Sample	20
	Daily during any discharge	Oil and Grease (mg/L)	Representative Sample	10
	Daily during any discharge	pH (pH unit)	Representative Sample	6.5-8.5
	Daily during any discharge	Total Suspended Solids (mg/L)	Representative Sample	50

6.2.2 STORMWATER MANAGEMENT

Cargill's EPL contains a Pollution Reduction Program (PRP) under Section 8 Condition *U1 – Storm Water Management Plan*. The SWMP covers:

Balance of surface water onsite

Identification of surface water that is classified as clean, contaminated or dirty, and how this water is managed

Assessment of the design of water containment structures

Future plans for surface water quality management

Cargill implemented the SWMP actions following completion in 2013.

6.2.3 DOMESTIC AND PROCESS WASTEWATER MANAGEMENT

The underground drain has an interceptor pit at the wastewater treatment plant. During times of heavy rain, the interceptor pit to the wastewater treatment plant may not be able to collect all the wastewater from the site. The water from the interceptor pit overflows to a retention dam for storage. Once the rain event is over, the water from the retention dam is returned to the WWTP or to the irrigation areas.

A process control is in place to ensure that a levy follows the lowest points of the underground drain to control possible overflow of wastewater into the creek.

In certain circumstances where overflow may be anticipated, prevention is in place where the water can be directed with a pump to a 'soak area', which is a mound in the north-western corner of the plant which drains back to the dam. This allows the water additional time to travel to the dam rather than the creek.

The abovementioned SWMP is to be used in conjunction with the PIRMP, as it contains information regarding water onsite.

6.2.4 AIR EMISSIONS MANAGEMENT

In accordance with EPL Condition P1.1, Cargill has fourteen (14) air monitoring points however only point (EPA Point 15) at the coal fired boiler requires regular testing. The EPL requires monitoring of the air discharge Point 15, with parameter, frequency and 100 percentile concentration limit shown in Table 6-3.

The testing is completed in accordance with the *Protection of the Environment Operations (Clean Air) Regulation 2010* 'Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales'.

Table 6-3: Cargill's Air Monitoring Requirements for Points as per EPL 902

EPA ID Points	Parameter	Frequency	Sampling Method	100 th %ille Concentration Limiy (mg/m3)
15	Total Soild Particles	Yearly	TM-15	250

a In accordance with the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales

The above monitoring is required when the plant is running at steady state conditions. As the plant has been moth balled the boiler is not in operation and therefore not operating at stead state conditions.

Emissions to air as a result of the coal fired boiler operating therefore currently do no occur.

7 Notification of Incident to Surrounding Areas

In the event of an environmental incident it is the responsibility of the Plant Manager to notify emergency services and people living or working in neighbouring areas.

7.1 NSW Fire Brigade

Representatives from the Narrabri Volunteer Fire Brigade, being part of the NSW Fire Brigade, visit the site annually to familiarise themselves with the plant layout, operation, potential hazards and emergency procedures. This activity benefits both Cargill and the Emergency Services team in minimizing the effects of an emergency situation.

7.2 Neighbouring Businesses and Residents

All emergency and evacuation procedures including the notification and evacuation of neighbours are the responsibility of the emergency services. An Emergency and Community Contact List of Cargill's neighbours is found in Appendix A, and a copy is kept at the Front Office.

8 Inventory of Potential Pollutants

Safety Data Sheets (SDS) for each hazardous substance are listed in the Hazardous Chemicals Register found in the SDS locations, which are located in:

The Front Office – *Master Copy*

Emergency Box at Weighbridge

The areas likely to be affected by a pollution incident at Cargill include water associated with the nearby Long Gully Creek and all soil areas onsite. [Figure 2.2](#) shows Cargill's site and infrastructure including the locations of EPA points along Long Gully Creek.

Cargill when in operation possessed two underground hexane tanks. These tanks supplied hexane to the solvent plant. As a part of their operational control and maintenance procedures, Cargill removed the underground hexane storage tanks to be replaced with new hexane storage tanks. The aim at the time was to continue solvent plant operations. Before the underground hexane storage tanks were commissioned, Cargill made the commercial decision to moth ball the Narrabri plant. This has resulted in the new underground hexane storage tanks remaining safely in storage, without any hexane delivered to the tanks. The tanks are currently filled with water. The volume of the new tanks are presented below in Table 8-1

Table 8-1: Inventory of water stored onsite in underground storage tanks

Storage Area	Pollutant	Maximum Capacity (L)
Underground Storage Tank 1	Water	70,000
Underground Storage Tank 2	Water	70,000
Total		140,000

9 Cargill's Safety Equipment

Cargill has safety equipment including alarm systems located throughout the plant to minimise the risks to human health and the environment. Cargill has a level system and an overflow flow meter on the discharge side of the sedimentation dam onsite.

9.1 Overview

Annunciator Panels are located in the following areas at Cargill:

Workshop

Seed Receival

Pellet Mill

Laboratory

Front Office

Upstairs Office

Prep Control Room

Weighbridge

Garage

Extraction

There are emergency break glass stations throughout the plant that are indicated on the annunciator panels in all the locations above.

There are also 'mushroom head' push buttons left throughout the plant from the old system that now function as machinery emergency stop buttons.

9.2 Theory of Operation

There are two buttons that employees or contractors may use in the case of an emergency.

The 'Emergency Break Glass' stations will be used to call for assistance in case of fire, a major accident or similar. This system does not shut down the plant machinery.

The yellow/red Evacuation buttons will sound an evacuation tone and message. Everyone will evacuate the plant as per the Plant Emergency Organization Evacuation.

Emergency Stop mushroom head buttons (from previous system) stop plant machinery.

[Figure 9.1](#) below shows the emergency buttons, emergency assistance and alarms panel.



Figure 9.1: Emergency assistance controls

Depending on the circumstance, you may need to press one or more of the buttons. This may be for the following identified situations:

To stop a vibrating machine without calling for additional help, press the Emergency Stop button.

If someone is injured and not in danger from any running machinery, then hit the Emergency Break Glass alarm.

If someone is injured and in danger from running machinery, then press the Emergency Stop button, followed by the Emergency Break Glass to get assistance.

9.3 Emergency Break Glass Station

If an Emergency Break Glass button is activated, an audible alarm will sound throughout the plant after a 5 second delay. A lamp will flash on the annunciator panels indicating the area to which to respond.

9.4 Evacuation Buttons

In addition to the Emergency Break Glass buttons there are two (2) Evacuation buttons. They are located in:

- Prep Control Room
- Front Weighbridge

9.5 Personnel Safety Equipment

In order to deal with an emergency effectively, it is essential all personnel know the location and use of safety equipment at the plant.

9.6 First Aid Kits

First Aid Kits are located throughout the plant. They can be easily removed and carried to an individual to administer first aid. Locations are:

- Front Office
- Weighbridge

9.7 Miscellaneous Safety Equipment

Major safety equipment is stored in the designated safety room which is located on the ground floor of the Prep next to Crude Oil Tanks A and B. The storage is as follows:

6 – Breathing Apparatus; 4 – Stretchers; 1 – Static line; 2 – Spreader bar; 4 – retractable lifelines; 2 – complete bags for Safety Harnesses; 1 – Jordon lifting frame; 1 – Tripod; 1 – Rope; 2 – Spare O₂ Cylinders

The First Aid Kits located throughout the plant contain the items listed in Table 9-1.

Table 9-1: First Aid Cabinet contents

Item	Quantity
Adhesive Plastic Dressing Slips, Sterile, Packets of 50	2
Adhesive Dressing Tape, 2.5cm x 5cm	1
Bags, Plastic, For Amputated Parts	
Small	2
Medium	2
Large	2
Dressings, Non-Adherent, sterile, 7.5cm x 7.5cm	5
Eye Pads, Sterile	5
Gauze Bandages:	
5cm	3
10cm	3
Gloves, Disposable, Single, Large	5
Gloves, Disposable, Single, Extra Large	5
Rescue Blanket, Silver Space	1
Safety Pins, Packets	1
Scissors, Blunt/Short Nosed, Minimum Length 12.5cm	1
Splinter Forceps	12
Sterile Eyewash Solution, 10ml Single Use Ampule	10
Swabs, Prepacked, Antiseptic, Packs of 10	8
Triangular Bandages, Minimum 90cm	10
Wound Dressings, Sterile, Non-Medicated, Large	1
Sterile Eyewash Solution, 500ml Large Use Bottle	1
First-Aid Pamphlet as approved by Work Cover	
Additional Items	
Dressing - Combine 20x20cm	4
Swabs - Gauze 7.5 x 7.5cm	3
Disposal Splinter Probe	5
Set of Air Splints	1
BA Mask Cleaner bottles	3

10 Minimise Risk of Harm – Personnel and Plant Evacuation

10.1 Plant Evacuation

A total plant evacuation may be required in the following circumstances:

- Major Fire in Prep or Extraction
- Earthquake / Severe Storms
- Major threat from any local industry
- Bomb threat or Suspect mail or package

10.1.1 UPON ALARM

When the evacuation alarm is initiated, an alarm will sound followed by a voiceover announcement 'Evacuate, Evacuate'. Once this has been sounded all employees are to report to the assembly area immediately

10.1.2 ASSEMBLY AREA

In the event of a plant evacuation all employees, contractors and visitors must proceed if safe to the primary assembly point. The primary assembly point is the car park at the front of the plant.

Never leave the site or evacuation assembly areas until authorised by the Emergency Leader.

10.1.3 PROCEDURE TO ACCOUNT FOR PERSONNEL

Use the following documents to account for people on site:

- Collect the visitor logbook from the office and the weighbridge
- Collect the updated Kronos punch report
- Collect the weighbridge movement report

10.1.4 SEARCH AND RESCUE

All search and rescue operations are the responsibility of the external emergency personnel, no one is to return into the plant unless the area has been declared safe and permission is granted by the Plant Manager.

10.2 Personnel Injury

If it is a personnel injury, this information must contain the following:

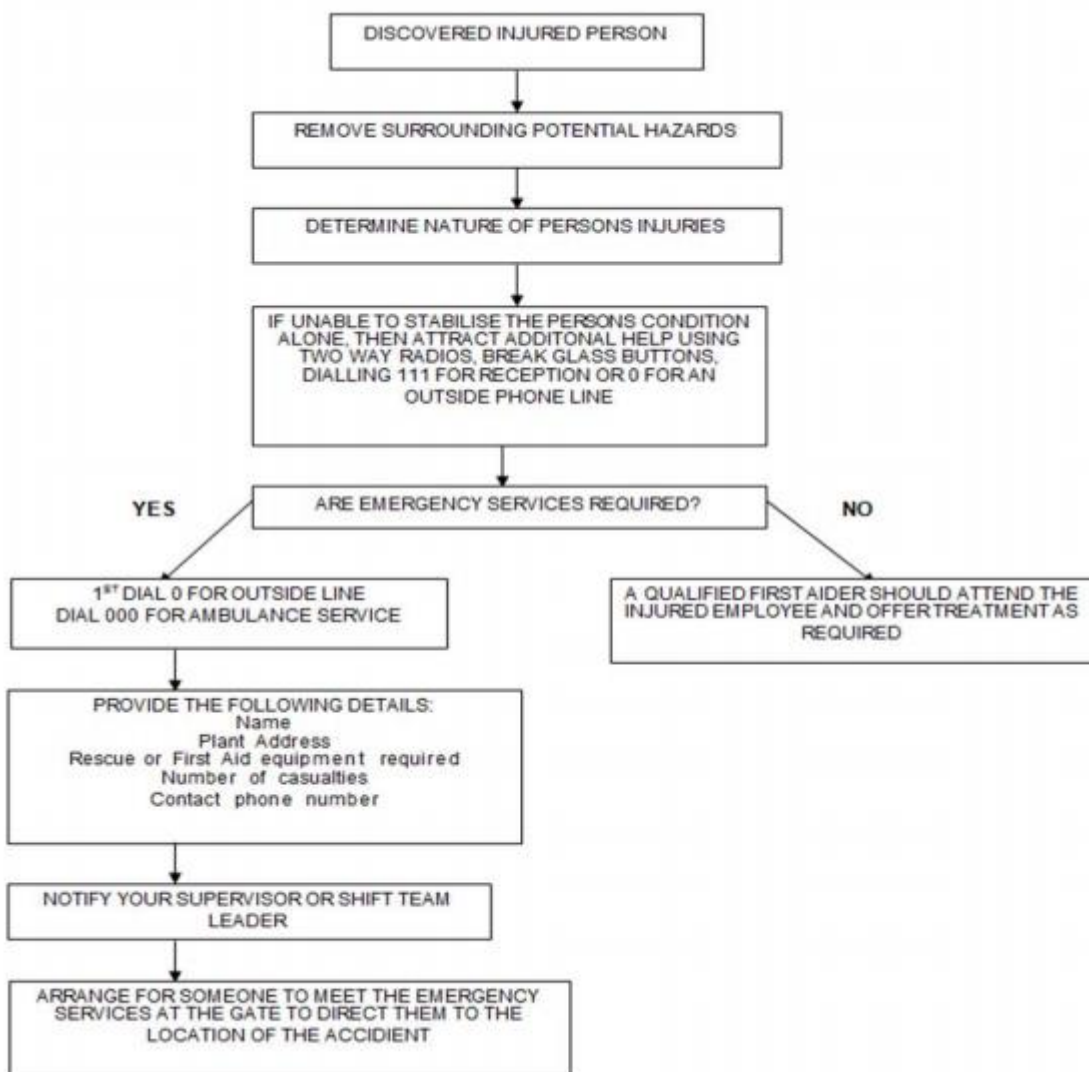
- Name of injured worker
- Job title
- Extent of injury
- Date and time of injury
- Circumstances surrounding injury
- Basic causes
- What initial steps have been taken to prevent future injuries

In the event of serious personal injury, a fatality or multiple injuries the site of the incident must remain untouched until the investigation is complete. If it is required to move anything to treat the injured parties, it must be noted.

After the injured parties have been removed, access to the area is to be restricted. This can be done by putting up safety tape.

Work can only recommence once the area has been thoroughly checked and deemed safe.

The flowchart below is followed for any personnel injury onsite.



11 Procedure for Terminating an Emergency

Once the emergency alarm is disabled, it is the responsibility of the plant manager or designated employee to declare the site safe to return to normal operation. To disable the evacuation alarm:

Release the evacuation push button. This requires the button to be turned slightly and it will pop out.

On the alarm panel in the Prep hit 'ACK NEXT' then 'SYSTEM RESET'.

The extent of damage to equipment, utilities and raw materials must be established and methods for rectification discussed with all relevant employees. A verbal "ALL CLEAR" must be given by the Plant Manager or designate once he/she is satisfied that the emergency has been defused.

Critical Task Procedures for starting process equipment must be followed.

12 Emergency Communication

12.1 Incident Procedure Emergency Services

Arrange for someone to meet emergency services at the front gate.

If the weighbridge is open, clear it of all traffic and stop any trucks from entering the plant. Contact trucks on the

UHF radio and tell all drivers to remain in Mooloobar Street, or if already in the plant, in a safe place where they will not obstruct emergency vehicle access.

Clear the area around the shed on fire of non-essential people (e.g. truck drivers, cleaners) and if possible, erect a barrier at minimum 50 metres from the shed to assist in keeping the area clear.

Take note of the direction and strength of the wind and the potential effect of thick smoke or burning embers on neighbouring residents and businesses. Emergency services should be able to assist in alerting affected neighbours and will take the decision to evacuate them if necessary

Effective communication is vital during an emergency situation. The communications equipment are listed in the following sections.

12.1.1 TELEPHONE

The telephone system, be it fixed or mobile, is used as a means of internal and external communication. Such calls can be made from any phone in the office and processing buildings.

12.1.2 FIELD TWO-WAY RADIOS

The two-way radios are intrinsically safe and therefore may be used in any processing area including the solvent extraction plant.

Two-way radios must be carried at all times during an emergency whilst fighting fires, manning other equipment or searching for injured personnel on site.

13 Media and Public Relations Debriefing

No employee other than the Plant Manager or their delegate may communicate with news media in the event of an environmental incident. Cargill will ensure that the spokesperson is competent and will not disclose any information which may destroy public confidence and exacerbate the incident.

14 Statutory Investigation

Cargill will co-operate with relevant government authorities, such as the SafeWork NSW and the EPA, should there be a statutory investigation required following an emergency situation at this site.

Cargill will ensure no evidence is interfered with, moved or destroyed and that no repairs (other than those required to control the emergency) proceed without approval from the investigating authority.

15 PIRMP Assessment and Updates – Testing and Review of PIRMP

15.1 Testing of PIRMP

Cargill will test and assess the effectiveness of the PIRMP annually on 30 July to ensure the information is up to date and the procedures are capable of being implemented. The test will be carried out:

annually 30 July; and

within 1 month of any pollution incident to which Cargill's EPL relates.

The test will be recorded in the Cargill's EMS.

15.2 Review of PIRMP

The PIRMP will be reviewed annually on 30 July.

The assessment will check all PIRMP procedures, safety equipment and alarms, and consider any new site processes. The outcomes of the assessment will be reviewed, and the plan updated and communicated to staff by the Plant Manager. The review will be carried out:

annually 30 July; and

within 1 month of any pollution incident to which Cargill's EPL relates.

The PIRMP is a living document and updates will be completed by as necessary by the Plant Manager, and changes recorded in the EMP where date of reviewing is recorded.

16 Limitations

16.1 Scope of Services and Reliance of Data

This Pollution Incident Response Management Plan ("the report") has been prepared in accordance with the scope of work/services agreed, between MJM Environmental Pty Ltd (MJM) and Cargill. In preparing the report, MJM has relied upon data and other information provided by Cargill and other individuals and organisations. Except as otherwise stated in the report, MJM has not verified the accuracy or completeness of the data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in the report ("conclusions/summary") are based in whole or part on the data, those conclusions are contingent upon the accuracy and completeness of the data. MJM will not be liable in relation

to incorrect conclusions should any data, information or condition be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to MJM.

16.2 Study for Benefit of Client

This report has been prepared for the exclusive benefit of Cargill and no other party. MJM assumes no responsibility and will not be liable to any other person or organisation for or in relation to any matter dealt with in this report, or for any loss or damage suffered by any other person or organisation arising from matters dealt with or conclusions expressed in this report (including without limitation matters arising from any negligent act or omission of MJM or for any loss or damage suffered by any other party relying upon the matters dealt with or conclusions expressed in this report). Other parties should not rely upon the report or the accuracy or completeness of any conclusions and should make their own inquiries and obtain independent advice in relation to such matters.

16.3 Other Limitations

To the best of MJM's knowledge, the proposal presented, and the facts and matters described in this report reasonably represent Cargill's intentions at the time of printing of the report. However, the passage of time, the manifestation of latent conditions or the impact of future events (including a change in applicable law) may have resulted in a variation of the Proposal and of its possible environmental impact. MJM will not be liable to update or revise the report to consider any events or emergent circumstances or facts occurring or becoming apparent after the date of the report.

Appendix A: Emergency and Community Contact List

Appendix B: Plant Neighbours

Cargill Narrabri Plant **Neighbours**

<redacted for privacy reasons>