POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

PIRMP

LUBRIZOL INTERNATIONAL INC.

28 River Street Silverwater NSW 2128

REVISION TABLE (A)

Prepared by: Lubrizol International Inc.				
Rev.	Date	Details	Revised By	Authorised
1.0	03/07/2012	New Pollution Incident Response Management Plan as per POEO Act		
2.0	03/04/2014	Revised contacts as per new Org Chart		
3.0	15/09/2014	Added contact number for Auburn Council P7 and Shell emergency number on page P4		
4.0	02/08/2016	Updated emergency contacts and removed GM from documentation		
5.0	02/10/2017	Updated emergency contacts and team lists, transition for ISO 9001 & 14001:2015 requirements		
6.0	02/11/2018	Remove barge requirements		
7.0	04/06/2020	Updated emergency contacts and team lists, Transition for ISO 45001:2015 requirements		
8.0	09/09/2022	Updated emergency contacts and team lists		

Authorised By:

Operations Leader, Lubrizol International

Table of contents

1.	IMMEDIATE NOTIFICATION OF POLLUTION INCIDENTS	4
2.	NOTIFICATION TO NEIGHBOURS	4
3.	EMERGENCY CONTACT LISTS	6
4.	EMERGENCY TEAMS	8
6.	EXTERNAL DISTRIBUTION LIST	9
7.	LUBRIZOL PIRMP REVIEW	10
9.	SITE FUNCTION	11
10.	HAZARDS	11
11.	PIRMP DEFINITION	12
12.	AIMS AND OBJECTIVES	13
13.	AUTHORITY	13
14.	TRAINING	13
15.	MEDIA RELEASES	14
16.	SITE RESOURCES	14
17.	INTERNAL REPORTING AND NOTIFICATION	15
18.	MINIMISING THE RISK OF HARM	15
19.	EMERGENCY & TERP CO-ORDINATOR (EC)	17
20.	COMMUNICATIONS	17
21.	EMERGENCY CONTROL CENTRE (ECC)	17
22.	SWITCHBOARD OPERATOR / RECEPTIONIST	18
23.	EMERGENCY TERMINATION	18
24.	DG MANIFEST	20
25.	TRANSPORTATION EMERGENCY RESPONSE PLAN (TERP) – OFF S	ITE23
26.	MARINE EMERGENCY	23
27.	IMPORTANT TRANSPORTATION NOTES	24
28.	MARINE RESPONSE TEAM	24

ANNEXURES	
Annexure 1 – SITE LOCATION MAP	26
Annexure 1A - NEIGHBOURHOOD/IMPACT	27
Annexure 2 – SITE PLAN	28
Annexure 2A – DRAINAGE SYSTEM	29
Annexure 3 - FIRE FIGHTING WATER RETICULATION PLAN	30
Annexure 3A – TRAFFIC FLOW PAN	31
Annexure 4 - EMERGENCY RESPONSE PLAN FLOW CHART	32
Annexure 5 – LUBRIZOL EMERGENCY INCIDENT REPORT	33
Annexure 6 - EMERGENCY EVACUATION PROCEDURES	35
Annexure 7 - MATERIAL SAFETY DATA SHEETS	36
Annexure 8 – WHAT EXTINGUISHERS TO USE	40
Annexure 9 – EMERGENCY REFERENCE GUIDE	41
Annexure 10 - ERO FLOW CHARTS	42

INTRODUCTION

This **POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN** has been compiled to provide guidance and information to for all personnel employed at Lubrizol, Silverwater.

During an incident or threat to the Environment, the timely response by key personnel and staff generally will ensure that environmental damage is contained/ minimised.

This Response Plan addresses the elements as required by the POEO Act but not fully covered by the ERP.

This Plan has been authorised by the Operations Leader - Lubrizol, Silverwater.

1. IMMEDIATE NOTIFICATION OF POLLUTION INCIDENTS

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

If the incident does NOT require an initial combat agency, or once the 000 call has been made, notify ALL of the relevant authorities in the following order.

- a) The EPA 13 15 55
- b) Public Health Unit (Parramatta) (02) 9840 3603 if on this site.
- c) Workcover 13 10 50 (will ask for the ABN # 52 073 495 603)
- d) Paramatta Council 1300617058

Additional Contacts if pollution incident is in Duck River.

- e) Sydney Port Authority 02 9296 4000
- f) Shell Emergency Services 02 9897 8704

NOTE: Notification is required if there is "**MATERIAL HARM**" to the environment as defined in s147 of the POEO Act.

In addition to the above, Sydney Ports Authority and Shell Emergency Services will need to be contacted for additional assistance in the event of a spill in the waterways.

2. NOTIFICATION TO NEIGHBOURS

As per section 72(I) (b) (f) (c) of the POEO Act, the early warnings requirements and impact on neighbours or from non-hazardous chemicals.

In the event of a, pollution incident from hazardous or non-hazardous chemicals that may adversely impact our immediate neighbours, the relevant person shall contact the entities as per below list.

LZPL – PIRMP – Pollution Incident Response Management Plan

LZA NOTIFIER to Neighbours: Front Desk Receptionist.		
Neighbours: Contact No.		
RMS Roads & Maritime Services	13 77 88	
United Flashing	9748 8828	
Mills Industrial Brokers	9648 6444	
Optical Solutions Australia	9395 1400	
AUS Grid Learning Centre	8745 1555	

Impact Zones:

The potential impact zone(s) from a pollution incident relating to neighbours has been established giving consideration to the type of product stored on site. Owing to the viscous nature of our products the effect on neighbours can be minimised by controlling the flow of product away from their site and back into a controlled area using portable bunds and collection vessels/pumps to remove the contaminant from the area. <u>See Annexure 1A</u>

NOTIFIER:

The Emergency Coordinator (see ERP) will assess the pollution incident and provide the LZA NOTIFIER with an assessment of the situation that will then be relayed to our surrounding neighbours.

The LZA Notifier will brief the neighbours with the following information:

- Nature of the call. i.e. <u>A Pollution Incident or a Training scenario</u>
- The magnitude of the incident.
- The immediate impact to the surrounding area
- Chemical(s) involved in the Pollution Incident
- Any Health and Safety concerns relating to the pollution incident
- If there is a need to evacuate their premises
- What emergency vehicles will be attending
- Make available relevant SDS & Provide regular updates

Note: If the call is in relation to a training exercise all other details are irrelevant.

3. EMERGENCY CONTACT LISTS

Internal Contacts

Position	Ext (7415)
Deputy ERO and Media Co-ordinator	203
ERO Coordinator (site)	206
TERP Coordinator	
First Aid Co-ordinator	
Response Team Leader	232
Deputy Response Team Leader	226
Electrician – Shawn Husband	
Boiler Attendant	227
Maintenance Contractor	227

External Contacts

Fire Brigades		
Police	000	(Nominate service required)
Ambulance	112	(any mobile phone)

Company	Number
TELSTRA CALL CONNECT	12456
Environmental Protection Agency	13 15 55
Poisons Hot Line	13 11 26
Sydney Ports Corporation	9296 4000
Sydney Water – 24 hours	13 20 90
AGL (Electricity & Gas Supply)	13 17 66
Auburn Hospital	9563 9500
Auburn Council	9735 1222
Westmead Hospital	9845 5555
Fire Brigades (Silverwater)	9647 1246
Police (Ermington)	9898 8299
Ambulance	13 12 33
Lubrizol Control Centre	Allocated Mobiles
Neighbours:	Number
RMS Roads & Maritime Services	13 77 88
United Flashing	9748 8828
Mills Industrial Brokers	9648 6444
Optical Solutions Australia	9395 1400
AUS Grid Learning Centre	8745 1555

4. EMERGENCY TEAMS

<u>TERP - On-site Response Team (Transportation Emergency Response Plan)</u></u>

Position	Designation
Operations Leader	ERO & TERP Coordinator
Engineer	Deputy TERP Coordinator
Plant Supervisor	Response Team Leader
Plant Operators	Response Team Member
Maintenance	Support

ERO Team (Emergency Response Organisation)

Position	Designation	
Operations Leader	Emergency Co-ordinator	
Sales Manager	Deputy Emergency Co-ordinator	
Plant Supervisor	Response Team Leader (deputy warden)	
Plant Operators	Response Team Member	
OHS Chair Person	First Aid Co-ordinator/Warden	
	Emergency Evacuation Warden	
Account Manager	Office Top Floor	
	Emergency Evacuation Warden	
Laboratory	Office Ground Floor	
	Chief (Fire)Evacuation Warden	
Bulk	Plant Top Yard	
	Emergency Evacuation Warden	
Warehouse	Bottom Warehouse	
Electrician	As Per "Emergency Contact List"	
Contract Maintenance	As Per "Emergency Contact List"	

6. EXTERNAL DISTRIBUTION LIST

Emergency Plans Distributed to:

Contact	Company	Issued via CD
Manager	NSW Fire Brigades - Station Office (Silverwater)	
Manager	NSW Police - Senior Constable (Ermington)	
Manager	Sydney Ports - Response Centre	
Manager	Area Inspector Environmental Protection Authority	
Manager	Paul –Tec Security	
Manager	NSW Fire Brigades - Station Office (Rydalmere)	
ManagerNSW Fire Brigades - Station Office (Parramatta)		
Manager NSW Fire Brigades -Parramatta Operations		
Manager	NSW Fire Brigades - Zone Commander	
Port Services Manager	SPC Sydney Port Authority	
Manager NSW	Intertek Testing Service	
AP HSE Site	http://thechannel.lubrizol.com/C5/HSES- APAC/default.aspx	Via email

ACRONIM	MEANING	
PIRMP	POLLUTION INCIDENT RESPONSE MANAGEMENT PLANS	
POEO	PROTECTION OF the ENVIRONMENT OPERATIONS	
ERP	Emergency Response Plans	
TERP	TRANPORT EMERGENCY RESPONSE PLANS	

7. LUBRIZOL PIRMP REVIEW

The Pollution Incident Emergency Plans should be reviewed and amended as required, but at least annually and within "ONE month" following an emergency.

Additionally, a review of the document should be made whenever pertinent Legislative changes are introduced or amended.

The Pollution Incident Emergency Plan has been created as per legislative requirements but will be managed, controlled and audited as per:

- ISO14001:2015 & ISO45001:2018 Section 8.1 Operational Planning and Control
- ISO14001:2015 & ISO45001:2018 Section 8.2 Emergency Preparedness and Response
- ISO 9001:2015, ISO14001:2015 & ISO45001:2018 Section 9.3 Management Review
- ISO 9001:2015, ISO14001:2015 & ISO45001:2018 Section 9.2 Internal Audit

Date review conducted, details of amendment, name and designation of reviewing officer should be indicated as per Table (A) on Page 1

Document references in support of PIRMP Document:

- LZW-4.9.10 SPILL CONTROL PROCEDURE
- LZP-4.18.2 COMBUSTIBLE & FLAMMABLE MATERIAL HANDLING
- LZW-498 POLLUTION CONTROL
- LZP-4.15.1 PRODUCT HANDLING PROCEDURE
- LZD-4.3 EMS AND OHS ASPECTS OF PLANNING ENVIRONMENTAL ASPECTS REGISTER
- LZPL-ERP EMERGENCY RESPONSE PLANS

9. SITE FUNCTION

The primary function of the Lubrizol Silverwater Plant is to receive, store, process, package and despatch chemical additives and oil based products (AS 1940 Class C1 and Class C2) (and limited quantities of ADG Code - Class 3, PG III), to both Australian and overseas customers. Each of these activities is detailed below.

Receiving

Full container loads (16 MT Units) - drummed and packaged products into warehouse.

Tank-tainers (19 MT Units) direct into bulk storage.

Road Tankers (27 MT & 39 MT Units) direct into bulk storage.

Storage

Drum Storage - approx. 850 MT of AS 1940 Class C1, Class C2 and DG Class 9 products. In transit storage only of ADG Code Class 3 PG 111 products

Bulk Storage - approx. 7000 MT capacity for AS 1940 Class C1, Class C2 and DG Class 9 products

Processing

Approx. 100 MT processing capacity for AS 1940 Class C1, Class C2 and DG Class 9 products.

3 x 33,000 litre mixing vessels

- 3 x 5,000 litre mixing vessels
- 1 x 23,000 litre storage tank

Packaging

Capacity to package AS 1940 Class C1, Class C2 $\,$ and DG Class 9 products into 205 litre drums and 1000L IBCs.

Despatch

a) Drum Despatch - approx. 2000 MT/Quarter in 205 litre drums.

b) Bulk Despatch - approx. 2500 MT/Quarter in 27MT and 39MT road tankers

10. HAZARDS

A description of the hazards to human health or the environment associated with the activity to which the licence relates (the *relevant activity*), as required in section 7272(a) is given below.

- a) Majority of products stored/handled are classified as Marine Pollutants
- b) Majority of products are combustible
- c) Majority of products stored/handled are known to be skin irritants
- d) Some products are known to be Harmful if inhaled.
 - i. Causes eye irritation.
 - ii. Causes skin irritation.
 - iii. Causes respiratory tract irritation.
 - iv. Harmful if absorbed through skin.
 - v. Contains components which may cause cancer.
 - vi. May cause chronic health effects.

The Likelihood

The likelihood of any such hazards occurring, including details of any conditions or events that could, or would, increase that likelihood as outlined in section 7272(b) of the PIRMP Regulation will be controlled via the implementation of one or more of the following procedures:

- LZD-4.3 EMS AND OHS ASPECTS OF PLANNING
- LZW-4.9.10 SPILL CONTROL PROCEDURE
- LZW-498 POLLUTION CONTROL
- LZP-4.18.2 COMBUSTIBLE & FLAMMABLE MATERIAL HANDLING
- LZP-4.15.1 PRODUCT HANDLING PROCEDURE and
- LZPL-ERP Emergency Response Plans

The likelihood of such hazards occurring are assessed in the risk register LZD-4190 HSE – Hazard and Risk Register.

Pre-emptive Action

The likelihood of any such hazards occurring, including details of any conditions or events that could, or would, increase that likelihood as outlined in section 7272(b) of the PIRMP Regulation will be controlled via the implementation of one or more of the following procedures:

- LZD-4.3 EMS AND OHS ASPECTS OF PLANNING
- LZW-4.9.10 SPILL CONTROL PROCEDURE
- LZW-498 POLLUTION CONTROL
- LZP-4.18.2 COMBUSTIBLE & FLAMMABLE MATERIAL HANDLING
- LZP-4.15.1 PRODUCT HANDLING PROCEDURE and
- LZPL-ERP Emergency Response Plans

NOTE: For additional SDS information Refer to Annex 7

11. PIRMP DEFINITION

This Pollution Incident Response Management Plan caters for a developing emergency where the environment, life, or immediate neighbours/neighbourhood are/is threatened by a pollution incident.

Response escalation will be determined by the severity of the emergency and effectiveness of the on-site emergency response personnel to contain the situation.

Refer to ERP for detailed information on responding to an Emergency situation.

A developing situation which constitutes a threat to life, property or the environment, is deemed to be an emergency and requires a response proportional to the threat including;

- Local Alert
- Site Alert
- External Alert

Local Alert: Pertains to the measures deployed in the immediate location of the pollution incident, in its incipient stages.

Site Alert: Pertains to the measures deployed in curtailing the pollution incident as other areas of the site are affected.

External Alert: Pertains to the measure deployed in protecting life, property and environmental aspects external to the site such as the neighbourhood affected by a developing pollution incident.

NOTE: ALL INCIDENTS / ACCIDENTS ARE TO BE REPORTED TO THE EMERGENCY COORDINATOR OR THEIR DEPUTY, FOR FINAL DETERMINATION.

12. AIMS AND OBJECTIVES

AIM

The aim of this plan is to bring together areas of expertise, to manage a pollution incident implement the PIRMP/ERP and to assist in the normalisation of operations. The key elements are: Containment, Evaluation, and Management of the situation.

OBJECTIVES

As per section 7272(m). The nature and objectives of any staff training program in relation to the plan is outlined below. See section 14.

The objectives of this plan are to establish an effective response to a pollution incident or threat to the environment and a level of preparedness commensurate with statutory requirements including;

- Control or limiting any effect that a pollution incident or potential emergency may have on on-site on neighbouring areas or the environment.
- Facilitate a pollution incident response and assistance on-site as appropriate to the occasion.
- Establish a viable communications network on-site to facilitate control aspects.
- Re-organise and reconstruct activities so that normal operations can be resumed.
- Training programs for key personnel so that a high level of preparedness / response can be maintained.
- A basis for the continual updating and reviewing of the PIRMP.
- Ensure communication of all vital information to the emergency services.

INDEMNITY

Personnel shall be indemnified against civil liability, resulting from practice or actual on-site emergencies where the personnel act in good faith and in the course of the duties of such personnel.

13. AUTHORITY

All persons on the site shall observe directions given by on-site emergency response personnel in all respects to the extent that if any such directions are inconsistent with those given by the management of the premises, the directions of the on-site emergency response personnel shall prevail.

14. TRAINING

As per section 7272(m), (n) and (p) of the PIRMP Regulation.

All personnel will be instructed, on the emergency procedures and protocols applicable to the Lubrizol, Silverwater site. All permanent personnel will subsequently also receive training in the use of first aid firefighting appliances. Continuation training programs will be provided on a regular basis, to maintain currency.

The nature and objectives of any staff training program in relation to the plan, as per section 7272(m)will be recorded as per guidelines in LZP-4.1.8 Training Procedure and the Lubrizol Training Matrix LZD-4.18.2 and Internal training attendance sheet.

Emergency response exercises, including evacuation drills will be held on a yearly basis to test the effectiveness of the emergency plan(s) (ERP/PIRMP) and preparedness of the Emergency Response Personnel in line with legislative requirements covering the WHS Act 2011 (for the ERP) and the POEO Act (for the PIRMP).

The details relating to the training and the dates on which the plan has been tested and the name of the person who carried out the test, will be recorded as per guidelines in LZP-4.1.8 Training Procedure and the Lubrizol Training Matrix LZD-4.18.2

15. MEDIA RELEASES

Press releases shall be handled and managed by the appointed Lubrizol media co-ordinator.

See LZPL-ERP – EMERGENCY RESPONSE PLANS for detailed information on media releases.

16. SITE RESOURCES

A number of resources are available on-site which will operate automatically or can be utilised by staff to contain an emergency situation including;

- Early warning fire detection (plant and office building)
- First aid fire appliances
- Fire hydrant reticulation system
- Firefighting hoses
- Telephone network
- Spillage control systems
- Communications system
- First aid facilities
- First Aid alarm system
- General alert alarm

Early Warning Fire Detection: pertains to the installed system for the administration building, offering a direct link with the NSW Fire Brigades alarm monitoring service.

First Aid Fire Appliances: pertains to the fire extinguishers and fire hose reels strategically located throughout the entire site.

Fire Hydrant Reticulation System: pertains to the dedicated firefighting water supply ring main on-site incorporating a Fire Brigades booster connection (adjacent to the boiler house), to facilitate a sustained firefighting action. <u>See Annexure 3</u>

Fire Fighting Hose: pertains to the available 38 mm fire hoses and associated fittings, affording a substantial firefighting / fire containment capacity.

Telephone Network: pertains to the internal telephone system, which can be utilised to communicate emergency instructions and co-ordinate emergency response procedures internally, and also as a means for contacting external emergency resources.

Spillage Control Systems: pertains to the provision of readily available spillage control equipment, strategically located throughout the site, and including;

Qty	Description	Qty	Description
4	200lt drums (empty)	4	Pairs of gloves
4	Squeegees	13	Bags of absorbent material
4	Dust pans	2	Spill mat & sandbags
4	Shovels	3	Temporary bund
20	Heavy duty garbage bags	4	Spillage Control Kits at site
1	Emergency Response boat and motor		Spillage control booms (Duck River Loading / Unloading Dock)

Refer to LZW 4.9.10 – SPILL CONTROL, LZP-4.18.2 – COMBUSTIBLE & FLAMMABLE MATERIAL HANDLING & LZPL- ERP Lubrizol Emergency Response Plan

(Refer to Site Plan - Annexure 2)

First Aid Facilities: pertains to the available first aid stations and trained first aid personnel, capable of providing medical treatment pending the arrival of the ambulance services.

General Alert Alarm: pertains to the audible alarm (siren) which can be activated automatically (fire alarm system), or manual Emergency Alarm System which can be activated throughout the plant, to alert staff of an on-site emergency.

First Aid Alarm: pertains to the audible alarm which can be activated throughout the plant to obtain First Aid in the case of injury.

17. INTERNAL REPORTING AND NOTIFICATION

PURPOSE

To provide a detailed procedure through which designated corporate personnel are notified immediately of any significant incident situation. A significant incident is one which could have a critical impact on the Corporation, its communities, its reputation or shareholders and thus requires immediate public disclosure of relevant and accurate information.

To capture emergency information use "Lubrizol Emergency Incident Report" (Annexure 5)

For detailed response please refer to Lubrizol Standard of Care; EE-001 HSE&S Significant Incident Notification Procedure

18. MINIMISING THE RISK OF HARM

The arrangements for minimising the risk of harm to any persons who are on the premises or who are present on site as per requirement 72(j) of the PIRMP regulation will be achieved via the Emergency Response Organisation comprising of key personnel drawn from the workforce.

The responsibilities of the ERO, during an emergency, are;

- To assist in the timely and safe evacuation of non-essential personnel and visitors
- To control / contain the developing incident (if safe to do so)
- To prevent / restrict environmental pollution (if safe to do so)
- To alert relevant authorities
- To assist responding emergency services
- To assist in the normalisation of site operations

Lubrizol's Silverwater operations comprise the receiving, manufacture, storage, packaging and distribution of lubricating oil additives.

By its inherent nature the product, through the production process and as the final product, represent a low fire risk hazard; refer hazardous materials - on-site section.

Nonetheless, a situation could arise whereby the Emergency Response Plans LZPL-ERP are invoked as a result of;

- Fire or explosion in on-site building 72(I) (j) (f) (c)
- Fire or explosion in the bulk storage area 72(l) (j) (f) (c)
- Fire or explosion in the drum storage area 72(l) (j) (f) (c)
- Road tanker incident on-site
- Gas leak
- Fire in adjoining properties

- Structural damage to buildings
- Structural damage to storage facilities
- Natural disaster earthquake
- Bomb threat
- Civil disorder

A product spill situation has been catered for through the provision of bunding and a segregated pollution control facility. For response protocols in this instance reference should be made to the Lubrizol Spill Control Work Instruction LZW- 4.9.10. Additional processes for the handling of Hazardous and Pollutant Chemicals as outlined in LZP-4.15.1 Product Handling must be in place so as to protect neighbouring facilities and their personnel.

Identifying Risk of Harm

A detailed description of how any identified risk of harm to human health will be reduced, including (as a minimum) by means of early warnings, updates and the action to be taken during or immediately after a pollution incident to reduce that risk as per PIRMP Regulation 72(I) will be controlled via a periodic health monitoring program for staff that may be potentially affected by an exposure to chemicals during a pollution incident or an emergency situation. Additionally Staff will undergo periodic Chemical Handling Training to mitigate the risk of exposure or following a pollution incident.

For detailed response please refer to Lubrizol Standard of Care; EE-001 HSE&S Significant Incident Notification Procedure

Transport Emergency – Off-site

REFER ANNEXURE 10 FOR TERP FLOWCHART

For each emergency situation, the Lubrizol TERP Co-ordinator will initiate an appropriate response to safeguard life safety aspects and environmental considerations.

To capture emergency information use "Lubrizol Emergency Incident Report" (Annexure 5)

For detailed response please refer to Lubrizol Standard of Care;

EE-001 HSE&S Significant Incident Notification Procedure

GENERAL RESPONSE GUIDELINES – On Site

If a fire or other emergency is discovered the person discovering the emergency should take the following action: -

- Assist anybody in immediate danger
- Attempt to contain the emergency with the available resources.
- If the fire or emergency cannot be contained then activate the Fire Alarm.
- Make your way to the Evacuation Assembly Point.
- Provide information, as required, to the Emergency Response Team Members.

If there are a number of people in attendance at the incident site, the above actions may be undertaken simultaneously.

FIRE ALARM

Rev.8 Issued: 09/09/2022 Authorised: Lubrizol International Inc. Page 16 of 45 pages

The general alert alarm will be raised either through the activation of the automatic fire detection system, activation of a Push Button Alarm or manually from the Emergency Control Centre in response to a reported on-site emergency.

On the activation of the general alert alarm, Emergency Response Personnel will respond to the Evacuation Assembly Point obtain details of the incident and proceed to the incident site (refer ERO responsibilities).

EVACUATION

Should the Emergency Alarm sound or when directed to evacuate by ERO personnel, staff shall proceed to the nominated Evacuation Assembly Point - <u>Annexure 6</u>, in an orderly manner.

The evacuation process shall be enacted and controlled as per LZPL-ERP Emergency Response Plan. – <u>Annexure 4</u>

19. EMERGENCY & TERP CO-ORDINATOR (EC)

REFER ANNEXURE 10 FOR FLOWCHART

The Emergency Co-ordinator, during a declared emergency, is required to respond immediately, determine what emergency procedures should be implemented and bring the Emergency Response Organisation promptly into operation.

The Emergency Co-ordinator shall assume full control of all response initiatives, pending the arrival of the External Emergency Services.

The Emergency Co-ordinator shall ensure that in times of absence, that he/she is contactable by Mobile Phone or other means.

20. COMMUNICATIONS

Dissemination of information during any type of incident emergency is paramount to the effective deployment at Lubrizol resources safety of Emergency Response Team Personnel and employees generally.

Emergency communications for the Silverwater Lubrizol site comprise:

- internal telephone network
- public address system
- 2 x mobile phones or designated runners

During an emergency the supervisor, at the affected area, is to communicate directly with the Emergency Co-ordinator to notify type and location of the emergency.

Notification of Emergency response personnel and general alerting shall be undertaken via the PA system, telephone network, or runners.

Where the internal telephone network is affected, communications shall be maintained via the mobile phones and runners, for both on-site and off-site control aspects.

A list of key personnel and Emergency Services numbers is contained at the front of this manual and on ERP cards located at reception.

21. EMERGENCY CONTROL CENTRE (ECC)

The Emergency Control Centre for the Lubrizol, Silverwater site shall be located at the ground floor foyer of the administration building.

To facilitate control aspects, the ECC shall be equipped with:

- Control facilities for the early warning systems
- 2 x mobile phones
- Hard copy of the PIRMP/ERP

The serviceability of installed equipment and currency of the available information shall be regularly monitored by the ERO.

NOTE: Should the nominated Emergency Control Centre be affected during an ongoing emergency, operations should be transferred to the Emergency Services mobile command vehicle (where applicable).

22. SWITCHBOARD OPERATOR / RECEPTIONIST

When notified of an emergency or pollution incident the switchboard operator (NOTIFIER) will immediately inform the Emergency Co-ordinator, or in that officer's absence, the Deputy Emergency Co-ordinator.

When instructed to do so, notify the external emergency services:

Police Fire Brigades} - 000 Ambulance

Give the following information:-

- This is Lubrizol International Inc.
 28 River Street Silverwater
 Nearest Cross Street: Shaft Street
- State nature of emergency: Fire, bomb threat, gas leak, Pollution Incident

(Provide additional information as may be requested)

Please Note: For a Pollution Incident please follow the steps as outlined on page 4 of this Doc.

During an on-going emergency:

- Give priority to calls connected with the Emergency Response Organisation
- Take direction from the Emergency Co-ordinator
- Maintain a statement of events record to facilitate the review / debrief processes

23. EMERGENCY TERMINATION

Following the termination of Emergency Operations by the external Emergency Services, control of the site will be passed back to the site Emergency Co-ordinator.

The site Emergency Co-ordinator in conjunction with the ERO and management is to initiate the normalisation of site operations.

Dependent on the type of emergency involved, remedial action includes:-

FIRE

For incidents involving fire;

- Isolate fire damaged area / equipment
- Restore detection / suppression systems
- Restore / re-route electrical services
- Replenish / replace firefighting mediums
- Replenish / replace firefighting equipment
- Collect incident related data
- Initiate structural repairs of fire affected area
- Review security arrangements, pending restoration at damaged areas
- Review emergency response procedures
- Conduct debriefing session-provide counselling if necessary
- Restore ERO operational status

Rev.8 Issued: 09/09/2022 Authorised: Lubrizol International Inc. Page 18 of 45 pages

• Submit report.

SPILLAGE

- Clean up / remove spillage (arrange additional / support if required)
- Replace defective equipment
- Re-route supplies facilities (if required)
- Replenish cleans up materials
- Replace / repair clean up equipment
- Review containment aspects (liaise with EPA if necessary)
- Alert Sydney Water, if contamination has occurred
- Alert S.P.C. if necessary
- Collect incident related data
- Review emergency procedures
- Conduct debriefing session provide counselling if necessary)
- Restore ERO operational status

GAS LEAKAGE

- Repair / replace faulty equipment
- Alert supplier of gas fired equipment to attend site
- Conduct a gas analysis in high-risk areas, before commencement of operations
- Replenish / replace firefighting equipment used
- Collect incident related data
- Review emergency procedures
- Conduct debriefing session provide counselling if necessary
- Restore ERO operational status
- Submit report

BOMB THREAT

- Collect incident related data
- Review emergency procedures
- Conduct debriefing session provide counselling if necessary
- Pass on any new information to Police
- Review security arrangements
- Restore ERO operations status
- Submit report

BOMB DETONATION

- Assess extent of damage
- Assess risk of threat re-occurrence
- Assess risk of resumption of operations (structural damage)
- Initiate program of repairs
- Notify appropriate authorities if environmental contamination has occurred
- Refurbish / replace damaged detection / suppression and firefighting equipment
- Assess damage to essential services, e.g. Water, electricity, gas supply, communication systems
- Collect incident related data
- As soon as practicable review security measures
- As soon as practicable review emergency procedures
- As soon as practicable conduct debriefing session and provide counselling for staff, as necessary
- Restore ERO operational status
- Submit report

An emergency incident has the capacity to severely disrupt the operational integrity of the facility.

Rev.8 Issued: 09/09/2022 Authorised: Lubrizol International Inc. Page 19 of 45 pages

The normalisation of operations, following an emergency, must be afforded a high degree of attention to detail, to ensure life safety aspects are not compromised and in averting an incident re-occurrence.

24. DG MANIFEST

Potential Pollutants & Flammable Materials ON-SITE

The Inventory of potential pollutants on the premises or used in carrying out the relevant activity, as per section 72(d) and the maximum quantity of any pollutant that is likely to be stored or held at particular locations as per section 72(e) are listed below.

Flammable (Dangerous Goods) products are stored on site in Flammable Goods Cabinets. These products consist of minor quantities of solvents which are required for the day to day activities of the laboratory, maintenance, despatch areas, and pressure pack cans of paint used for package identification.

LABORATORY

PRODUCT	QUANTITY	LOCATION
Mixed Xylenes	6x 20 litres	North cabinet lab store
2-Propanol (IPA)	3x20 litres	North cabinet lab store
Pet. Ether BP 55°C	6x 20 litres	North cabinet lab store
Acetone (Propanone)	1x20 litres	North cabinet lab store
Various Solvents	<2.5 litres ea. (Total <250 litres)	Cabinet outside of lab
Compressed Oxygen	1x 74 kg	Outside of lab

A full list of chemicals used by the lab for analytical work is available in the Emergency Information Cabinet located at the main gate.

PLANT

PRODUCT	QUANTITY	LOCATION
Pressure Packs	500ml ea.	Cabinet in process area
All-purpose thinners	20 litres	Cabinet in warehouse
LPG Cylinders	6 x 15 kg	North end of warehouse
Acetylene cylinder	2 x E & G	Workshop

Summary Information about classes of Dangerous Goods

Class	Packing Group	Maximum quantity
8	III	30,000 kg
9	III	500,000 kg
C1	n/a	1,500,000 kg

Please refer to Dangerous Goods and combustible liquids manifest

NOTE: THIS IS AN EXAMPLE OF THE DG MANIFEST WHICH IS STORED IN THE **EMERGENCY INFORMATION CABINET AT THE MAIN GATE (key located in Key Cabinet in Supervisor's office)**

BULK STORAGE

Tank ID No.	Dangerous Goods					Tank	
	Name	Class	Subs Risk/s	UN No.	PG	Туре	Capacity
	ELEVATED TEMPERATURE						
AT77	LIQUID N.O.S.	9	n/a	3257	III	a/g	47,000 L
AT79	ENVIRONMENTALLY HAZARDOUS SUBSTANCE LIQUID N.O.S.	9	n/a	3082	III	a/g	50,000 L
	ENVIRONMENTALLY						
AT87	HAZARDOUS SUBSTANCE	9	,	3082	III	a/g	8,000 L
	LIQUID N.O.S.		n/a			-/ 5	-,
	ENVIRONMENTALLY						
AT88	HAZARDOUS SUBSTANCE	9		3082	III	a/g	8,000 L
/100	LIQUID N.O.S.		n/a	5002		u, g	0,000 2
	ENVIRONMENTALLY						
AT89	HAZARDOUS SUBSTANCE	9		3082	III	a/g	8,000 L
	LIQUID N.O.S.		n/a			~, 5	0,000 -

u/g = underground a/g = aboveground n/a = not applicable

Package Storage Locations

No Packaged dangerous goods of Packing Group 1 or Class 2.3 Stored on site.

Storage Location		Dar	Quantity				
	Name	Class	Subs Risk/s	UN No.	PG	Average	Capacity
WH1	NIL	NA	NA	NA	NA	NIL	NIL
WH2	NIL	NA	NA	NA	NA	NIL	NIL

Other packaged dangerous goods

Storage Location	Class	Sub Risk/s	Packing Group	Average Quantity	Maximum Quantity
WH1	8	n/a	III	20,000 kg	30,000 kg
WH1	9	n/a	III	600,000 kg	1,000,000 kg
WH1	C1 Combustible liquid	n/a	n/a	100,000 kg	1,000,000 kg
WH2	8	n/a	III	20,000 kg	30,000 kg
WH2	9	n/a	III	300,000 kg	500,000 kg
WH2	C1 Combustible liquid	n/a	n/a	100,000 kg	500,000 kg

Manufacturing Locations

Location	Class	Sub Risk/s	Packing Group	Maximum Quantity
BL1	9	n/a	III	100,000 kg
BL1	C1 Combustible liquid	n/a	n/a	100,000 kg

Dangerous Goods Loaded onto Vehicles

Loaded vehicles are not kept at this site.

Wastes and grave yard storage Areas.

LZA makes no distinction between waste and any other products; they are all handled in the same manner. SEE LZP-4.15.1 Product Handling Procedure.

25. TRANSPORTATION EMERGENCY RESPONSE PLAN (TERP) - Off Site

REFER ANNEXURE 10 FOR FLOWCHART

PURPOSE

The purpose for this material is to provide uniform guidelines for response by Lubrizol to transportation emergencies/incidents involving Lubrizol products.

The objective is to achieve a rapid response to the person in charge at the scene of the incident so as to minimise hazards to the public, emergency personnel, and the environment, as well as to prevent unnecessary loss or contamination of the product. Pre-planning of communication is the key to success.

26. MARINE EMERGENCY

REFER ANNEXURE 10 FOR FLOWCHART

MARINE EMERGENCY

To capture emergency information use "Lubrizol Emergency Incident Report" (<u>Annexure 5</u>)

Follow the Corporate SOC

EM-S-03 Transportation Emergency Response Guide (Global)

To capture emergency information use "Lubrizol Emergency Incident Report" (<u>Annexure 5</u>)

• same as EM-S-03

As such, LZAust shall respond according to what the local authorities request and instruct.

27. IMPORTANT TRANSPORTATION NOTES

Regardless of who is the reporting party, the same procedure as shown in the flow diagram **(Annexure 10)** must be followed.

- Reporting party can be:-
- Police
- Drivers
- Transportation Company
- Shipping Company
- Member of the Public
- Other

If an incident report is received by phone, LZAUST employee or security company receiving the call must:-

- Inform the caller that his call will be transferred to, or provided with the telephone number of, the person in charge immediately, and at the same time request the caller to call back if the telephone line is cut off.
- Contact any of the Emergency Contacts listed ON PAGE 5:-
- If none of the co-ordinators can be contacted, then the employees or security company must proceed to ask the reporting party to provide as much information as possible required in "Lubrizol Emergency Incident Report" (Annexure 5)
- Once this is done, then the employee or security company must refer to any management staff that he or she can find.

28. MARINE RESPONSE TEAM

REFER ANNEXURE 10 FOR FLOWCHART

RESPONSIBILITIES

To provide on-site assistance to shipping company, towage company, local authorities, or at the Lubrizol Silverwater facility in:-

- Containing spillage of Lubrizol's additives,
- Cleaning spillage of Lubrizol's additives during a marine emergency.
- To bring back any materials recovered from A to LZAUST. for recovery or disposition

To keep the TERP Co-ordinator and/or LZAUST management informed on progress of on-site cleaning.

MARINE EMERGENCIES

To capture emergency information use "Lubrizol Emergency Incident Report" (Annexure 5)

NOTE: Notification is required if there is "**MATERIAL HARM**" to the environment as defined in s147 of the POEO Act. As per Section 1, Page 4 of this Document!

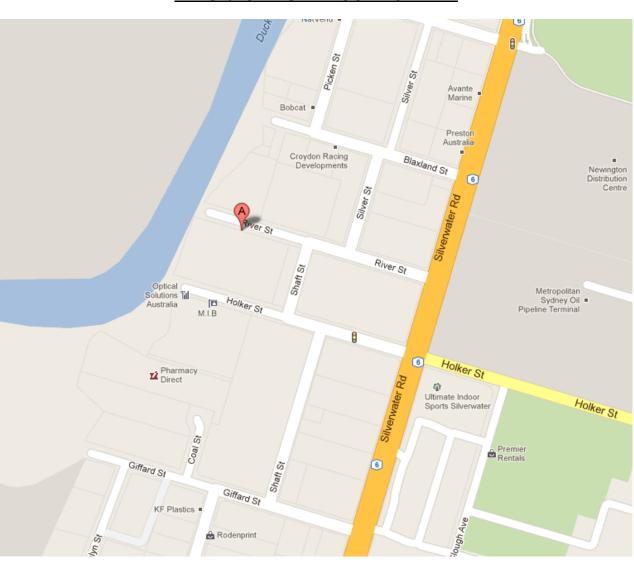
Responsibilities of Response Team Leader

- Form a team with other members immediately upon notification of a marine emergency.
- Obtain a copy of material safety data sheet from LZAust facility.
- brief team members on any potential hazards of material based on information contains in the relevant SDS

- supervise containment and cleaning up of spillage
- if spillage is beyond the control of the team, call for further assistance from:
- SPC Emergency Response or HAZMAT
- keep TERP Co-ordinator and/or LZAUST. Management informed on progress of onsite cleaning (Team Leader should use the ship mobile phone)
- stop all cleaning operations if site becomes unsafe to team members
- remind team members not to make any unofficial statement or comment to third parties

TERP Cleaning Equipment

1 x Marine Response Kit

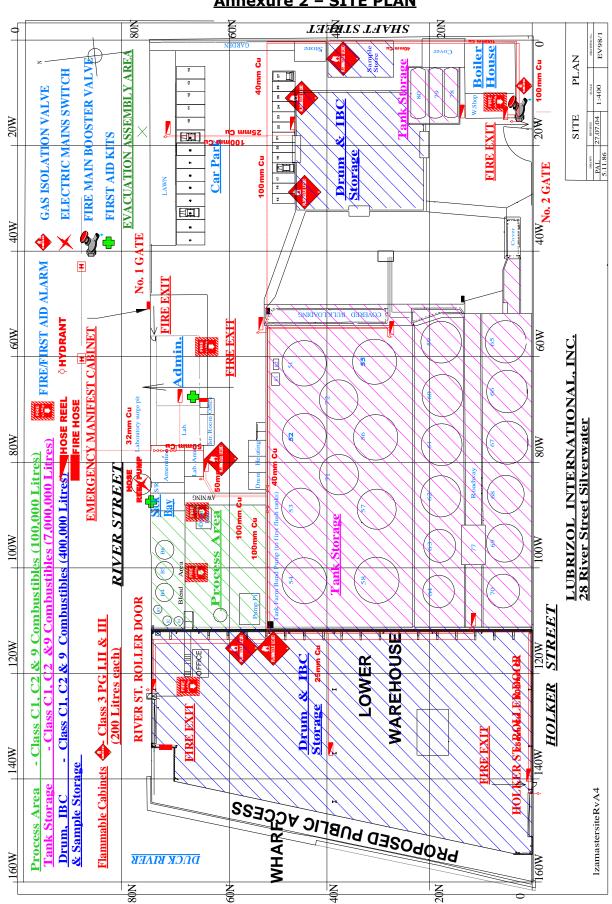


Annexure 1 - SITE LOCATION MAP

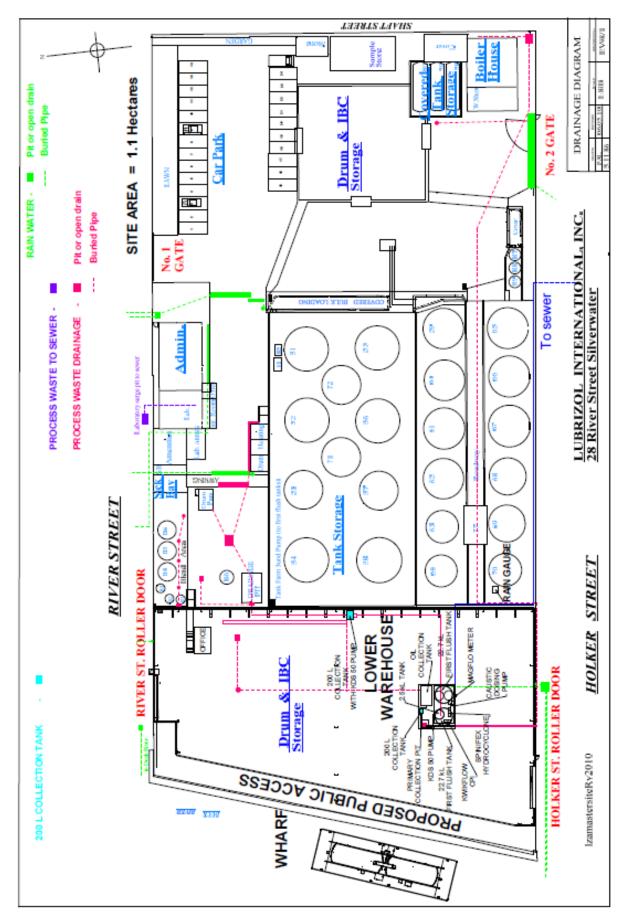
28 River Street, Silverwater, NSW 2121 Lat-Long: -33° 49' 49", 151° 2' 47" || -33.8303, 151.0464

LUBRIZOL INTERNATIONAL INC. **RMS Roads & Maritime Services** United Flashing & Roofing Duck River POTENTIA **IMPACT** ZONES AUS Grid Learning Centre Optical Solutions Australia B & H Australia M.I.B

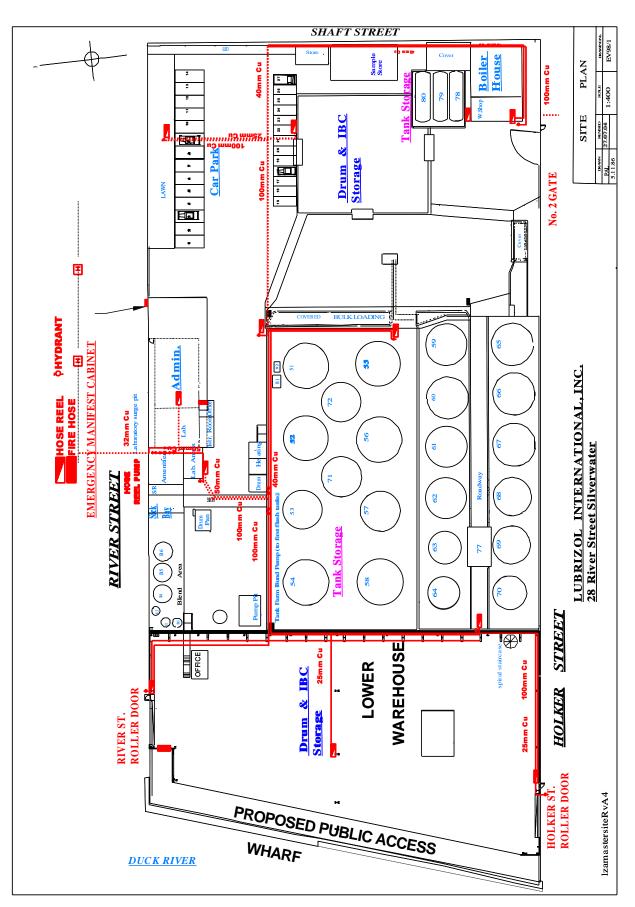
Annexure 1A – NEIGHBOURHOOD/IMPACT



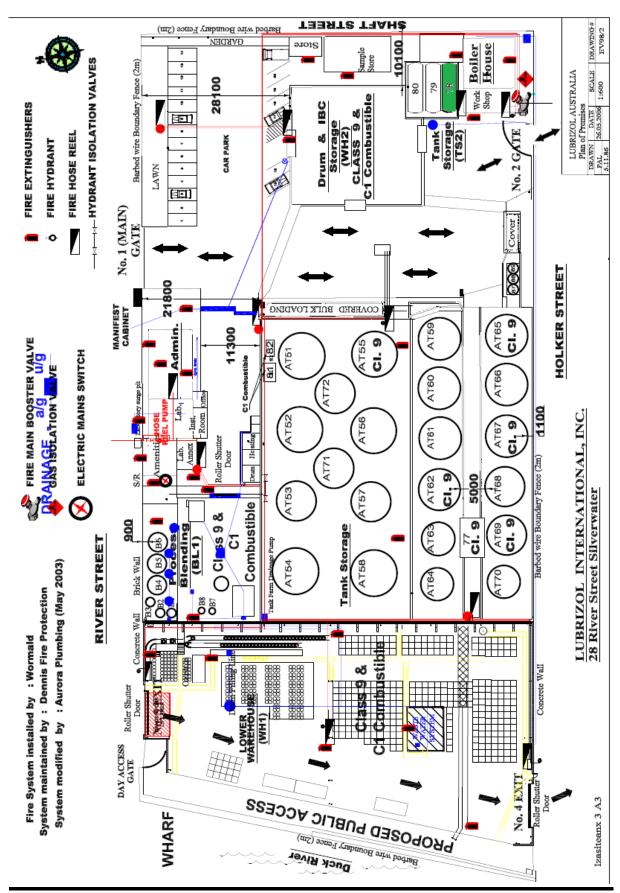




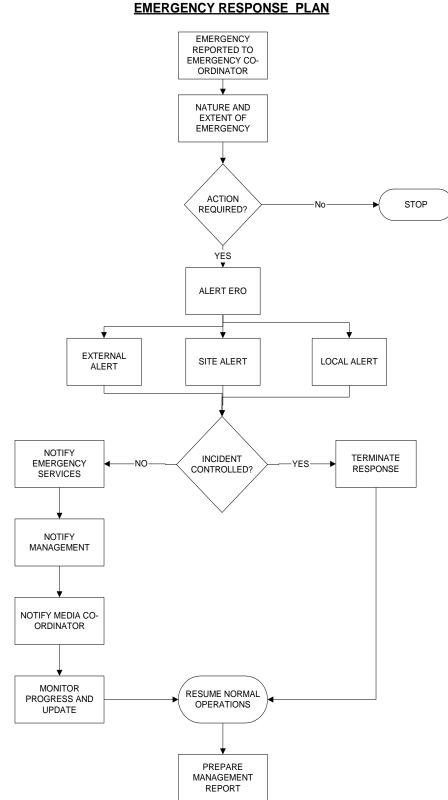
Annexure 2A – DRAINAGE SYSTEM











Annexure 4 - EMERGENCY RESPONSE PLAN FLOW CHART

ERPLAN1.vsd

Annexure 5 – LUBRIZOL EMERGENCY INCIDENT REPORT

LUBRIZOL EMERGENCY RESPONSE REPORT LZD - 4.15.18

INSTRUCTIONS:

- 1. To be completed by the person receiving emergency information
- 2. Obtain as much detail of incident as possible
- 3. Distribution:-
- LZAust Country Manager
- Emergency Co-ordinator

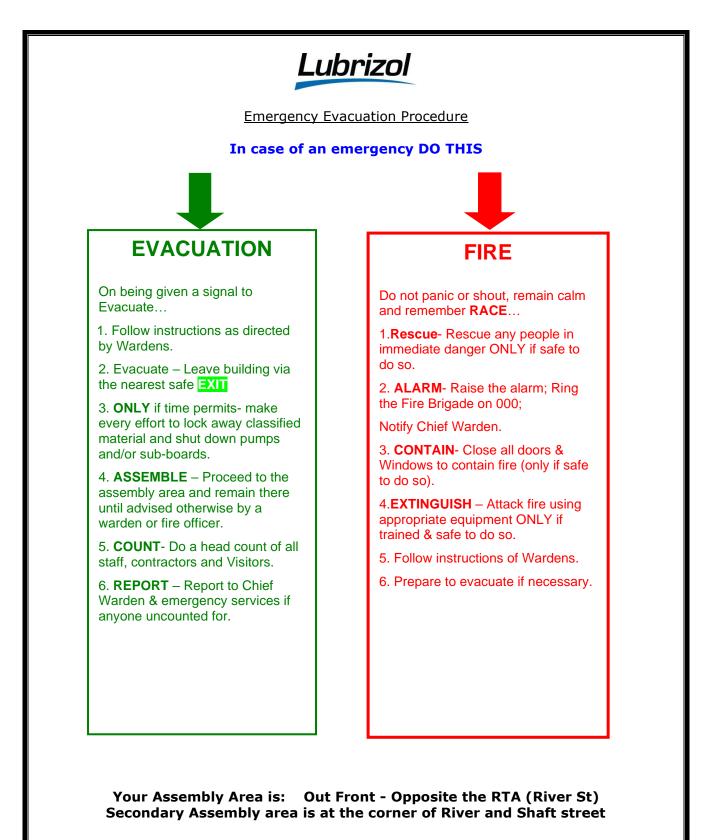
EMERGENCY

FIRE	GAS LEAK		POLLUTION INCIDENT/SPILLAGE
FLOOD	EXPLOSION		VEHICLE INCIDENT
STRUCTU	JRAL DAMAGE		BOMB THREAT
	SORDER		NATURAL DISASTER
THREAT	FROM ADJOINING PROP	ERTY	
INCIDENT DATE:			<u>TIME:</u>
INCIDENT LOCATIO	<u>N</u> :		
INCIDENT DESCRIP	TION:		

LZPL – PIRMP – Pollution Incident Response Management Plan

EMERGENCY SER	RVICE IN ATTENDANCE:		
POLICE	FIRE BRIGADE	AMBULANCE	
AUTHORITIES II	NVOLVED:		
E.P.A.	S.P.C.	SYDNEY WATER	
EXTENT OF DAM	AGE: (Give details)		
REMEDIAL ACTIO	ON: (Plant Normalisation Initiativ	es)	
INJURIES:	FATALITIES:		
NAME:	SIGNATURE:	DATE:	

Annexure 6 - EMERGENCY EVACUATION PROCEDURES



Annexure 7 - SAFETY DATA SHEETS

For flammable materials (Dangerous Goods) kept on site.

Refer to DG MANIFEST / FLAMMABLE MATERIALS ON-SITE (section 28)

Safety (SDS) data for 2-propanol



General

Synonyms: 2-hydroxypropane, isopropanol, isopropyl alcohol, isopropanol, isopropyl alcohol, IPA, sec-propanol, sec-propyl alcohol, dimethyl carbinol, propan-2-ol, avantin, avantine, combi-schutz, rubbing alcohol, spectrar, sterisol, takineocol, virahol Molecular formula: CH₃CHOHCH₃ CAS No: 67-63-0 EC No: 200-661-7

Physical data: Appearance: colourless liquid with slight alcohol odour Melting point: -89 C Boiling point: 82 C Vapour density: 2.1 Vapour pressure: 33 mm at 20 C Specific gravity: 0.79 Flash point: 12 C Explosion limits: 2.0 % - 12 % Autoignition temperature: 425 C

Stability: Stable. Incompatible with strong acids, strong oxidizing agents, halogens, aluminium, active halogen compounds. Regulated in UK under Highly Flammable Liquids and Liquefied Petroleum Gases Regulations 1972. **Highly flammable!** Vapour-air mixtures may be explosive.

Toxicology: May be harmful by inhalation, ingestion or skin absorption. May act as an irritant! UK OES Long-term 980 mg/m3.

Toxicity data: (The meaning of any abbreviations which appear in this section is given <u>here.</u>) ORL-RAT LD50 5045 mg kg⁻¹ *Pimephales promelas* LC50 11130 mg/l/96h *Daphnia magna* LC50 9500 mb/1/24h

Risk phrases: (The meaning of any risk phrases which appear in this section is given <u>here.</u>) R11 R36 R37

Personal protection: Safety glasses. Effective ventilation!

Safety phrases: (The meaning of any safety phrases which appear in this section is given <u>here.</u>) S7 S16 S24 S25 S26

Safety (SDS) data for petroleum ether



General: Synonyms: Amsco H-J, Amsco H-SB, Benzin B70, hi-flash naphtha, hydro treated naphtha, rubber solvent, super vmp, pet ether, ligroin, petroleum spirits, petroleum naptha, Benzin, petroleum benzine Molecular formula: varies (typically samples contain predominantly <u>n-pentane</u>, with small amounts of methyl pentane, <u>cyclopentane</u>, dimethyl butane and other short chain hydrocarbons. Exact formulation determines the boiling range of the material.) CAS No: 8032-32-4 EC No: 232-453-7

Physical data: Appearance: colourless liquid with hydrocarbon odour

Melting point: Boiling point: varies with formulation, typically ca. 35 C Specific gravity: varies with formulation, typically ca. 0.64 Vapour pressure: Flash point: typically ca. -46 C Explosion limits: typically ca. 1.1% - 5.9% Autoignition temperature: Water solubility: negligible

Stability: Stable. Extremely flammable! Avoid strong oxidising agents, all sources of ignition. As a consequence of its low flashpoint, mixtures of this material with air may ignite upon contact with hot surfaces - a naked flame is not required.

Toxicology: Harmful by inhalation, ingestion or by skin contact.

Toxic if inhaled. May be carcinogenic in humans! Inhalation may cause headache, nausea or vomiting. Prolonged exposure to the liquid may cause dermatitis. Typical TLV 1350 mg/m3 (300 ppm)

Toxicity data: (The meaning of any abbreviations which appear in this section is given <u>here.</u>) IHL-HMN LCLO 3pph/5m IVN-MAN LDLO 27000 mg kg⁻¹ ORL-RAT LD50 > 5000 mg kg⁻¹ SKN-RBT LD50 > 3000 mg kg⁻¹

Risk phrases: (The meaning of any risk phrases which appear in this section is given <u>here.</u>) R22 R45

Personal protection: Safety glasses. Use efficient ventilation. Remove all sources of ignition, including hot plates, from the working area.

Safety phrases (The meaning of any safety phrases which appear in this section is given <u>here.</u>) S45 S53

Safety (SDS) data for xylene



General: Synonyms: dimethylbenzene, xylol Molecular formula: $C_6H_4(CH_3)_2$ This is a mixture of the three xylenes, m-xylene (CAS 108-38-3), o-xylene (CAS 95-47-6) and p-xylene (CAS 106-42-3), and often also contains ethyl benzene (CAS 100-41-4). CAS No1330-20-7 EINECS No:

Physical data: Appearance: colourless liquid Melting point: -48 C Boiling point: 137 C Vapour density: 3.7 (air = 1) Vapour pressure: 5.1 mm Hg at 20 C Density (g cm⁻³): 0.87 Flash point: 27 C (closed cup) Explosion limits: 1.1 - 7% Autoignition temperature:

Stability: Stable. Highly flammable - incompatible with strong oxidizing agents

Toxicology: Harmful if swallowed or inhaled. Eye, skin and respiratory irritant; May act as a narcotic! Typical TLV/TWA 100 ppm

Toxicity data: (The meaning of any abbreviations which appear in this section is given <u>here.</u>) ORL-RAT LD50 4300 mg kg⁻¹ SCU-RAT LD50 1700 mg kg⁻¹

Personal protection: Safety glasses, good ventilation. Remove sources of ignition from the working area.

Chemical Safety Data: Propanone (Acetone)



Common synonyms:

Acetone, 2-propanone, methyl ketone, dimethyl ketone

Formula (CH₃)₂C=O

Physical properties: Form: colourless liquid with a characteristic smell Stability: Stable, but highly flammable. Melting point: -95 C Boiling point: 56 C Water solubility: <u>miscible</u> in all proportions Specific gravity: 0.79

Principal hazards: Contact with the eyes can cause serious permanent damage. Propanone is highly flammable, and presents a serious fire risk. Propanone is harmful if it is swallowed or inhaled. Long-term exposure, for example through breathing in the fumes, can cause liver damage. Repeated skin exposure may lead to defatting and irritation.

Safe handling: Always wear safety glasses. Ensure that ventilation is good so that you do not breathe in the vapour. Remove all sources of ignition from the working area. (Be aware that very flammable materials do not need a flame for combustion to start - they may be ignited by a hot plate or even a hot radiator if their flash point is low enough.) Always store bottles of propanone in a flame-proof cabinet! Do not leave propanone, or solutions containing it, standing unattended on a bench where they might get knocked over or set alight.

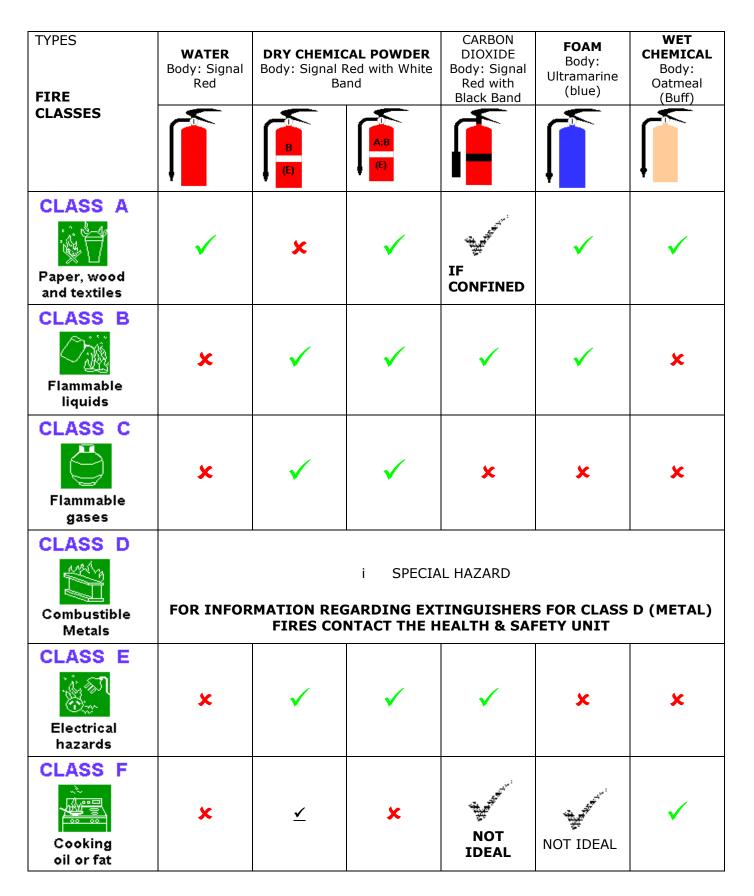
Emergency: Eye contact: Immediately flush the eye with plenty of water. Continue for at least ten minutes and call for medical help.

Skin contact: Wash off with plenty of water. Remove any contaminated clothing (noting that clothing soaked in propanone may present a serious fire risk).

If swallowed: Wash out the mouth with water and call for medical help.

Disposal: Very small amounts of propanone can be flushed down a sink with a large quantity of water, unless local rules prohibit this. Significant amounts of water must be used in order to ensure that dangerous levels of vapour do not build up in the sewer. Larger amounts should be disposed of through authorised contractors.

Protective equipment: Always wear safety glasses when handling propanone. If you need gloves, butyl rubber is a suitable protective material.

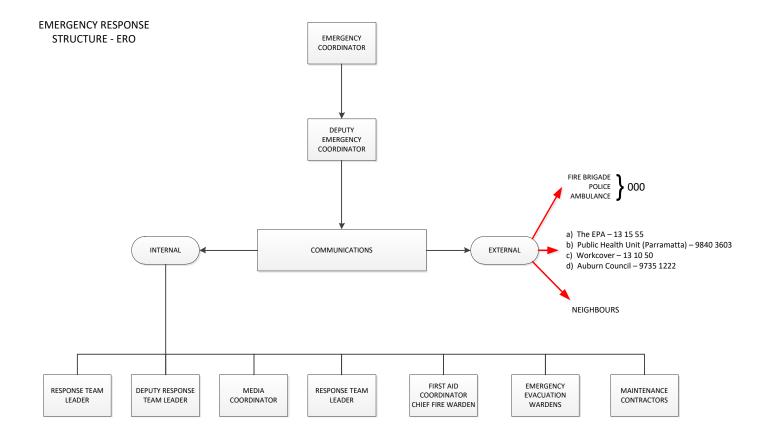


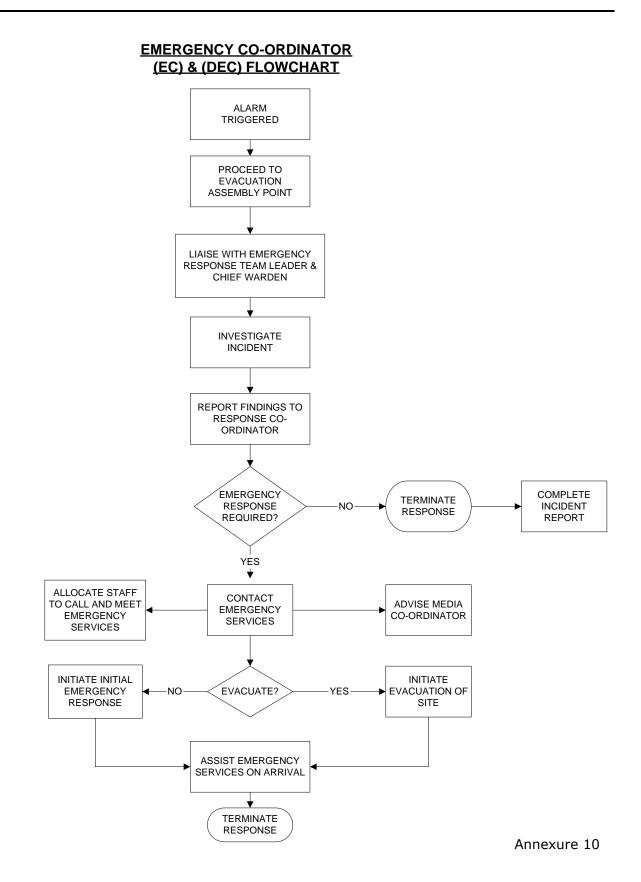
Annexure 8 – WHAT EXTINGUISHERS TO USE

FIRE PROCEDURES		BOMB THREAT	ARMED HOLD-UP			
1.	Call FIRE BRIGADE	1. REMAIN CALM!	 Tell yourself to stay calm! Do not try to be a hero. 			
2.	REMAIN CALM	2. HAVE ANOTHER STAFF MEMBER CALL THE	2. HAVE ANOTHER STAFF			
3.	Only if safe to do so _use the fire extinguisher or fire hose	POLICE.	MEMBER CALL THE POLICE			
	reel	Record the exact wording or threat.	3. Do what the offender tells			
-	XTINGUISHER	4. Keep the caller talking –	you.			
1.	Select the correct fire extinguisher	try to obtain as much information as possible.	4. Try to be observant.			
2.	Remove from bracket.	5. DO NOT HANG UP!	Only if safety permits, raise the alarm.			
3.	,	6. Record details of the	6. Notice the offender's			
	Pull pin.	caller's voice and background noises.	mannerisms, clothing and speech.			
5.	Aim nozzle at base of fire	 Await instructions from authorised persons. 	Try not to involve other staff in the hold-up.			
6.	Squeeze Handle.					
7.	Sweep from side to side, and up and down on burning material	 Advise Management as quickly as possible to discuss the next step in reporting to the police. 	 Advise HR and management as soon as possible. 			
FIRE H	IOSE REEL					
	Open valve to turn on water supply					
2.	Run out hose to location					
3.	Operate hose reel nozzle (twist or lever)					
4.	Direct Stream at base of fire.					
8.	WATER fire extinguishers (with a blue band) and all fire hose reels MUST NOT BE DIRECTED AT ELECTRICAL FIRES. <u>If you</u> <u>are unsure, LEAVE IT!</u>					
ii EMERGENCY CONTACT NUMBERS FIRE BRIGADE, POLICE, AMBULANCE 000						
	OFFICE (02) 9741 5200					

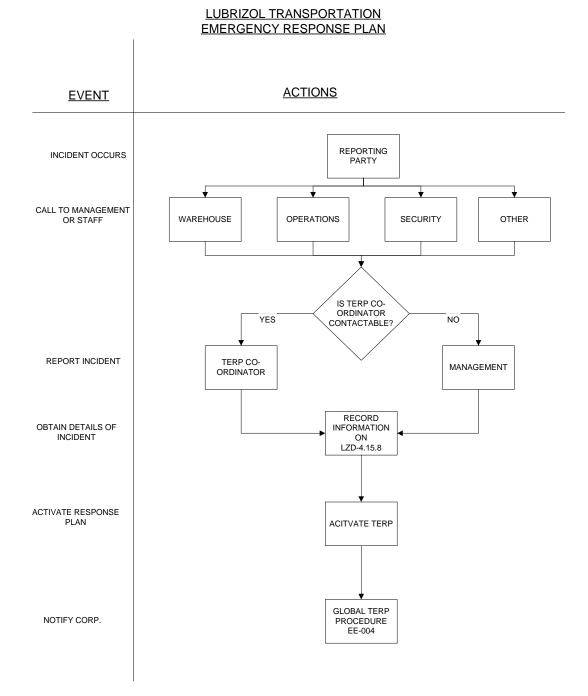
Annexure 9 – EMERGENCY REFERENCE GUIDE

Annexure 10 - ERO FLOW CHARTS





Annexure 10



Rev.8 Issued: 09/09/2022 Authorised: Lubrizol International Inc. Page 44 of 45 pages

