Plan

LPG-NEW-EMM-PLA-0001

Modified Version for EPA

LPG – (AUS) Emergency Response Plan

Newcastle Terminal

Egret Street, Kooragang Island, 2304 NSW

Geocode **-32.881317**

151.764107

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Contact	Contact person for information regarding the content of this ERP is Steve Pearce 0417 492 009 MHF

Please see document control section for more information.

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1 Emergency Contact Details

In the event of an emergency the following personnel should be contacted as required

Table 1: External Emergency Contacts

Emergency Services	Business Hours	After Hours
Fire Brigade – Police – Ambulance (life threatening)	000	000
Fire	4927 2555	4927 2555
Ambulance	13 1233	13 1233
Hospital	4921 3000	4921 3000
SES	132500 or 0417 401 270	132500 or 0417 401 270
Neighbours	**Business Hours**	**After Hours**
Authorities	**Business Hours**	**After Hours**
Newcastle City Council	4974 2000	4974 6000
Energy Australia	13 15 35	13 13 88
SafeWork NSW	4921 2900	13 10 50
EPA	4908 6800	13 15 55
Newcastle Emergency Management Officer	4974 2411	4974 2411
Medical		
Services and Equipment		
Pollution Incident Reporting (Immediately following an Environmental Emergency)		
EPA – Environment Line	13 15 55	13 15 55
Public Health Unit – Newcastle Office	4924 6477	4924 6477
Safework NSW	13 10 50	13 10 50
Fire & Rescue NSW	1300 729 579	1300 729 579
Newcastle City Council	4974 2000	4974 6000

Table 2: Internal Emergency Contacts

Terminal Personnel		Business Hours	After Hours
Origin Emergency Response Number (NRC)		1800 808 526	
Terminal Manager CHIEF WARDEN	Steve Pearce	02 4033 7803 0417 492 009	0417 492 009
Regional Manager, Operations & Delivery - NSW	John Chalmers	02 9765 6475	0419 929 491
Note: Business hours are 6am – 5pm Monday to Friday.			

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2 Purpose and application

This Emergency Response Plan provides the procedures that are required to be followed in emergency situations and also used for training to meet different emergency scenarios. It complies with the requirements of Origin's Emergency Management Procedure ORG-RMS-PRO-006, Australian Standard AS 3745 Planning for Emergencies in Facilities and Work Health and Safety Regulations or equivalent legislation.

This plan provides guidance on actions required to address physical emergency incidents either at or outside the terminal, such as:

- Fire and explosion
- Security threats
- Spills and emissions
- Occupational safety injuries and other medical emergencies
- Natural events (floods, storms etc.)

The aim of this plan is to ensure all personnel know their roles and responsibilities and have clear procedures for handling emergencies that may affect the facility. The objectives of the ERP are to:

- Minimise adverse effects on people, property and the environment, reputation and liabilities
- Control or limit any effect that an emergency may have on site or on neighbouring areas
- Facilitate emergency response and to provide such assistance on site as required
- Ensure communication of vital information as soon as and as effectively as possible
- Facilitate procedures so that normal operations can be resumed
- Provide for competency-based training in order to maintain a high level of preparedness
- Provide a basis for updating and reviewing emergency procedures.

A controlled copy of this ERP is available on the LPG document management system. Copies are also kept in terminals, in hazmat boxes, and issued to fire services, and Newcastle Council.

2.1 Scope

This plan applies to all employees, contractors and visitors to this terminal operated by Origin Energy LPG.

This plan covers all site emergencies including onsite transport incidents but not off-site transport incidents. For those refer to the LPG Transport Emergency Response Plan LPG-AUS-EMM-PLA-0002.

Emergencies at customer sites are covered by "EP1 Controlling LP Gas Leakages Occurring Outside a Terminal". Emergencies affecting company personnel or property while offsite are also excluded.

The Newcastle terminal includes:

- Receipt of LPG by bulk road tanker
- Storage of LPG in bulk tank
- Storage and handling of LPG cylinders
- Cylinder filling and dispatch
- Cylinder testing
- Filling and delivery of LPG by bulk road tanker

2.2 Definition of an Emergency

An Emergency is an unplanned event or situation that requires urgent action to control, correct and return the situation to a safe condition and that:

a) arises from catastrophic events e.g. fire, explosion, flooding, storms;
b) has caused loss of life, significant health detriments or substantial damage to property and/or environment;
c) has the potential to cause an immediate threat to life, significant health detriments, and/or escalation to substantial damage to property and/or environment.

d) has caused or has the potential to cause loss of business, or harm to Origin's reputation

2.3 Pollution Incident Response Management Plan (PIRMP)

The Newcastle LPG Terminal holds an Environment Protection License (EPL) issued by the EPA. Therefore this terminal is required to prepare, keep, test and implement a Pollution Incident Response Management Plan (PIRMP), as prescribed by the Protection of the Environment Operations (General) Regulations 2009 and the Protection of the Environment Operations Act 2011.

The PIRMP is embedded in this ERP, and the references of the applicable legislative requirements to the ERP are presented in Table 3.

Table 3: Summary of Legislative Requirements for PIRMP

Legislative Requirements for Contents of PIRMP	Referred to in this ERP
Description and likelihood of hazards	A summary of Potential Major Incidents is listed in Table 9: Summary of "Potential" Major Incidents The major incidents hazards and their likelihood are presented in a Bowties format contributing to each of the Major Incidents, see Appendix 6 Newcastle Bowties
Pre-emptive actions to be taken	Section 5.2 Roles and Responsibilities Appendix 4 – SERT Roles and Responsibilities Table. Also refer to the Newcastle Safety Case. for preventative control measures
Inventory of pollutants	Table 4: Hazardous Materials
Safety equipment	Appendix 2: Site Emergency Equipment
Contact details	Section 1: Emergency Contact Details
Communicating with neighbours and the local community (notification requirements)	Section 7.1.5 Communicate and Escalate
Minimising harm to persons on the premises	Section 7.1.4 Respond to Emergency
Maps	Appendix 1 - Terminal Site Safety and Manifest Plans
Actions to be taken during or immediately after a pollution incident	Appendix 4 – SERT Roles and Responsibilities Table Appendix 7 – Detailed Emergency Response Procedures
Staff training	Section 8.2 Training Schedule
Testing plan	Section 9 Review and Update

3 Definitions

Definitions of terms and acronyms used in this plan:

Term	Definition
BLEVE	Boiling Liquid Expanding Vapour Explosion
CEO	Chief Executive Officer
CMT	Crisis Management Team
EAA	Emergency Assembly Area
EAP	Employee Assistance program
ECP	Emergency Control Points
ELT	Executive Lead Team
ERE	Emergency Response Exercise
ERP	Emergency Response Plan
ESD	Emergency Shut Down
GEMT	Group Emergency Management Team
HAZMAT	Hazardous Material
LCDP	Local Counter Disaster Plan
LEL	Lower Explosive Limit
LES	Lone Employee System
LPG	Liquefied Petroleum Gas
LSD	Local Shut Down
MHF	Major Hazard Facility
OCIS	Origin Collective Intelligence System
PIRMP	Pollution Incident Response Management Plan
Procedure	Series of actions conducted in a certain order, excluding documents
SC	Safety Case
SCDO	State Counter Disaster Organisation
SEC	Security, Emergency and Continuity
SERT	Site Emergency Response Team
SERE	Site Emergency Response Exercise
TERE	Transport Emergency Response Exercise

4 Site Information and Emergency Resources

4.1 Site Description

The Newcastle Terminal is a storage and distribution facility for LP Gas for the Origin business. Product is normally received by road transport, and then distributed by road in bulk tankers and as packaged goods in cylinders.

The Terminal is located at Egret Street, Kooragang Island, and it includes the following buildings: Office & Fitters Shed. The terminal has 203 tonnes of LP Gas storage consisting of the following tanks:

- 2 x 100 tonne mounded LPG tanks
- 1 x 3 tonne LPG day tank

Figure 1: Terminal Location and Surrounding Area

- Details moved due to security requirements

4.2 Manning level

The Site is mostly manned during normal operating hours and may have no personnel, or a small number present out of normal operating hours. Table 5 shows the days and hours of operation and the typical number and roles of personnel onsite during and out of normal operating hours.

Table 5: Manning level

Days of Operation	
Hours of Operation	
Personnel During Normal Operating Hours	
Personnel Outside Normal Operating Hours	

4.3 Emergency Assembly Areas

Emergency Assembly Area A (Primary): Grass verge near entry barrier
Emergency Assembly Area B: Outside Property 150m South of Egret Street Entrance
Emergency Assembly Area C: Outside Property 150m North of Egret Street Entrance

An emergency assembly area (EAA) is the location that personnel are required to assemble at during an emergency. The Primary EAA for personnel is EAA A, unless instructed otherwise. In the event that the emergency threatens certain EAAs, emergency services or Origin personnel may request personnel to assemble at alternative EAAs or evacuate further to an offsite EAA.

4.4 Emergency Control Points (ECPs)

Emergency Control Points are locations where Site Emergency Response Team (SERT) set up incident response command centres. Recommended Emergency Services staging points are adjacent to the ECPs. The relevant staging point for a given incident will be selected by the Emergency Services according to the incident and weather.

It is assumed that the emergency services will arrive at the ECP/staging point within 5-20 minutes of being alerted. The potential approach route option(s) for emergency services and the ECP locations are shown in Figure 1. The best approach to the terminal would be determined by the fire services on the day of the incident/emergency.

- The Main ECP is located in the Terminal Administration Office
- In the event the Main ECP is threatened and evacuation ordered, the Alternative Control Point will be the Emergency Assembly Area.
- If the entire terminal is evacuated, the main ECP would be set up offsite at the Gateway Hotel, Mayfield. At this point the emergency would be escalated to Group Crisis Management Level based in Melbourne.

The main ECP has the following resources to manage an emergency situation:

- Emergency Response Plan including Location maps and site layout.
- Site Manifest
- Safety Data Sheets

If the Main ECP is evacuated, the above resources will be taken by the Chief Warden to ensure they are also available at the Secondary ECP.

4.5 Site Emergency Equipment

The site has the following categories of emergency equipment:

- Isolation Systems
- Detectors, Alarms and Communications Systems
- Fire Fighting Equipment
- Portable Equipment and Other Emergency Equipment
- Security facilities and systems

See Appendix 2 for details of this equipment.

4.6 HAZMAT Box

The HAZMAT box contains the following documents:

- This Emergency Response Plan
- Site Manifest
- Site Safety Plan
- ESIP – Emergency Services Information Package
- Safety Data Sheets

4.7 Neighbours and Infrastructure Potentially Affected in an emergency

Figure 2 shows a map of the Newcastle LPG terminal and the surrounding area, with the worst case impact zones shown which is for a 20 tonne tanker BLEVE. Neighbouring businesses, public locations and infrastructure that could be affected by a major emergency on the terminal are identified in Table 6.

There are no sensitive, high density or vulnerable receptors within the maximum emergency impact zone of the terminal (school/childcare/hospitals/aged care, residential, community, retail, sporting facilities, etc.). The nearest residential area - Stockton is approximately 2 km (East) of the site, and Mayfield 2km (South).

Hazardous chemicals at other facilities are shown in Table 6 where known. There are no major infrastructure items within the maximum emergency zone such as airports, railways, arterial roads and highways, water resources, shipping routes etc.

The predominant wind direction during the day (East and North Westerly).

Table 6: Neighbours and Infrastructure Potentially Affected by Terminal Emergency

Details removed due to security requirements

Figure 2: Worst case impact zones showing a 20 tonne tanker BLEVE affecting surrounding areas

Details removed due to security requirements

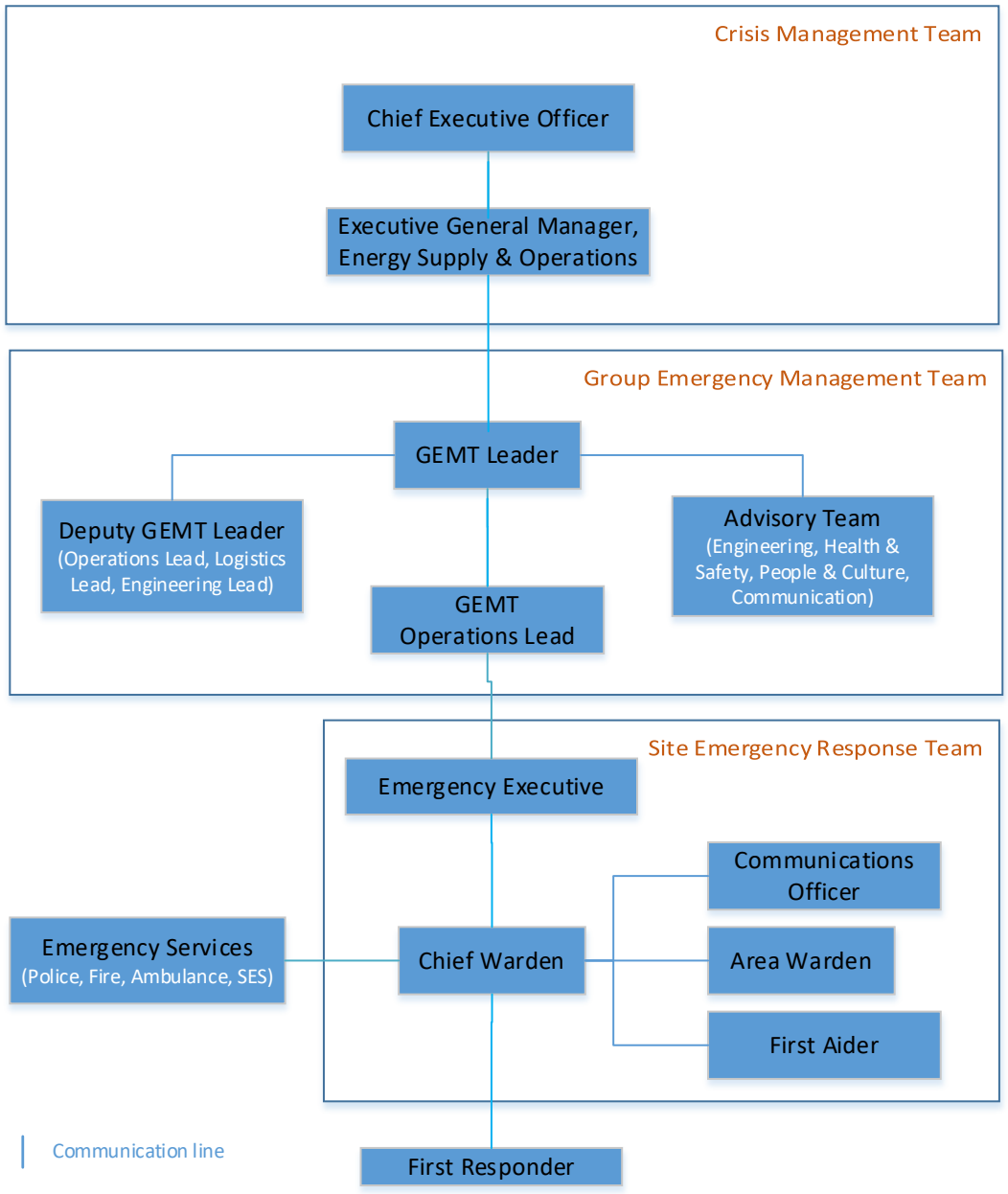
5 Emergency Management Structure, Roles and Responsibilities

5.1 Emergency Management Structure

The Emergency Management structure defines reporting lines between the key parties that may be involved in emergency response at the terminal, see Figure 3. The Emergency Management structure contains three levels of emergency response starting with the SERT, with the ability to escalate, if required by the nature and magnitude of the emergency, to the Group Emergency Management Team (GEMT) and then the Crisis Management Team (CMT). Refer to LPG Group Emergency Management Plan (LPG-BUS-EMM-PLA-0001) and Escalation tool (Appendix 3) for information on escalation.

The SERT is the site based emergency response team for effective response and communication in the event of a site emergency.

Figure 3: LPG Emergency Management Structure


Crisis Management Team
Chief Executive Officer
Executive General Manager, Energy Supply & Operations
Group Emergency Management Team
GEMT Leader
Deputy GEMT Leader (Operations Lead, Logistics Lead, Engineering Lead)
Advisory Team (Engineering, Health & Safety, People & Culture, Communication)
GEMT Operations Lead
Site Emergency Response Team
Emergency Executive
Communications Officer
Emergency Services (Police, Fire, Ambulance, SES)
Chief Warden
Area Warden
First Aider
Communication line
First Responder

5.2 Roles and Responsibilities

Table 7 shows the specific roles within the SERT and the staff assigned to each role. Their responsibilities before, during and after an emergency are listed in Appendix 4. The roles are assigned at all times to specific individuals as identified on emergency boards in terminal offices. If the primary staff assigned is unavailable, the deputy is trained to adopt the role.

The First Responder is any person who first discovers an actual or potential emergency. If the First Responder is not trained as a member of the SERT, then they should raise the alarm (if not already activated), make safe the immediate area, and evacuate from the site.

The Chief Warden activates the ERP, leads the SERT and manages the site response, liaises with and takes instruction from the emergency services, and reports to the Emergency Executive. The Emergency Executive will report a site ERP activation to the Operations GM and other relevant personnel. The GEMT leader decides if it is necessary to activate the Group Emergency Management Plan based on the following considerations:

- If the incident actual or potential consequences are significant (per escalation tool Appendix 3),
- If the site is likely to need additional resources to respond to the emergency, or
- If there may be implications or impacts to the LPG BU or Origin beyond the specific site involved.

The GEMT evaluates the strategic implications of the emergency and provides senior management input and support to site on issues such as specialist/technical advice, Regulatory notifications, media/customer/government communications, and additional manning or assets required to support the response. The GEMT also keeps the CMT informed as required. GEMT will arrange for specialist items which may be required to resolve emergency (e.g. technical expertise, pipe repair equipment, product transfer equipment etc.) including obtaining resources from off-site.

Table 7: Site Emergency Response Team Roles

Storage Terminal	Assigned Staff	Deputy	Colour coded hat/vest (AS3745)
Chief Warden	Terminal Manager	Terminal Gas Fitter	Red
Area Warden	Terminal Operator	Tanker Driver	N/A
Communications Officer	Accounts Manager	Tanker Driver	N/A

First Aider	Available Qualified Staff	Available Qualified Staff	Green/white cross
Emergency Executive	Regional Manager	Regional Manager Delegate	N/A

The terminal manning level varies as indicated in Section 4.2, and the ERP is designed to be implemented during normal business hours and out of hours, regardless of the number of people on site at the time. Terminal manning will dictate the filling of roles. Individual roles are filled and tasks within each role are completed based on priority and the nature of the emergency, and available resource as it arrives. SERT trained personnel are each trained to play a range of SERT roles and can play one or more roles simultaneously if needed.

The priority roles of the SERT are in descending order: Chief Warden, Area Warden, Communications Officer, First Aider & Emergency Executive, depending on the nature of the emergency. For example if someone is injured, then First Aider role becomes a higher priority. The Chief Warden determines the priority SERT roles and tasks using their judgement, experience and training, and taking into account the specific circumstances of the emergency.

In the event of an emergency, if there is only 1 person on site not trained in SERT, that person is required to carry out the role of a First Responder only. If that person has the necessary SERT training they are required to do the following:

- Carry out the role of a Chief Warden and in addition where required by the circumstances of the emergency, any specific duties of Area Warden and Communications Officer.
- Contact Origin Management to inform them of the emergency and if necessary request for assistance to be provided to fulfil the roles of the Communications Officer and Area Warden.

If there are 2 SERT trained persons on site, the personnel are required to do the following:

- One person is to carry out the role of a Chief Warden.

Another person is to carry out the roles of the Communications Officer and Area Warden and inform Origin Management of the emergency so that support can be provided where required.

5.3 Emergency Services Agencies

An emergency response may involve the Newcastle Police Service, the Newcastle Fire and Rescue NSW, including Fire and Rescue NSW HAZMAT Services, and the Environment Protection Agency and the Newcastle Ambulance Service. Each of these agencies has specific roles and responsibilities at an incident, as outlined in relevant legislation.

The Fire and Rescue NSW, including HAZMAT Services has the necessary expertise and equipment, is the designated combat authority and will take control of the incident response in a significant emergency (e.g. one involving potential offsite consequences or where there is a risk of escalation). Fire and Rescue NSW provides overall coordination with local emergency responders and may also provide additional firefighting equipment (not listed in this plan) and firefighting media (foam and additional water supplies).

The role of the Police Service is to assist Fire and Rescue NSW, including maintain a security cordon around the incident to allow the Fire Service to operate unhindered. In the overall management of an incident, the Police are responsible for co-ordination. The declaration of an emergency situation extends Police powers in relation to assuming control of necessary resources, directing evacuations, closing roads, etc.

Fire and Rescue NSW HAZMAT Services provides scientific and technical advice to responding emergency services in the case of chemical emergencies.

The NSW Environment Protection Agency are responsible for managing the response to a pollution incident.

At the scene of an incident, the primary role of the Ambulance is to co-ordinate the care and transportation of injured people. The Ambulance Service operates a system for multi-casualty management.

If the effects of the event require the Local Counter Disaster Plan (LCDP) to be activated, the Police, Fire and Ambulance services may be supported by elements of Local Government, community-based organisations and other agencies and individuals as defined in the LCDP. If resources available through the LCDP are unable to cope with the event, the State Counter Disaster Organisation (SCDO) may be activated to provide additional support from other Local Governments or State or Commonwealth resources, as necessary.

5.4 Emergency Response Arrangements with other Parties

Not available at this site.

6 Emergency Scenarios

6.1 Types of Emergency (internal / external)

There are three types of emergencies at this terminal as shown in Table 8.

Table 8: Types of Emergency and Emergency Services Notification Guidance

TYPE	LOCAL	SITE	EXTERNAL
Description of Emergency	Confined to a specific location within the facility with no potential for escalation.	May spread to or affect some or all parts of the facility, but not offsite.	May impact both within the facility and beyond the boundary of the facility.
Examples of Incidents	- Very small restricted leak that cannot escalate. - Small office fire. - First aid or medical emergency.	- Fire affecting two or more areas of the terminal. - Intruder onsite.	1. An incident chemical, oil or fuel spill such as Ethyl Mercaptan 2. An emergency such as fire, which starts at a neighbouring

			facility but threatens the terminal. 3. A fire or spill which could spread outside the terminal's boundary.
Requirement of Emergency Services	***Emergency Services MAY BE NOTIFIED AND REQUIRED DEPENDING ON SEVERITY***	***Emergency Services MAY BE NOTIFIED AND REQUIRED DEPENDING ON SEVERITY***	***Emergency Services SHALL BE NOTIFIED AND REQUIRED***

6.2 Potential Major Incidents

A LPG Loss of Containment Incident is an uncontrolled incident involving release of LPG, with the potential to lead to Major Incidents such as fire or explosion resulting in injuries, fatalities, property or environmental damage. The Potential Major Incidents for this terminal are listed in Table 9, and they can have a consequence of either 5 – Critical or 6 – Catastrophic, however their likelihood/frequencies as indicated in the table are very low. Consequences of LPG loss of containment incidents are described in Appendix 5. The major incidents hazards and their likelihood presented in a bowtie format contributing to each Major Incident Newcastle Terminal is shown in Appendix 6.

Table 9: Potential Major Incidents at Newcastle Terminal

Terminal Major Incident ID	Major Incident (MI) Description	Area	Consequence: 5 or 6	Likelihood: (10^{-5} – 10^{-4} pa) or (<10^{-5} pa)	Current Risk: L = Low, M = Med, H = High
NEW-H01	Release of LPG from storage vessel	Bulk storage	5	<10^{-5}	M
NEW-H03	Release of LPG (vapour) from transfer compressor during cylinder evacuation or tanker loading / unloading	Site compressor	5	<10^{-5}	M
NEW-H04	Release of LPG from transfer hose during road tanker loading / unloading	Road Tanker Gantry	6	<10^{-5}	M
NEW-H05	Release of LPG from road tanker	Road Tanker Gantry	6	<10^{-5}	M
NEW-H06	Road tanker drive-away whilst still connected	Road Tanker Gantry	6	<10^{-5}	M
NEW-H07	Release of LPG during cylinder filling	Cylinder Filling	6	<10^{-5}	M
NW-H08	Release of LPG due to cylinder impact during cylinder handling by forklift	Cylinder handling	5	<10^{-5}	M
HEW-H09	Release of LPG from the day tank	Cylinder Filling	5	<10^{-5}	M
NEW-H10	Release of LPG during cylinder testing and maintenance	Cylinder Testing and Maintenance	5	<10^{-5}	M
NEW-H11	Impinging fire on cylinder storage area	Cylinder Storage	5	<10^{-5}	M

Terminal Major Incident ID	Major Incident (MI) Description	Area	Consequence: 5 or 6	Likelihood: (10^{-5} – 10^{-4} pa) or ($<10^{-5}$ pa)	Current Risk: L = Low, M = Med, H = High
NEW-H19	Release of LPG from parked road tankers (out of hours)	Road Tanker Parking Area	6	$<10^{-5}$	M

* Consequence and Likelihood as per Origin Risk Assessment Matrix, where Consequence 5 is Critical and Consequence 6 is Catastrophic.

6.3 Other Emergency Scenarios

Table 10: Other Emergency Scenarios

Scenario	Description
General site fire	Any fire not involving the release of LPG, such as office fire, workshop fire, dangerous goods store fire, general non-process related fire or miscellaneous rubbish fire onsite.
Onsite Vehicle Incident	Scenarios include: Vehicle impacts on facility, other vehicles and/or people, vehicle fire. Including forklift trucks, light vehicles, cylinder trucks and LPG tankers.
Oil, Fuel and Chemical Spill	Spill scenarios could include diesel, automotive distillate, hydraulic fluids/oil, ethyl mercaptan and solvents etc.
Medical Emergency	Scenarios include heart attack, other acute medical incapacitation of individuals, fall from heights (injuries from falls/slips/trips), burns (freeze or other), machinery or tool injuries, person overcome by confined space, structural collapse e.g. building or scaffolding.
Third Party Emergency	Incidents occurring outside terminal potentially impacting terminal, e.g. incidents on roads or at neighbouring facilities, where there is a risk of fire spreading, smoke or toxic fumes blowing across the site etc.
Natural Disasters	Examples include earthquake, flood, bush fire or severe storms
Security Threats	Examples include bomb threats, personal and terrorist threats, suspicious parcels, intrusion, hold ups, public disorder, vandalism, etc.

7 Emergency Response Procedures

While the immediate and ongoing response actions in an emergency will depend on the nature of the incident, there are several generic procedures that will generally be required irrespective of the specific incident details (e.g. raise the alarm, activate the ERP, isolate & evacuate). There are also incident/scenario – specific procedures (e.g. gas leaks / fire, security threat, bush fire, medical emergency). These are all summarised below and presented in Appendix 7.

Table 11: Emergency Response Procedures

Generic Emergency Procedures	Scenario Specific Emergency Response Procedures
1. Detect Emergency and Raise the alarm 2. Activating the ERP 3. Make Work Safe and Evacuate 4. Respond to Emergency 5. Communicate and Escalate 6. Termination of Emergency 7. Reporting and Investigation 8. Restoration	1. Fire and Explosion 2. Loss of Containment of LPG 3. Procedures in event of failure of fire or ESD systems during Fire or Leak Emergency 4. Chemical, Oil or Fuel Spill 5. Vehicle Accident 6. Medical Emergency 7. Third Party Emergency 8. Natural Disasters 9. Security Threats

All procedures apply to emergencies during both normal operating hours and out of hours. Specific additional requirements for out of hours emergencies are provided where necessary.

The overriding ER philosophy is to preserve the lives of people. Actions and priorities are dictated by this requirement and actions are performed only if they can be done without placing people at risk.

8 Emergency Response Training and Capability

All personnel on site are provided with induction, education and ongoing training so that they fully understand, and have the knowledge and experience required to carry out, their roles and responsibilities in an emergency.

All personnel based at the terminal receive emergency response training via “Respond to an Emergency in an LPG Workplace (EM-LPG-ILT00660)”. Formal training records are captured in People Central on the Origin Intranet. This training covers detailed requirements for those assigned roles in the SERT, and basic response requirements (i.e. First Responder, evacuation) for other personnel. These basic response requirements are also covered in site inductions and specific additional instructions are detailed in relevant operating procedures.

The Terminal Manager is to ensure the ERP is kept in a prominent position and that all personnel in their areas of responsibility are made aware of the ERP. During induction and exercises, the TM is to ensure personnel are aware of the location of all emergency alarms, exits and firefighting equipment within or near their work area and the location of the emergency assembly areas.

8.1 Exercise and Testing of Plan

The effectiveness of the ERP and staff response knowledge and capabilities are evaluated and improved by simulated emergency exercises carried out under the direction of the Chief Warden.

Origin Energy requires the site to conduct a minimum of two Site Emergency Response Exercises (SERE) (one desktop and one live) and one Transport Emergency Response exercise (TERE) each year. SERT personnel are required to complete exercises in which they carry out each of their nominated primary and deputy roles in the SERT.

Emergency Services shall be invited to any of the tests, and other relevant parties (e.g. port operator, neighbouring sites, Origin group personnel) may be invited to attend. Records of the invitations shall be kept.

Site EREs are tracked in OCIS. Details of EREs are recorded on the Emergency Response Exercise Record & Debrief form, LPG-BUS-EMM-FOR-0002. This records attendance and provides a debrief / review to determine what worked well and what improvements are required. Corrective actions generated from the ERE are raised and tracked within OCIS.

The ERP must be tested within 1 month of an actual pollution incident occurring.

8.2 Training Schedule

Terminal Management are responsible for ensuring that appropriate training schedules and programmes are implemented for all staff within their areas as appropriate. Records of site emergency response training such as responding to an emergency in a LPG workplace, fire extinguisher and first aid are recorded within People Central. With emergency response exercises recorded in OCIS.

9 Review and Update

The ERP will be reviewed and updated as necessary based on the following criteria:

- 3 yearly and in particular when Safety Case is revised
- In relation to any changes which may affect Emergency Response (e.g. changes to materials, plant and equipment, organisational changes, changes in surrounding area, names and contact details)
- Following any routine testing of the plan, an incident or near miss or activation in an emergency that indicates potential need to revise ERP

During the review, the following aspects are to be considered as appropriate:

- Lessons learned from an emergency

- Changes in legislative requirement
- Improvements to effectiveness in terms of response strategy, management and communication
- Developments in the latest techniques/technology in handling an emergency
- Changes to, or movement of personnel within the organisation
- Changes to contact numbers or internal and external organisations
- Revisions to existing or availability of Emergency Management tools and equipment and resources.

During ERP reviews, stakeholders are consulted and informed as follows:

1. Workers – Updates to the ERP are conducted in consultation with the site Health and Safety Representatives (if applicable), and with the involvement of workers at the site in accordance with their roles and based on LPG Controlled Documents revision procedures.

2. Neighbouring Facilities and local community – provision of information on site, emergency contact details and actions, as required under WHSR or DGSM regulations.

3. External Agencies – The Terminal consults with external agencies and provides a copy of the ERP to each of the following parties:

    - Emergency services - any significant change to ERP, recommendations must be adopted
    - Local authority – during Safety Case reviews in relation to offsite impacts
    - Regulators – during Safety Case reviews and any significant changes

Table 12: PIRMP Testing

PIRMP Test Schedule Date	PIRMP Test Actual Date	Tested By	Signature
September 2020			
September 2021			
September 2022			

10 References

Document Title	Document Reference / Version Number
Work Health and Safety Regulation 2011	External document
Origin Emergency Management Procedure	ORG-RMS-PRO-006
Origin Emergency Assessment and Escalation Tool	N/A
Origin HSE Incident Management Procedure	ORG-HSE-PRO-025
Origin Crisis Management Plan	ORG-RMS-PLN-001
Origin Media Policy	ORG-CGOV-POL-0005
LPG Contract Management Processes	N/A
LPG Transport Emergency Response Plan – Aus.	LPG-AUS-EMM-PLA-0002
LPG Group Emergency Management Plan	LPG-BUS-EMM-PLA-0001
LPG Regulatory Notification Procedure	LPG-BUS-RAC-PRO-0005
Newcastle Terminal – Manifest	LPG-NEW-OPE-IST-0001
Newcastle Terminal Manifest Site Safety Plan	LPG-NEW-CIV-SSP-0003
Newcastle Safety Case Report	LPG-NEW-RAC-PRT-0001

11 Document control

Author (To whom any changes are to be recommended)	
Position	**Incumbent**
Newcastle Terminal Manager	Steve Pearce

Reviewed by (including Technical Authority or Site Safety Committee if applicable)		
Position	**Incumbent**	**Review date**
LPG Operational Integrity Engineer	Debbie Liew	08/10/2020
Terminal Manager	Steve Pearce	13/08/2020
Regional Manager	John Chalmers	
Terminal Site Personnel – S&I Fitter	Mark Kenney	
Terminal Site Personnel – Terminal Operator	Craig Perry	

Approved by		
Position	**Incumbent**	**Approval date**
Regional Manager	John Chalmers	14/08/2020

History (of all versions)

Date	Author	Version	Nature of change
20/02/2014	Alan Hill-Hartporter	23.0	Draft, QFES & NSW comments
07/03/2014	Alan Hill-Hartporter	24.0	Realignment with national requirements
29/07/2014	Steve Pearce	25.0	Update Contacts
11/11/2014	Kanni Short	26.0	Update Contacts
13/11/2015	Steve Pearce	27.0	Updates as per review & feedback from FRNSW. Updates to contact numbers. Reference added for Oil leaks in 10.3 for PIRMP purposes. Update Reference document details through document
11/11/2016	Steve Pearce	28.0	Contact details updated
25/11/2019	Debbie Liew	29.0	Revised using new ERP template
14/10/2020	Debbie Liew	30.0	Updated EPA licence conditions

Related documents	
Title	**Document Reference Number**
LPG Procedure – Regulatory Notification	LPG-BUS-RAC-PRO-0005
LPG Group Emergency Management Plan	LPG-BUS-EMM-PLA-0001
LPG – Transport Emergency Response Plan – AUS	LPG-AUS-EMM-PLA-0002
Origin Crisis Management Plan	ORG-RMS-PLN-001
Origin Media Policy	ORG-CGOV-POL-0005
Newcastle Terminal Manifest	LPG-NEW-OPE-IST-0001
Newcastle Terminal Site Safety Plan	LPG-NEW-CIV-SSP-0002
Newcastle Terminal Security Report	LPG-NEW-EMM-RPT-0001

LPG Controlled document location *(to be completed by Document Controller)*			
eDRMS ID: 14928399			
LPG Safety Critical Element (SCE) Category			
SCE Category:	High ☒	Low ☐	Non-SCE ☐

Appendix 1- Terminal Site Safety and Manifest Plans

These form part of the ERP but are separate controlled documents. They are therefore not copied into the ERP controlled document. Instead they shall be printed and included with any hard copies of the ERP at the site and any copies sent to other parties. They shall also be included with electronic copies of the ERP provided to others. This avoids the need to revise the ERP when a drawing changes.

Newcastle Site Safety Plan - LPG-NEW-CIV-SSP-0001

Newcastle Site Manifest - LPG-NEW-CIV-SSP-0003

Details removed due to security requirements

Appendix 2- Site Emergency Equipment

Isolation System

LPG Tank

All outlets on the storage tanks are fitted with a primary shut off, either an excess flow or a back check valve, and a secondary shut off, pneumatically operated ball valve which fails safe in case of an air failure and a loss of power. In addition the tank is fitted with safety relief valves designed to open in the event that pressure in the tank approaches its design pressure.

Note: Safety Relief Valves (SRVs) used on LPG tanks are of the “pop action” type that are designed to lift, to relieve excess pressure, and then to reseat. The pressure at which they reseat is variable depending on why the SRV operated initially and it is possible that the SRV may remain open for prolonged periods if the tank is being heated or the vapour space is connected to other tanks or sources of high pressure.

Do not assume that the SRV will quickly reseat and if this has not occurred within 30 seconds of lifting, it should be treated as an emergency and the ESD should be activated.

Both 100 tonne tanks are mounded and therefore not subject to heat or flame impingement.

Road Tankers and Loading/Unloading Bays

All loading points are fitted with an excess flow valve, and air actuated emergency shutdown valve interlocked to the road tanker and a manual valve;

Road tankers are fitted with a device that locks the brakes until the hoses are disconnected to prevent accidental drive-away whilst still connected. The tanker has an over-ride that allows the tanker to be driven away in an emergency whilst the driver holds down the over-ride button;

Road tankers are also fitted with a terminal/tanker interface which closes the emergency shutdown valves on the tanker and on the breakaway stanchion should the tanker drive-away (with the hoses connected), and

The loading points are fitted with a breakaway stanchion, which allows the loading point to break, while maintaining the operability of the excess flow valves and emergency shutdown valves. This shear point will only be broken in an emergency drive away situation and has been designed to minimise damage to other components as the weakest point.

All tankers are required to pass over the weighbridge after filling therefore possibility of overfilling is controlled.

Cylinder Platform

The terminal has a cylinder filling platform but there are no sales from the terminal. Cylinders are stored as per the Manifest in both full and empty condition.

Emergency Shutdown System (ESD)

- Activation of deluge system
- All pneumatic shut down valves
- Electric power is switched off to the LPG pumps and compressors.
- Audible and visual fire alarms activate.
- Alerts the security company who in turn contact the Fire Service and the appropriate Origin Energy personnel.

Lone Employee System (LES)

The LES is activated by a pre-determined security code from the terminal security panels. The LES consists of control buttons at locations immediately adjacent to LPG tanker loading and the cylinder filling platform.

In the event of an operator becoming incapacitated and the LES not being reset the following will occur:

- Shut down of actuated LPG valves and isolation of the electrical supply to the LPG pump or compressor in operation for that transfer
- LES siren will continue to enunciate
- The security company will be notified.

The LES must be deactivated at the end of the transfer irrespective of whether the LPG valves have been closed and the pump or compressor stopped by the operator. Failure to do so will activate the alarms.

Detectors, Alarms and Communication Systems

Alarms at terminal are intended to alert onsite personnel only. Table 13 shows the types of alarms, activation mechanisms and communication systems that would be used in an emergency, and response required for this terminal.

Table 13: Terminal Emergency Warning and Communication Systems

Types of Alarms	Sound / Look like	Location	Mechanism / type of activation	Response to alarm
High-high level alarm	General siren	Siren on external terminal office wall	Overfill – max fill level reached 91%	Tank Valves close and LPG pump shut down automatically
Site ESD alarm	ESD Siren Evacuation Fire alarm - bell	ESD Siren on external terminal office wall Fire alarm bell in car park	ESD activation as per Appendix 7 – Detailed Emergency Response Procedures	Tank Valves close, LPG compressors and pumps shut down automatically. Air and power to terminal shutdown
Fixed gas detector	Electronic sounding siren	6 detectors around the terminal perimeter	Activation on 50% LEL	Security is notified who will contact site management
Lone employee system (LES)	LES siren	Siren at respective load bay or cylinder dock	As per warning and site alarms	Acknowledge and reset at load bay or cylinder dock. Localised shut down of valves and pump/compressor and Security firm is notified if not reset in time.
Building alarm	Security panel flashes	Main office entrance	Forced intrusion	Security firm is notified, Physical check and reset
Security alarm	Security panel flashes	Main office entrance	Infra red beam along fence line and around tank farm	Security firm is notified, Physical check and reset

Fire Fighting Equipment

Table 14 identifies the available firefighting resources in the terminal.

Table 14: Fire Fighting Resources

Supply from water mains	Hunter Water
Fire water tank	N/A
Fire Service booster points	1
Fire Pumps	N/A
Fire monitors	N/A
Fire Hydrants	3
Fire extinguishers	8
Hose reels	1
Deluge System	Tanker Load Bay & Cylinder Dock

Deluge system

The site deluge system is activated in one of the following ways:

1. Heat sensors (frangible bulbs) in all the areas covered by deluge sprays
2. Activation of emergency stop buttons (ESD) strategically placed around the terminal as shown on the site plan and on the terminal emergency site plan at the terminal gates.

The deluge system is designed to temporarily protect aboveground LPG vessels and equipment from the radiation effects of a fire in compliance with Australian Standard AS 1596. The deluge system covers:

1. Road tanker bays
2. Day tank
3. LPG pumps and compressors.
4. Cylinder fill dock.

The Fire System is checked and tested on monthly, six monthly and annually. This includes a documented checklist that records the results of the tests including water pressure. Maintenance of the system is performed by qualified people. The system and associated documentation – checklists, tests, and maintenance – is also audited via Origin LPG compliance programme.

Portable Equipment and other Emergency Equipment

The emergency compressor trailer can be used for emptying LPG from any vessel and transferring into another or a road tanker. This assists in an emergency situation in removing product from the danger area or in lowering gas pressure. The trailer usually carries 40m ¾ hose and 30m 1 inch hose to ensure it remains in a safe area (hoses can be joined). S&I and terminal operatives are trained in the use of this equipment.

Table 15 below shows the portable equipment and their respective locations in the terminal.

Table 15: Portable Equipment

Portable Equipment	Location
First Aid Box	Lunchroom (fixed) Cylinder Dock Store (portable)
Portable Gas Detector	1 Main Office

Safety Harness and life lines	1 Office Store
Emergency Trailer	1 Fitters Shed

Site Security

Details removed due to security requirements

Appendix 3 - Origin Emergency Response Assessment and Escalation Tool

First 5 minutes – assessment and escalation guide

- This is a guide to help leaders quickly assess actual or potential incident consequences and notification thresholds. You may choose to activate / notify at levels lower than those detailed
- Each incident is different and must be individually assessed. It is prudent to contact the next level quickly if a SERT or GEMT has been activated.
- Escalation / Notification to the next level does not guarantee that team will activate. They will assess the incident and decide if they should activate, or leave it to be managed at the current level.

In the event of an incident the actions in priority should be:
(1) provide appropriate immediate assistance
(2) notify the relevant Emergency Services if required
(3) ensure that appropriate plans are activated and notification & escalation is conducted.

origin	Site Emergency Response Level 1 – Event	Group Emergency Management Level 2 - Emergency	Crisis Management Level 3 - Crisis
ACTIVATION	**The SERT may activate if any of the criteria below are met**	**The GEMT may activate if any of the below criteria are met**	**The CMT may activate if any of the following criteria are met**
ESCALATION / NOTIFICATION	**If this Team is Activated, SERT-L notifies Line Management who may notify the GEMT-L**	**If this Team is Activated, relevant ELT notifies Origin CEO & GEMT-L notifies SEC Team: 0423 841 366 (alt. 0402 898 161)**	**Relevant ELT to notify Origin CEO ASAP & GEMT-L notify SEC Team: 0423 841 366. If Activated CMT to arrange contact with the GEMT-L**
Injury / illness to workers	Injury or ill health requiring medical treatment.	Fatality or injury / ill health requiring extensive medical treatment (e.g. amputation, spinal injuries etc).	For a fatality and/or severe irreversible disability to multiple people, assess in conjunction with other impacts (eg. reputation) and consider CMT.
Loss of workforce capacity (pandemic or industrial action)	Loss of key staff/roles impacting on operational output. Threat of industrial action.	Operations compromised due to staff unavailability.	>75% of staff not available (>5 days). Ongoing industrial action affecting multiple business units /critical function(s).
Personnel and asset security	Non-specific threat towards the safety of Origin staff or asset. Includes protest, suspicious package, bomb threat etc.	Community protest action. Direct threats to OE Staff or asset. Bomb threat, suspicious package, security incident triggering ERPs.	Major security incident/criminal activity causing significant financial loss or warranting shareholder attention.
Environment and/or Community	Localised/short-term environmental and/or community incident/emergency.	Extensive environmental or community incident such as significant contamination, offsite pollution or fatality	Destruction of plant/animal population or area of significant environmental or cultural significance. Remediation not practical. Prolonged community outrage
Natural Disaster	Predicted or actual localised damage to facilities / assets due to storm, external fire, flooding. Local Disaster Plans activated.	Storm, fire, flood damage. Forecast natural disaster (widespread). Multiple locations impacted. Regional Disaster Plans activated.	Destruction of facilities/assets. State Disaster Plan/s activated. Significant impact to business/operations.
Fire and explosion	Small localised fire extinguishable by site resources or any explosion	Uncontrolled fire / explosion requiring external emergency support.	Fire / explosion - large scale response from multiple external agencies.
Property Damage	Serious damage to Origin asset / 3rd party property.	Major damage to Origin asset / 3rd party property.	Catastrophic damage to Origin asset / 3rd party property.
Loss of containment (LOC) inc chemical spill – solid, vapour, liquid. MAE (major accident event)	LOC from: any MAE, or event requiring HAZMAT response, or Non-Hazardous substance spill that meets response activating ERP scenario. Any spill to water.	Uncontrolled release unable to be isolated and contained within an hour after activating ERP scenario. Event resulting in evacuation of nearby residents.	Major release (or spill) requiring major multiple external agency response and evacuation or requiring resources of state or national response plans.
Laws, regulations, civil actions	Breach of regulation with investigation, report to authority, possible prosecution/fine.	Litigation/prosecution by regulator which could lead to plant closure.	Major litigation/prosecution with damages/fines >$25m. Involvement of Executive Leadership.
Stakeholders/Media	Local media coverage. Health safety concerns to local community.	State/National or social media with potential to impact performance of site/team operations	National/social media coverage over several days. Shareholders, regulator, Board exercise control. Potential class action.
Facility, Plant or System failure / Cyber attack	Significant SLA Breach of a P1 IT incident affecting one BU/location. Loss of access to single location <4hrs	Significant SLA Breach of a P1 IT incident affecting more than one business unit/location. Loss of access to single location for >4 hrs	Significant SLA Breach of a P1 IT incident affecting the entire organisation. Loss of access to multiple locations
Customer interruption/Supply disruptions	Customer service interruption up to 1 day. Product shortfall at facility or supply point >25 TJ per day	Potential customer service interruption up to 3 days. Supply shortage impacting community or major customer >100TJ per day	Actual customer service interruption up to 3 days. Product shortage impacting a region. Inability to perform critical supply/production (as determined by BIA)
Third party failure (inc contractor, supplier or partner)	Restricted impact which can be rectified in the normal course of business. e.g. haulage contract	Supply or services potentially disrupted with threat of serious impacts (inc to customers or critical functions).	Failure of major agreements/contracts with suppliers with major impacts (inc to customers or critical functions). Joint venture partner in crisis.
Financial	EBIT: $5m impact CASH FLOW: $25m	EBIT: $20m impact CASH FLOW: $100m	EBIT: > $200m impact CASH FLOW: > $1b

Appendix 4 - SERT Roles and Responsibilities Table

Table 16: First Responders and General Site Personnel Responsibilities

BEFORE EMERGENCY	DURING EMERGENCY	AFTER EMERGENCY
Familiarisation with the terminal. Visitors and contractors are given briefing of site Emergency Response procedures as part of their induction.	Stop Work, isolate equipment as necessary and if safe to do so. Immediately raise the alarm (report location, type and extent of incident) by ESD, in person, radio or telephone to Chief Warden. Notify a First Aider if required. Follow all instructions provided by the Chief Warden. Evacuate to Emergency Assembly area as instructed by the Area Warden.	Resume normal activity upon instruction by Chief Warden.

Table 17: Chief Warden Responsibilities

BEFORE EMERGENCY	DURING EMERGENCY	AFTER EMERGENCY
Detailed understanding of the terminal, the operating equipment, processes and materials used, the potential effects of emergencies on people, property and the environment, waste control and the application of the Emergency Response Plan. Mobile phone/radio is carried and left switched “ON” when in non-hazardous zone. That all personnel are inducted and trained in the procedures, and amendments are provided to persons or organisations listed in this ERP so that their manual can be updated. That 6 monthly emergency exercises are conducted to prove the validity of the procedures and maintain the competency of all personnel. Weekly inspection of all equipment is carried out and recorded, that all equipment is kept fully operational.	Decide if site ERP requires activation and plan the site response. Pick up Chief Warden hat from ER Muster area. Proceed to the danger area, if safe to do so, and assess the situation. Confirm all persons have been (or are being) moved to safety and accounted for. Activate additional control measures as required (e.g.: deluge). Establish communications with the ECP and check if Emergency Services have been notified. Co-ordinate the response actions of other Emergency Response staff. Provide regular situation reports to the Emergency Executive. Meet, brief and assist the Emergency Services on their arrival. Respond to out of hours contact by security / Emergency Services.	Pass “ALL CLEAR” instructions, and if possible, re-establish terminal operations. Conduct debriefing of Emergency Control Staff. Responsible to Emergency Executive to ensure: • Refurbishment of emergency and other equipment. • Evaluation of procedures. • Preparation of reports.

Table 18: Area Warden Responsibilities

BEFORE EMERGENCY	DURING EMERGENCY	AFTER EMERGENCY
Detailed familiarisation with the terminal, equipment, and ERP. Keys to perimeter security gates are carried at all times. Visitors and contractors are given briefing. **“NO ENTRY”** signs are correctly located and maintained in good condition.	If the site fire alarm is activated or when instructed by the Chief Warden: Collect the visitors, contractors and employees sign-in sheets from the front office Organise evacuation in your area if threatened or when instructed, confirm the area is clear and if required commence searching and accounting for people. Verify that everyone is accounted for at the evacuation point. Advise the Chief Warden. Under Chief the Warden instruction:	Pass **“ALL CLEAR”** instructions to personnel. Attend Chief Warden debriefing session. Retrieve and store **“NO ENTRY”** signs. Refurbish ‘Evacuation Checklist’ sheets.

	1. Approach the emergency area, if safe to do so, and assess the situation. 2. Activate additional control measures as required (e.g.: deluge). Take responsibility for site access and control, including the posting of **"NO ENTRY"** signs at the Main gate entry. Prevent the start-up/movement of vehicles in the terminal and in the car park assembly area. If safe and appropriate to do so, remove road tankers and cylinder trucks from the terminal. Assist and update the Chief Warden as required.	

Table 19: Communications Officer Responsibilities

BEFORE EMERGENCY	DURING EMERGENCY	AFTER EMERGENCY
Familiarisation with all communications systems and specific duties as outlined in this manual. Ensure phones, security keys and ERP are readily available and able to be taken to the Main Control Point. Deputy is available when absent. All emergency phone numbers are kept up to date, and are accessible for easy reference. Bomb threat and other checklists, and message log are readily available.	If the site fire alarm is activated or when instructed by the Chief Warden: Set up the Main Control Point and, commence the message log. Under instruction from the Chief Warden ensure that the Emergency Services have been alerted and given details. Assist the Emergency Executive to advise other external parties e.g. neighbours and authorities. Await further instruction from the Chief Warden. Be prepared to evacuate when directed by the Area Warden/Chief Warden.	Prepare report using completed message log. Attend Chief Warden debriefing session. Refurbish equipment, documents, stationery in Emergency Control Point.

Table 20: First Aider Responsibilities

BEFORE EMERGENCY	DURING EMERGENCY	AFTER EMERGENCY
Maintain current first aid certificate. Maintain awareness of ERP and first aid equipment.	Collect first aid kit when required. Report to and act under instructions of Area Warden. Provide first aid as required.	Attend debrief meeting. Replenish first aid stores if required.

Table 21: Emergency Executive Responsibilities

BEFORE EMERGENCY	DURING EMERGENCY	AFTER EMERGENCY
To be aware of and have access to: • Organisation, policies, and General Manager LPG and Origin Insurance contact details. • Security Threats Analysis and Assessment Criteria. • Actions required in emergencies. • Recovery/Special Plans including the Group Emergency Management Plan. • Knowledge of LPG HSE Contractor Management process and the LPG Regulatory Notification Procedure (LPG-BUS-RAC-PRO-0005).	If present onsite, proceed to the Main Emergency Control Point or another centre as advised by the Chief Warden. Assist and advise the Chief Warden as required. Handle media/relatives/public enquiries in consultation with senior management and police, (Refer to Table 31: Communicate and Escalate of this plan for Origin Media Relations guidelines). Advise the GEMT Operations Lead and Origin Insurance and maintain liaison. If emergency has been escalated to Group Emergency level, continuously liaise with the GEMT Operations Lead. Continuously monitor the situation and advise the GEMT Operations Lead whether it should be escalated to GEMT level. Respond to out of hours contact by security/Emergency Services.	Assess situation and initiate recovery and special plans if necessary. Arrange trauma counselling for staff if required. Attend debriefing. Evaluate emergency procedures. Prepare report with Chief Warden providing an analysis of investigations of the incident together with conclusions and recommendations.

Appendix 5 - Consequence Information

Details removed due to security requirements

Appendix 6 - Newcastle Bowties

Details removed due to security requirements

Appendix 7 - Detailed Emergency Response Procedures

Appendix 7 Table of Contents

Section	Generic Emergency Procedures	Section	Scenario Specific Emergency Response Procedures
7.1.1	Detect Emergency and Raise the alarm	7.5.1	Fire and Explosion
7.1.2	Activating the ERP	7.5.2	Loss of Containment of LPG
7.1.3	Make Work Safe and Evacuate	7.5.3	Procedures in event of failure of fire or ESD systems during Fire or Leak Emergency
7.1.4	Respond to Emergency	7.5.4	Chemical, Oil or Fuel Spill
7.1.5	Communicate and Escalate	7.5.5	Vehicle Accident Onsite
7.2	Termination of Emergency	7.5.6	Medical Emergency
7.3	Reporting and Investigation	7.5.7	Third Party Emergency
7.4	Restoration	7.5.8	Security Threats
		7.5.9	Natural Disasters

Generic Emergency Procedures

7.1.1 Table 25: Detect Emergency and Raise the alarm

#	Item/Step
1	Any person can act as a First Responder and detect an emergency and raise the alarm. On detection of a potential or actual emergency, one or more of the following methods can be used to raise the alarm: • In person e.g. verbal to the Area Warden or Chief Warden • Digital radio • Phone (mobile, or landline) – call 000 if necessary • Site alarm by ESD button • Auto detection and alarm e.g. fire detection, gas detection, LES, security system, level alarm, etc. Specific means of detecting LPG gas releases are as follows: • During business hours by personnel detection (sight, sound &smell) • After hours by security or public detection (sight, sound & smell) • At all times via fixed gas detectors (where fitted).
2	**Out of Hours Detection and Alarms** • If the fire system is activated out of hours, the emergency services and security monitoring company are automatically contacted. • If the security system, gas detectors or LES are activated out of hours the security monitoring company is automatically contacted. • If a member of the public identifies an emergency, they can call 000 or the Origin emergency number on the site entrance board.

	• If security patrols identify an emergency, they will contact the security monitoring company. • Security monitoring company will contact Origin in the following order until they get a response: ❍ Terminal Manager Mobile telephone ❍ Terminal Fitter Mobile telephone ❍ Origin After Hours contact number
3	Depending on the nature of the incident the contacted Origin party will assume the role of Chief Warden and: • Notify Origin line manager and request appropriate escalation within Origin • Seek assistance from operations, maintenance and technical personnel and contractors • Escalate or request assistance to escalate incident to emergency services and relevant regulatory agencies • Communicate if necessary to potentially affected neighbours • If safe to do so, travel to site to assess and manage the incident (including as necessary: ensure access to the site is limited to emergency services and Origin responders, establish an ECP and provide advice and information as required by the Emergency Services) Should the terminal be in danger from a neighbouring site out of hours, the Emergency Services will contact the terminal SERT, after referring to their copy of this plan, the terminal manifest or the Emergency Services Information Pack. In such circumstances, the person contacted will assume role of Chief Warden and act as indicated above. If the emergency is detected out of hours by a non SERT person, that person will carry out First Responder role and will raise the alarm, evacuate the terminal and await emergency services/Chief Warden attendance. If the terminal is unmanned and a person (member of the public, contractor or employee etc) notices a potential emergency, the arrangements for communication with emergency services and Origin in an emergency are described on the Emergency Panel (alongside the entry gate).

7.1.2 Table 26: Activating the Emergency Response Plan

#	Item/Step
1	The Chief Warden has the authority to activate the ERP and mobilise the SERT.
2	On receiving the alarm, the Chief Warden gathers information, assesses the situation, uses his or her knowledge and experience to determine if necessary, to activate the site ERP and mobilises the SERT as a precaution. Activation of the site ERP is based on considerations of actual or potential impacts on any of the following (refer to assessment and escalation tool Appendix 3): People, Environment, Asset, Reputation & Liability. In general the actual or potential impacts required to activate the ERP should be at or above Category 2 (Moderate) on the Origin Risk Matrix, i.e. in safety terms: Injury or illness to one or more people requiring medical treatment with up to one week lost time. The Chief Warden may decide to take a precautionary approach and activate the ERP regardless.
3	The Chief Warden mobilises the SERT by contacting each SERT member (identified on the site emergency information notice board) by the most appropriate method (face to face, phone or radio) and stating he or she is activating the ERP.
4	The Chief Warden is responsible to notify the Emergency Executive of the site ERP activation. The Chief Warden will ensure the Communications Officer commences recording of information in the emergency log. The Chief Warden may also determine if further personnel evacuation is required at this stage and request Communications Officer to communicate this to those concerned.
5	Once the ERP is activated the Communications Officer shall commence log keeping to record key events and decisions. Refer to Table 27: Emergency Response Immediate Actions Checklist.

Table 27: Emergency Response Immediate Actions Checklist

Incident:	
Time:	
Date:	
Location:	

Check	Action	Notified who	Time/Date	Initial
☐	Secure personnel log, visitors' book & ERP plus other documents as required (e.g. SDS register)			
☐	Locate First Aid Kit			
☐	Proceed to Muster Point & notify the SERT Leader of your position			
☐	Assist in any First Aid required			
☐	Assist Emergency Services when required			
☐	Assist SERT Leader when required			

Sequence of Events / Actions Taken	Time/Date	Initial

Situation Resolved – Appropriate Notifications				
Check	**Notification of return to scheduled work**	**Notified who**	**Time/Date**	**Initial**
☐	Await Verbal – "All Clear"			
☐	Attend De-brief session			

7.1.3 Table 28: Make Work Safe and Evacuate

#	Item/Step
1	Stop all work and make sure the worksite is safe: • Activate ESD or LSD in order to shutdown LPG operations and isolate any electrical supply. • No other utilities (water, air) require isolation in an emergency. • Communicate the need to evacuate to other people in the vicinity. • Make safe any current work activities, e.g. de-energise and shut down equipment in use • Stop vehicle and mobile plant operations If you need to abandon vehicles and mobile plant: • Pull over and park in a safe area • Ensure access and egress to the site is not impeded • Switch off and leave the keys in the ignition
2	Select a route to the Primary terminal Emergency Assembly Area (located at the grass verge near entry barrier) taking into account the nature and extent of the emergency and weather conditions. Plan a safe route and avoid or minimise movement towards or through unsafe locations or hazardous plant/storage areas or crossing roads. For example: If unignited LP Gas release, evacuation must be away from the direction of emission and wind as indicated by the windsock. If there are injured parties determine if they can be safely assisted in evacuating or should not be moved.
3	As each area is evacuated it must be searched by the Area Warden, if safe to do so, to ensure no person remains in danger. If this is dangerous, search and rescue must be left to the Emergency Services who will be properly equipped for this. Where required record information in the Evacuation Checklist (below) during or following search of areas, to confirm each area is clear of personnel. The Chief Warden or Communications Officer should take the following materials to the EAA: 1. Emergency mobile phone and/or radio 2. ERP 3. First Aid Kit 4. Records of personnel present onsite (visitor book, staff board, etc.)
4	The "Emergency No Entry" signs (and/or witches' hats, tape etc.) are to be placed by Area Warden across the entry and exit gates to the terminal, in order to secure the site and restrict access. The Area Warden is also to ensure emergency services can access the site in emergency. If you arrive at the premises during an emergency, report to the Area Warden at the nearest nominated EAA.
5	All personnel are to initially assemble at the Primary EAA and the Chief Warden will decide if further evacuation is required and if so on the appropriate EAA based on the incident, wind conditions, hazard ranges of emergency scenarios (Consequences Appendix 5) and risk of escalation. All persons are to evacuate by the nearest and safest route to the selected EAA under control of an Area Warden. Ensure visitors are guided to the EAA. Await further instructions at EAA and advise emergency services/Origin personnel on arrival. In the event of a gas release incident, the Area Warden needs to carry a portable gas detector to monitor and be warned of any dangerous gas levels.
6	The Area Warden is to account for all people at the EAA via a "roll call", using the personnel and visitor sign in logs and/or swipe card records, and referencing where necessary the Evacuation Checklist Form: (Table 29). This is for use in ensuring areas of the facility are searched and confirmed clear of personnel, e.g. if personnel are not all immediately accounted for. Ensure all personnel are accounted for or identified as missing prior to evacuation off-site. Report missing persons to Chief Warden. Stand by at the EAA until stood-down or instructed to evacuate to a different location. If further evacuation is required, proceed under the control of the Area Warden.

Table 29: Evacuation Checklist

To be Referred to by the Area Warden for use in conjunction with Personnel/Visitor Logs if required to locate missing persons or confirm all personnel onsite are accounted for.

EVACUATION CHECK		PERSONNEL CHECK	
AREA CHECKED	Tick √	LIST ALL PERSONS IN AREA ACCOUNTED FOR BY NAME	Tick √

7.1.4 Table 30: Respond to Emergency

#	Item/Step
1	The Chief Warden is to develop a response plan, act, monitor and gather more information, review outcomes and if necessary adapt the response plan accordingly. Use relevant specific response procedures (see scenario specific procedures below) if safe to do so under the particular circumstances of the emergency. The response plan may include actions to liaise with the Emergency services, provide periodic updates to Emergency Executive/General Manager Operations, minimise further danger e.g. by turning off equipment (not lights), moving tankers/trucks away from the danger, firefighting small fires, isolating plant areas, contacting neighbours or further containment/mitigation of the incident. Response actions should only be carried out if safe to do so. The Chief Warden and Area Warden must work together to determine what actions can be carried out safely and what additional precautions are required to ensure safety while responding in any particular emergency. These include the following considerations: • Time and path required to take to complete an emergency action • Size, location, duration and nature of hazard zone • Likely timing and nature of potential escalation of incident consequences • Options for carrying out an emergency task remotely • Use of portable gas detectors when approaching areas near potential gas leak • Consider wind direction from windsock in planning route to take • Availability of escape routes and sheltered areas • Maintaining line of sight with other personnel • Isolation points for electrical supply to the terminal are shown on the Site Plan If this has escalated to require emergency services response, some of the supporting functions such as HSE, Process Safety, Fleet, Engineering, Compliance Risk & Assurance, Legal or other relevant subject matter experts within the organisation should be notified and asked to ensure availability should their services/knowledge be required. For leaks of LPG or other materials the duration of the leak may be possible to estimate if the size of the hole and the conditions and inventory can be determined. The release rates provided in Appendix 5 can be used or Operations Integrity consulted.
2	When an emergency is of such proportions that the Emergency Services are involved, the formal incident control may be assumed by the Emergency Services. Depending on the type of emergency and the assistance required, in most circumstances Emergency Services will require assistance from Origin for local and technical knowledge and for additional resources to manage the incident. Meeting points with Emergency Services would typically be the Emergency Control P that may need to be revised according to the nature of the emergency.
3	If the emergency requires/results in the arrival and involvement of emergency services, Origin personnel will cooperate with their requests as they not only have statutory powers but are vastly more experienced and have access to resources in managing the emergency. Origin remains responsible for its employees and assets and would work with the emergency services to ensure their health and safety.
4	Shift changeovers may be required for continuity of emergency management of a long duration incident. The Chief Warden is responsible for changeover of personnel involved in emergency. Effective changeover will be achieved by: • Staggering changeover times • Avoiding changeovers during critical periods • Briefing incoming personnel

7.1.5 Table 31: Communicate and Escalate

#	Item/Step
1	One of the most important aspects of effective emergency management is communications. This may be required with a wide range of different internal and external parties. The timing, content, and style of such communications will generally have a major impact on the perceptions about how the Company has responded, and therefore need to be closely co-ordinated.

Operational emergency communications may need to be repeated and/or confirmed/verified with the receiving party to ensure it has been received and understood both ways.

Communications of two main types are required:

- Notification to appropriate external and internal groups.
- Response to enquiries, e.g. from relatives, the media, local community, and general public.

Guidelines are set out below regarding the range of potential contacts and how they should be handled.

2 Internal Communications

All incidents requiring activation of the ERP must be reported by the Emergency Executive to the GEMT Operations Lead who may in turn notify the GEMT Leader and mobilise the GEMT.

Local staff should also be notified. This may be done via the alarm or by using the terminal radios, but in instances where staff are not directly affected (e.g. a vehicle accident off-site) details should be provided through a notice from the Emergency Executive. This is particularly important in cases where a colleague has been seriously injured, or where the incident (and the Company's reputation) is being publicly debated, and staff should know the facts.

3 External Communications

A wide variety of external parties may need to be notified of an incident – starting of course with the Emergency Services, but also covering such groups as:

- Neighbours and the local community
- Next of Kin
- Any relevant government departments and local authorities
- Contractors, customers, suppliers etc.

The thresholds for NSW EPA on the types of pollution incidents which are "immediately reportable" to the EPA is outlined bellowed from the NSW EPA Guideline: Pollution Incident Response Management Plans.

Box 1.3: When does notification need to be given of a pollution incident?

Notification is required if a pollution incident causes or threatens to cause 'material harm to the environment'. Material harm is defined in section 147 of the POEO Act as:

'(a) harm to the environment is material if:

(i) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or

(ii) it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding $10,000 (or such other amount as is prescribed by the regulations), and

(b) loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.'

Notification is required even where 'harm to the environment is caused only in the premises where the pollution incident occurs', as specified in section 147(2).

Section 148 of the POEO Act sets out additional pollution incident notification requirements.

The Newcastle ERP is accessible from the Origin website.

If the Emergency Services have not been contacted by automatic systems such as fire detection, the Emergency Executive or Chief Warden may still decide to notify them if they are potentially required to attend site in order to manage the impacts of the emergency or prevent escalation or additional impacts, or if they need to be informed for other reasons e.g. in case other parties contact them in relation to the emergency.

The Communications Officer or Chief Warden or Emergency Executive will report the emergency to the Emergency Services. The following initial information/advice is to be provided:

- name and location of the terminal (suburb, street, nearest cross street to relevant site entry);
- number of injured persons or casualties and the nature of injuries if applicable;
- the type and scale of emergency including a brief description;
- hazards involved (including details of substances, UN Numbers, names of substances, quantities involved);
- telephone contact number (for any return messages);

	• name of person making the call; and • any other useful information (e.g. wind speed and wind direction, etc.). Depending on the nature and scale of the incident, the Emergency Executive may obtain assistance with communications at the site (e.g. GEMT, emergency services, security, communications officer, other SERT personnel). If the incident has, or is likely to result in serious injuries or death to Origin employees, establishing and maintaining contact and support for relatives is critical. The LPG GEMT generally provides support for individuals and next of-kin affected by the incident, refer to the LPG Group Emergency Management Plan LPG-BUS-EMM-PLA-0001 for further detail.
4	Local Community If the Chief Warden or Emergency Services determine there is a risk to neighbouring community or industry, external communications to alert these parties will be initiated. As deemed necessary by Emergency Services and the Emergency Executive or Chief Warden, a combination of the following methods shall be used to notify neighbours/local community of an emergency at the terminal: • Communications officer to contact neighbours by phone/group text • Police or Emergency Services to contact neighbours directly • Security to contact neighbours directly • Broadcast by radio and television stations if necessary • Communication to the local authority Where the emergency requires rapid neighbour notification: Security, Chief Warden or Communications Officer can commence neighbour communications by direct contact or telephone/text message. Emergency Services may contact neighbours directly e.g. via Police loud hailers. The communications to neighbours and community will include any information deemed necessary by Chief Warden/Emergency Executive or Emergency Services, e.g. a general description of the emergency, a description of the actions Origin is taking, recommended actions to take to safeguard their health and safety, and status updates/end of emergency.
5	Next of Kin For a local terminal emergency, responsibility for dealing with enquiries from relatives of employees (who may or may not be injured) rests with the Emergency Executive who will work with the police as required. In the event of an emergency involving fatalities or multiple serious injuries, the GEMT will be activated and the GEMT will assist the site with communications with relatives. GEMT may also activate Employee Assistance Program (EAP) providers to support personnel affected by the incident. Refer to the LPG GEMP (Group Emergency Management Procedure – LPG-BUS-EMM-PLA-0001) for Next of Kin procedure.
6	Regulatory Notification The Emergency Executive or Chief Warden must notify regulatory authorities immediately after becoming aware a Notifiable Incident has occurred and in accordance with the LPG Regulatory Notification Procedure LPG-BUS-RAC-PRO-0005. A checklist to notify the authorities, external and internal groups can be found in the Regulatory Notification Procedure. Following a Notifiable Incident, the site of the incident must be preserved until an inspector arrives or as directed by the inspector.
7	Origin Media Relations As outlined in Origin's Continuous Disclosure Policy, all communication with the media must be conducted by the Managing Director or the General Manager, External Affairs and Internal Communication, or a person authorised by them, and only to the extent of that authorisation. The Emergency Executive may assist the authorised media personnel in communications with the media. Media releases shall be conducted in consultation with emergency services where appropriate. If any employee, other than authorised media personnel, receives an enquiry from a journalist or reporter, whether in person or by phone and are asked about Origin, they should say: ***"I am not in a position to comment but if you give me your name and telephone number, I will organise for the most appropriate person to call you."***

	Always ask for: • The journalist/reporter's name • Publication/media outlet • Contact phone number and/or email. And • Publication deadline Forward this information immediately to the appropriate corporate communication contact (listed in Section 4 of the Media Policy). It is important to remember that there is no such thing as "off the record". Even if you are speaking informally, you could be quoted at any time.

7.2 Termination of Emergency

If Emergency Services are in control, they will formally declare the emergency to be over, and hand back control of the facility to the CW. Entry or re-entry is strictly forbidden until authorised by the Officer-in-charge of the attending emergency services. The CW and EE will in turn notify staff and other parties involved (e.g. contractors, neighbours etc) of the termination of the emergency and "all clear" to return to site.

As a minimum the following should be completed before returning to normal Terminal operations:

- Preserve relevant equipment and areas of the facility if notifiable incident has occurred and/or that require investigation.
- Confirm if terminal is safe to restart including checking with regulator if notifiable incident has occurred.
- Opening and closing an LPG Terminal Operating Instruction.
- Monthly Terminal Inspection Checklist.
- Monthly Fire Protection Checklist.

7.3 Reporting and Investigation

Following termination of the emergency, the Chief Warden will complete an incident report and initiate a formal investigation per the HSE Incident Management Procedure (ORG-HSE-PRO-025). Other investigations may be required e.g. by regulatory authorities.

Within one week of an emergency, the CW will convene a debrief meeting with the SERT to:

- Present and discuss findings and leanings.
- Consider the use and effectiveness of the emergency response procedures.
- Finalise recommendations for improvements.

OCIS is used to track the recommendations.

7.4 Restoration

Emergencies can result in harm or damage – to people, community, plant, property, environment, company image or business / customer relations – and remedial action will be required to restore operations fully. The responsibility for planning and implementing such action rests with the Emergency Executive, and may include:

1. Rehabilitation of staff and family
2. Review of protocols/relationships with neighbours.
3. Repair of damaged facilities.
4. Environmental remediation.
5. Replenishment of emergency facilities, e.g. fire extinguishers, first aid kits, control room equipment and documents.

In addition, harm may have been caused to the company's image or business / customer relations. Actions to restore image and business should be planned in conjunction with a range of functions including Sales and External Affairs.

In the event of an emergency that cause damage to the facility there may be a need to seek Technical Assistance for repairs and replacements.

7.5 Scenario Specific Emergency Response Procedures

7.5.1 Fire and Explosion

Staff should only attempt to fight small fires such as tyre fires on vehicles, paper fires in bins, small grass fires etc that can safely be put out by fire extinguishers or ¾" fire hose reel. (Note: Larger diameter hoses require special training and should only be used by Emergency Service.) All other firefighting should be left to the Emergency Services.

No attempt should be made to fight or extinguish LPG fires for which the ESD system provides the primary response.

IN THE DANGER AREA

Table 32: Required action/s in the Danger Area in the event of fire and explosion

1	First Responder	Notify Leading Hand/Terminal Manager of incident.
2	First responder	Move persons in danger to Emergency Assembly Area.
3	First Responder	If a small tyre, paper in a bin or grass fire attempt to extinguish with a fire extinguisher otherwise, activate the Emergency Shut Down (ESD) system.
4	Leading Hand	Assess the overall situation. Confirm ESD and isolations have worked.
5	Leading Hand	Advise the Chief Warden/Terminal Manager of incident.
6	Chief Warden	Activate the Emergency Response Plan.
7	Chief Warden	Set up Emergency Control Point.
8	Chief Warden	Advise Emergency Executive of incident and request assistance as required.
9	Communications Officer	Contact Emergency Services (000) to confirm the nature and location of the incident.
10	Communications Officer	Maintain a log of events during the emergency.
11	Communications Officer	Send communications text to nearest neighbours to advise of incident as per Table 1.
12	Area Wardens	Execute Evacuation procedure.
13	Area Wardens	Confirm to Chief Warden that area has been evacuated successfully. Or advise Chief Warden of any issues with the evacuation.
14	Area Warden	In consultation with the Chief Warden, take actions to maintain the safety of personnel. Advise truck drivers not on site to reframe from returning onsite
15	Chief Warden	Brief the Emergency Services when they arrive and hand over control to the Chief Fire Officer if required. Brief Emergency Services on site risks and hazards, details of emergency and potential for escalation. Provide explanation on site resources and facilities. Remain with emergency services commander. If firewater systems are activated, consider potential for contaminated water run-off and liaise with emergency services on any actions required.
16	Emergency Executive	Commence notification process to LPG management, Regulators and manage enquiries from public, neighbours, community, relatives, etc.

STAFF LOCATED IN A NON-DANGER AREA

On hearing the alarm

- Evacuate and assemble at the Emergency Assembly Area (if safe to do so)
- Area wardens will complete a check through their assigned area to ensure all personnel have evacuated
- Area Wardens to advise chief warden of any issues with evacuation of personnel or confirm assigned area is clear
- Upon direction from Chief Warden, Area Wardens will implement evacuation from the site to designated secondary Emergency Assembly area
- The all clear to return to work will only be given following confirmation from Emergency Services

7.5.2 Loss of Containment of LPG

In Terminal LPG Release

The ESD systems provide the main control mechanism for all LPG releases. In general, it should not be necessary to attempt to disperse an LPG cloud. However if there is a prolonged cloud or it is threatening a vulnerable location then water curtains/sprays can be used to assist dispersion or limit spread of cloud, if safe to do so and only if carried out by personnel trained in fire fighting. This may be determined in consultation with the fire services.

Table 33: Required actions in the Danger Area in the event of a major LPG escape

1	First Responder	Notify Leading Hand/Terminal Manager.
2	First Responder	Move persons in danger to safety.
3	First Responder	If safe to do so, close valves to control the LPG release otherwise, Activate Emergency Shut Down (ESD) system.
4	Leading Hand	Assess the overall situation. Confirm ESD and isolations have worked.
5	Leading Hand	Advise Terminal Manager/Chief Warden of the incident.
6	Chief Warden	Activate the Emergency Response Plan if appropriate.
7	Chief Warden	Set up Emergency Control Point.
8	Chief Warden	Advise Emergency Executive of incident and request assistance as required
9	Communications Officer	Communicate the nature and location of the incident to Emergency Services (000).
10	Communications Officer	Maintain log of incident.
11	Communications Officer	Send communications text to nearest neighbours to advise of incident as per Table 1.
12	Area Warden	Execute Evacuation procedure.
13	Area Warden	Confirm to Chief Warden that area has been evacuated successfully or advise Chief Warden of any issues with the evacuation.
14	Area Warden	In consultation with Chief Warden, take actions to maintain the safety of personnel. Advise truck drivers not on site to reframe from returning onsite
15	Chief Warden	Brief the Emergency Services when they arrive and hand over control to the Chief Fire Officer. Brief Emergency Services on site risks and hazards, details of emergency and potential for escalation. Provide explanation on site resources and facilities.

		Remain with emergency services commander. If firewater systems are activated, consider potential for contaminated water run-off and liaise with emergency services on any actions required.
16	Emergency Executive	Commence notification process to LPG management, Regulators and manage enquiries from public, neighbours, community, relatives, etc

7.5.3 Procedures in event of failure of fire or ESD systems during Fire or Leak Emergency

ESD system during Fire or Leak Emergency

During an emergency/incident on site, if the fire protection or shutdown is inoperable, the following emergency measures will be undertaken/in place.

Table 34: Required action/s in the event of Fire or ESD system failure during Fire or Leak Emergency

Scenario	Action
Power Failure to ESD	• ESD & Deluge system solenoids are supplied with power from the Fire Panel. The Fire Panel has battery back-up in the event of site power failure. • Terminal Operations are suspended with loss of power.
Deluge failure	• As above
Mains Water Failure/Supply Interruption	• Terminal must be shut down.

7.5.4 Chemical, Oil or Fuel Spill

Oil (e.g. Automotive Distillate, tanker diesel, hydraulic oil etc) Spillage

Personnel operating the filling of the fire pump fuel storage must understand the importance if immediately containing a distillate spill to reduce the fire threat and prevent contamination of the storm water system

Table 35: Required actions on the event of automotive distillate spillage

1	First Responder	Clear the immediate area of personnel and prevent access of vehicles.
2	First Responder	Advise Leading Hand or Terminal Manager of incident.
3	Leading Hand/Terminal Manager	Activate Emergency Response Team to attend the location to assist with control and clean-up of the spill.
4	Personnel affected by the spill	If product spilt on clothing or skin: • Remove contaminated clothing and boots • Use emergency shower to wash affected areas with water for 15 minutes • Seek medical assistance
5	Leading Hand/Terminal Manager	Stop adjacent operations such as cylinder filling, tanker loading, cylinder truck loading.
6	Responders	Turn off ignition sources, such as running vehicle engines, pumps, etc.
7	Responders	Control the flow of fluid (turn valves off, lay holed drums on their side with hole up).
8	Responder	Use booms/socks to contain or divert the spill • Place them in front of the spilt fluid to prevent it from spreading. • Place booms/socks in front of, or around drains to prevent run off into storm water system and eventually into rivers and lakes. • Divert the spill away from drains, stock or equipment to an area where the spill can be cleaned up. • Overlap ends for increased length. • Surround leaking drums, containers, tanker or truck to prevent the spill from spreading.

9	Responders	Use pads/Sokerol to absorb and clean up the spill • Use pads to wipe down clothing, hands, floor, containers, drums etc. contaminated by the spill. • Place pads behind the booms to absorb any seepage from under the booms and under leaking pipes or valves.
10	Responders	Clean up and report. • Having absorbed the majority of the spill, the remaining oil/fluid should be cleaned off the surface. • It is generally easier to collect the bulk of the spill than it is to complete the final clean-up. • Used absorbents no longer required should be placed in the disposal bags provided.
11	Terminal Manager/Leading Hand	If spilled diesel reaches drains or migrates off site, contact Emergency Services (000) to attend site.
12	Terminal Manager	Arrange clean-up operations as soon as possible to minimise fire threat. Dispose of distillate soaked blankets/booms or sand according to Local Council guidelines.

7.5.5 Vehicle Accident Onsite

Table 36: Required action/s for a vehicle accident onsite

#		Item/Step
1	First Responder	Escalate incident to leading hand or Terminal Manager.
2	Chief Warden / First Aider	If safe to do so, check on the health and welfare of all personnel involved with the accident Seek medical assistance – first aid or ambulance – if required.
3	Chief Warden / First Aider	Remove personnel from affected area if safe to do so or await arrival of ambulance.
4	Chief Warden	Assess damage to vehicle or other assets then activate recovery plan a) Product spill – refer to LPG loss of containment procedures b) Contact supervisor of any third parties involved in the incident e.g. contract hauler c) Arranging to offload cargo, if appropriate and safe to do so. E.g. via alternative tanker and emergency trailer, or terminal transfer facilities d) Contain/clean up fuel spilled, see fuel spill procedure e) Arrange vehicle recovery and repair
5	Chief Warden	Liaise with police or emergency services upon arrival.
6	Emergency Executive	Media enquiries must be escalated to the Origin Emergency Executive.

7.5.6 Medical Emergency

Table 37: Required action/s during a medical emergency

1	Person discovering	Notify wardens / summon assistance. The aim is to ensure treatment as quickly as possible, by appropriately qualified persons. First Aid qualified personnel and/or the Ambulance Service should be summoned immediately either through a direct “000” call or via the Communications Officer, or radio/direct request to First Aider.	
2		If trained and qualified in first aid techniques (e.g. CPR) initiate action.	
3		If not trained, stay with victim until medical assistance arrives.	
4	Chief Warden	Ensure qualified assistance is on its way and, if applicable, meet and direct the ambulance when it arrives. Information that may be required by the ambulance or other emergency service includes:	
		1. Your location:	• Building name, floor number, street number, street name, suburb, nearest cross street & access point to the building.
		2. Your contact details	• Your extension number, and / or your mobile number.

		3. What is the medical problem?	• Description of complaint (e.g. shortness of breath, sweating, tingling in arm), age of casualty, is casualty conscious? Is casualty breathing?

7.5.7 Third Party Emergency

The terminal and staff may be affected by incidents occurring at neighbouring sites e.g. where there is a risk of fire spreading to the terminal, or smoke or toxic fumes blowing across the terminal, an incident at the wharf, offsite vehicle incident, etc. While the prime responsibility for responding to the incident will rest with the third party, the terminal's SERT may be required to take action to:

- Protect the terminal and staff.
- Evacuate the terminal.
- Provide assistance to the neighbouring facility.

Should the terminal be in danger from a neighbouring site during or out of hours, the Emergency Services and/or neighbour site may contact the terminal emergency organisation.

Table 38: Required action/s in the event of a third party emergency

1	First Responder	Notify Leading Hand/Terminal Manager of incident.
2	Leading Hand/Terminal Manager	Assess the risk and obtain details from the owner of the affected site.
3	Chief Warden	If necessary, cease terminal operations, shutdown and close the terminal and activate the emergency response procedures.
4	Chief Warden	Notify site personnel by radio, by the site fire alarm or in person of the incident.
5	Chief Warden	Instruct personnel to move to the appropriate Emergency Assembly Area.
6	Chief Warden	Designate location of Emergency Control Point
7	Chief Warden	Advise Emergency Executive of the incident and any assistance required.
8	Area Warden	Execute Evacuation procedure.
9	Area Warden	Confirm to Chief Warden that area has been evacuated successfully or advise Chief Warden of any issues with the evacuation.
10	Area Warden	In consultation with Chief Warden, take actions to maintain the safety of personnel.
11	Communications Officer	If instructed by the Chief Warden, set up Emergency Control Point and commence log of events.
12	Chief Warden	Ensure all persons are safe and accounted for, and moved indoors (if applicable): • If smoke or fumes are present, close doors and windows and turn off air conditioning. • Be prepared to evacuate to an upwind assembly area away from the source of the third party incident if instructed by Emergency Services or based on Chief Warden's judgement.
13	Emergency Executive	Commence notification process to LPG management, Regulators and manage enquiries from public, neighbours, community, relatives, etc.
14	Chief Warden	After termination of the emergency, re-assume control and initiate recovery processes. Check the integrity of the plant and buildings. NB: Safety and Engineering are required to give approval before any restart of Operations if there have been damages.

7.5.8 Security Threats

Bomb Threats

1. **Telephone Threat - (Person receiving)**
   - **DO NOT INTERRUPT - OR HANG UP**
   - Record all information on nearest paper
   - Let caller finish message, do not interrupt
   - If asked for a response, keep your answer to one or two words
   - Try to attract the attention of persons near you
   - Be sympathetic (do not abuse caller)
   - Claim you cannot hear the caller
   - Ask for repeats of conversation
   - If given the opportunity tell caller there would not be time to evacuate all persons and stress to caller if an explosion occurs, innocent persons would be hurt or killed
   - Refer to the attached checklist for key questions to ask.

2. **Immediately the Caller Hangs Up**
   - Do not hang up or do not touch phone again until authorised
   - Report threat to Area Warden/Chief Warden, who will notify the Police
   - Complete the Bomb Threat Checklist and remain with Area Warden/Chief Warden for interview by Emergency Executive and Police
   - Do not discuss details of threat with media or any other person not authorised to receive such details
   - Await further instructions

Mail Threat – Person Handling

- Take careful note of the time and method of receipt
- Retain item but limit handling to a minimum and handle by edges only
- Notify Area Warden/Chief Warden and give details
- Complete Bomb Threat Checklist and remain with Area Warden/Chief Warden for interview by Emergency Executive and Police
- Do not discuss details of threat with media or any other persons not authorised to receive such details
- Await further instructions.

Suspect Letter and Parcel Recognition Points

Physical signs:	**Addressing**
• Unusual odour • Oily stains or discolouration • Excessive weight • Rigid envelope • Lopsided or uneven envelope • Protruding wires/tin foil • Excessive securing material e.g. tape/string • Visual Distractions • No return address	• Foreign mail, air mail or special delivery • Restrictive marking such as confidential, personal • Excessive postage • Handwritten or poorly typed address • Incorrect titles • Titles but not names • Misspelling of common words

Personal Threat

- Evaluate the person making the threat
- Has the person a complaint against your organisation?
- Under the influence of alcohol or drugs?
- Was the threat made in a facetious or joking manner?
- Take note of the appearance and other characteristics of the person(s) making the threat
- When the person has departed, report threat to Area Warden/Chief Warden then complete the Bomb Threat Checklist
- Remain with Area Warden/Chief Warden for interview by Emergency Executive and Police
- Do not discuss details of threat with media or any other person not authorised to receive such details
- Await further instructions.

Analysis of Threats

Table 39 Required actions on the analysis of threats

Emergency Executive	Analyse / assess the threat and interview the recipient of the threat, in conjunction with the police.
Chief Warden	Shut down terminal operations and if necessary, commence evacuation - which must be completed at least 30 minutes before the detonation time stated in the threat.
Area Warden	Position "No Entry" signs and keep all persons away from site until the all clear is given.
Area Warden	Search for suspect items, firstly in external areas and from the ground upwards. Report findings to the Chief Warden.
Area Warden	If a suspect item is found: • do not touch, move, or disturb it • move all persons to safety • if safe to do so, open doors and windows, turn off equipment, air conditioning etc, but leave lights on.
Area Warden	Remove flammable materials if safe to do so, and open doors and windows.
Area Warden	Ensure completion of the bomb-threat checklist and availability of the recipient for interview.
Emergency Executive	Notify GM Ops and be prepared to handle enquiries as per police advice.

NB: Use line telephone only – switch off and do not use radios, cellular or mobile phones, pagers or other radio transmitting devices.

Table 40: Bomb Threat Checklist

Questions to Ask: 1. When is the bomb going to go off? 2. Where did you put the bomb? 3. When did you put it there? 4. What does the bomb look like? 5. What kind of bomb is it? 6. What will make the bomb explode? 7. Did you place the bomb? 8. Why did you place the bomb? 9. What is your name? 10. Where are you?
Exact wording of threat:
Record details of: **Callers voice (Accent, Impediment, Voice, Speech and Manner)**
Background Noise: **(Street, Aircraft, Voices, Music, Machinery, House, Local Call, Long Distance, STD)**
Threat Language: **(Well spoken, Incoherent, Irrational, Taped, Message Read, Abusive)**
Other: **(Sex, Age)**
Date, Time and Duration of Call:

Armed Intrusion / Hold up/ Shelter in Place

General awareness

- Notify any suspicious person(s) to your Area Warden.
- Keep cash/vital records/information and valuables secured and to a minimum workable level.
- Do not discuss activities, vital records, amounts of cash or security procedures in public.

Table 41: Armed Intruder / Active Shooter

First Responder	1. Raise the alarm and get to safety (locked down). 2. If safe to do so evacuate the building or area. 3. If unable to escape, secure your immediate environment and other vulnerable areas. 4. Lock and blockade the door with heavy furniture. Shelter in place. 5. Move away from doorways, cover all windows, turn off lights and remain quiet. 6. Do not confront any armed intruder. 7. Do not attempt to engage, in any way (verbally or physically), with offenders / suspects. 8. If confronted, comply with all directions and attempt to keep offenders calm. Try to remain or appear to be calm. Do not make any sudden movement or take any action to excite intruder(s). Be courteous, converse with and answer questions asked by the intruder(s). Obey all instructions given by the intruder(s). Hand over valuables - cash - drugs on request. Pay attention to their description – height, weight, ethnicity, accent, hair, eyes, build, clothes, weapons and equipment, distinguishing features and / or tattoos. Write this information down and pass it on to the Chief Warden ASAP. 9. Be prepared to incapacitate the shooter if you are located (only taken as a last resort).
Chief Warden	1. Instantly activate Lockdown Alarm and call 000. 2. Assess the suitability / safety of normal evacuation routes / muster points and change if necessary. 3. Ensure all personnel are accounted for, in a safe location and are kept informed of the situation. 4. Chief Warden needs to obtain all information possible that will assist police bring the situation to an end, including maps, hazards present & a safe point of entry etc. 5. Notify GEMT Leader and provide regular updates. 6. Advise all personnel when “All Clear”. 7. Arrange site visitations by the EAP Provider to conduct critical incident debrief. 8. Review Site Security and Procedures

Public Disorder

Although riot or siege situations may be unlikely, the terminal could be faced with similar situations in the event of a major demonstration, in such circumstances the police must be called to control the situation and advise on communications with the demonstrators. Maintaining security of the terminal is of paramount importance, but access may be limited or blocked.

Table 42: Public Disorder

First Responder	Notify Area Warden when incident spotted.
All staff	Remain in the area in which you are located: Do not confront or speak with the demonstrator.
Chief Warden / Communications Officer	Assess the situation and notify police.
Chief Warden	Liaise with police when they arrive.
Emergency Executive	Notify the Group Manager Ops and prepare to handle media enquiries.

Terrorist Threats

Where there may be a possibility of terrorist action Origin can be instructed by the Police and National Security to heighten staff security. A High Level threat may require staff to limit work to within the Terminal and consider ceasing product movement. An Extreme Level threat may require staff to close the terminal.

7.5.9 Natural Disasters

These may include incidents such as earthquake, flood, fire, cyclone or severe storm. In such circumstances control will generally be assumed by the Emergency Services, following activation of Local Government or State Counter Disaster Organisation.

Earthquake

Table 43: Actions required during an earthquake

#	Item/Step
1	During an earthquake all persons should: • Stay indoors, avoid going out of the building. • Keep calm. • Keep away from windows and heavy objects. • Take cover from falling debris and stay under a strong table or other support. • Sit down and protect your head and face. • If evacuation order is given, proceed to assembly area as directed by the Area Warden.
2	Chief Warden Responsibilities: • After any earthquake immediately shutdown the plant (if this could not be done beforehand). • Check with all staff to ensure that no one has been injured, rendering any assistance as required. • Form appropriate response team and after taking necessary precautions (check with Engineering/Regional Manager, deploy portable gas detectors) inspect terminal for signs of damage or leaks. • Notify the emergency services as required. • Respond to any leakage. • Check the integrity of the plant and buildings. Safety and Engineering are required to give approval before any restart of Operations. • Check computer systems to ensure that they are still functioning correctly. • On all clear restart the plant following approval as above.

Bush Fires

The terminal is in an area prone to bush fire. In the event of a large bush fire in the area the terminal shall follow the same procedure as indicated above for a neighbouring third party emergency.

Table 44: Required action/s in the event of a bush fire emergency

1	First Responder	Notify Leading Hand/Terminal Manager of incident.
2	Leading Hand/Terminal Manager	Assess the risk and obtain information and advice from emergency services.
3	Chief Warden	Notify site personnel by radio, by the site fire alarm or in person of the bush fire.
4	Chief Warden	If necessary, cease terminal operations, shutdown and close the terminal and activate the emergency response procedures.
5	Chief Warden	Instruct personnel to move to the appropriate Emergency Assembly Area.
6	Chief Warden	Designate location of Emergency Control Point.
7	Chief Warden	Advise Emergency Executive of the incident and any assistance required.
8	Area Warden	Execute Evacuation procedure.
9	Area Warden	Confirm to Chief Warden that area has been evacuated successfully or advise Chief Warden of any issues with the evacuation.
10	Chief Warden	Personnel cannot return to site until the 'All Clear' is given by emergency services.
11	Chief Warden	After termination of the emergency, re-assume control and initiate recovery processes. Check the integrity of the plant and buildings. NB: Safety and Engineering are required to give approval before any restart of Operations if there have been damages.

Floods

The terminal may be subject to flooding from storm/cyclone, river overflow. Know the types of flood risks in the area. If you are under a flood warning, find a safe shelter, DO NOT walk, swim or drive through flood waters.

- Turn around, don't drown
- Evacuate if told to do so
- Move to higher ground or a higher floor

Consider moving mobile equipment and stores that could be washed away or damaged in floods to higher grounds or have them tied down.

Severe Storms

The Terminal may experience heavy rain, lightening or strong winds. Under such circumstances, consider tying down equipment to prevent mobile equipment from damage or being blown away.

Table 45: Required actions in the event of severe storms

1	**Leading Hand/Terminal Manager**	Assess the risk and obtain information and advice from emergency services.
2	**Chief Warden**	Notify site personnel by radio, or in person of the impending storm.
3	**Chief Warden**	If necessary, cease terminal operations, shutdown and close the terminal and activate the emergency response procedures.
4	**Chief Warden**	Instruct personnel to move indoors and away from external doors and windows. If appropriate and time permits, personnel could be sent off site.
5	**Chief Warden**	Designate location of Emergency Control Point.
6	**Chief Warden**	Advise Emergency Executive of the incident and any assistance required.
7	**Area Warden**	Execute Shelter in Place.
8	**Area Warden**	Confirm to Chief Warden that all personnel are sheltered in place or advise Chief Warden of any issues.
9	**Chief Warden**	Personnel cannot go outside until the 'All Clear' is given by the Chief Warden.
10	**Chief Warden**	After termination of the emergency, re-assume control and initiate recovery processes. Check the integrity of the plant and buildings. NB: Safety and Engineering are required to give approval before any restart of Operations if there have been damages.