Pollution Incident Response Management Plan (PIRMP)

Reinforced Concrete Pipes Australia (RCPA) Somersby Plant

149 Somersby Falls Road, Somersby

Document Preparation and Control	Document Review
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Document Approval	Signature
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Document Version History			
Revision	Date	Document Status	Brief Description of Change(s) from Previous Version
A	04/07/23	Draft	Draft for review
B	22/08/2023	Approved	Update of logo
C	01/09/2023	Approved	Rev C updated details

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1 PURPOSE AND SCOPE

The purpose of this plan is to ensure that systems are in place to minimise potential impacts associated with pollution incidents events. The term "pollution incident" is considered an emergency event in this Plan.

If an emergency event occurs the priorities must be:

1. The safety of all persons on site (including visitors and contractors).
2. The safety of nearby residents.
3. Minimum impact on the environment.
4. Normal business operations are returned to normal as soon as possible.

The scope of activities conducted at this site includes, but not necessarily be limited to work relating to the following activities:

- Concrete Pipe Production

This Pollution Incident Response Management Plan (PIRMP) has been developed to meet the conditions to comply with Part 5.7A of the Protection of the Environment Operations (POEO) Act 1997.

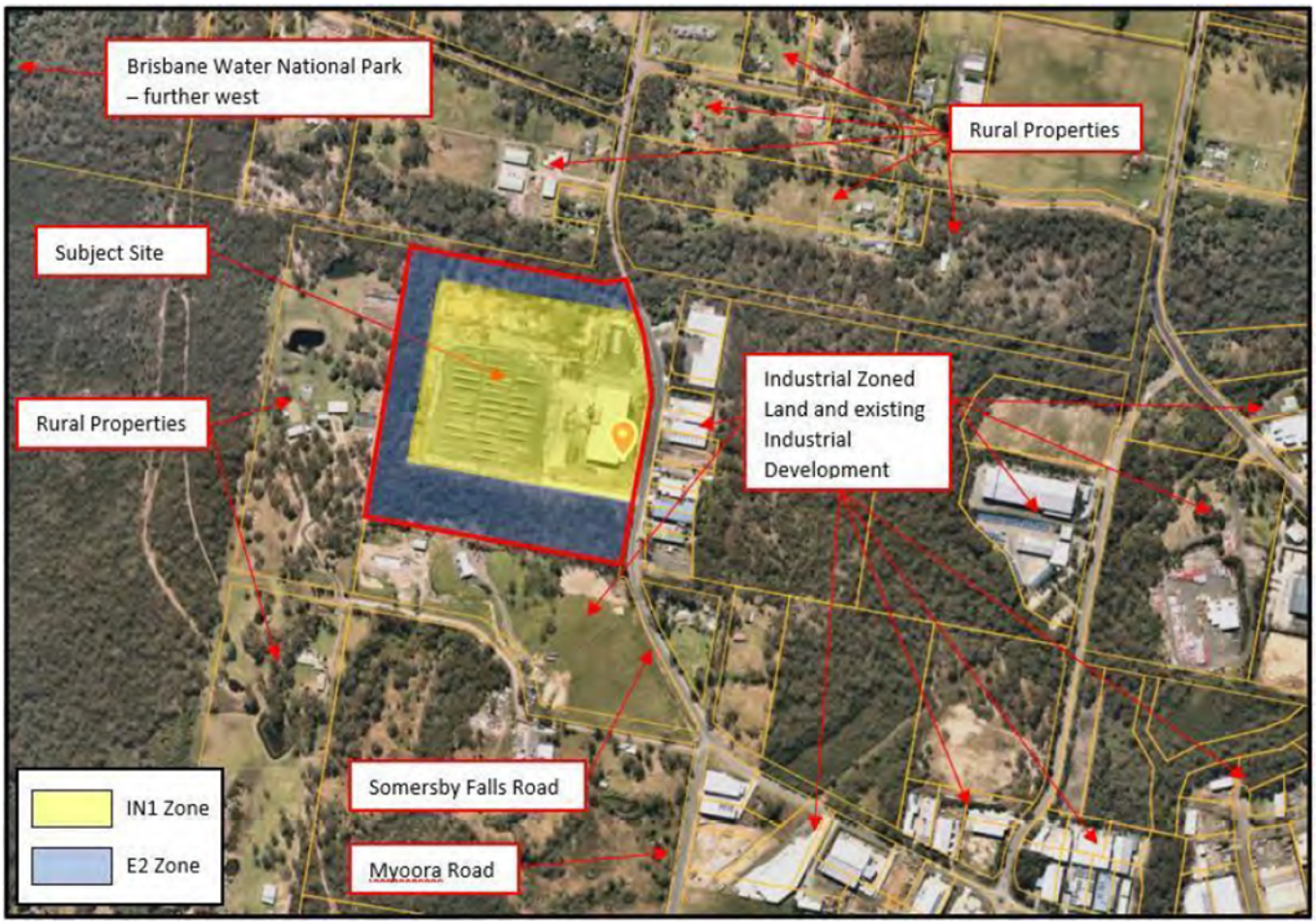
In order to meet this requirement, this document has been developed for implementation at the site for the activities carried out on the site.

2 SITE EMERGENCY PROFILE

2.1 Site Details

Site Name:	Reinforced Concrete Pipes Australia (RCPA) Somersby Plant		
Address:	149 Somersby Falls Road, Somersby		
Phone:	1800 887 272		
Buildings and Structures:	• Single floor site office and amenities • Single Floor Production Building • Dangerous goods container • 2 x Spare Parts Storage container • Raw Material Feed Bins and Conveyors • Fly Ash/Cement Silos • Batch plant control room • Overhead bins • Bulk Additive tanks • Rubber rings storage containers		
Buildings and Structures (continued):	• Consumables storage containers • Fire hydrant / booster pump shed		
Shift Details & Hours of Occupancy	Shift Name	Hours	No. of People
	Day	7am – 6.00pm (Mon to Sat) 8am – 6.00pm (Sun & Public Holidays)	Approx. 30-40 Nil
	Evening	6pm – 10.00pm Mon – Sun	Approx up to 13
	Night	10.00pm – 7.00am (Mon to Sat) 10.00pm to 8.00am (Sun & Public Holidays)	Approx. up to 13
Security Service Provider:	Central Monitoring Services – 02 9809 9244		
Fire and Emergency Equipment Contact:	Survival Solutions – 1300 040 362		

2.2 Site Location



2.3 Site Layout

2.4 Drainage Path Layout

Figure - Overland Drainage Path Diagram

2.5 Details of Neighbouring Facilities

Neighbouring Facilities	Contact Person & Phone number	Mechanism for Raising the Alarm and Ongoing Communication
Residents	TBC	Phone and/or door knocking
Thermit Australia	02 4340-4988	Phone and/or door knocking
Carlson Stainless Tanks	02 4340 0958	Phone and/or door knocking
Aspro Australia	02 4340 4181	Phone and/or door knocking
Roxset Health and Safety Flooring	1800 769 738	Phone and/or door knocking
Aqualove		Phone and/or door knocking

3 COMMUNICATION OF THIS PLAN

This PIRMP shall be communicated to personnel through site induction, at Toolbox and Pre-Start meetings and will be displayed on site and made available on the Site HSE Management Board. Site specific evacuation procedures (incl. muster points and the identities of ERT personnel) will be displayed on noticeboards and in prominent positions throughout the site/buildings.

As required by the POEO Act, and to allow appropriate communication of the plan, a current copy of this plan will be located on premises at all times and able to be provided to an authorised EPA officer on request.

In addition to having an onsite copy, a copy of this PIRMP will also be made publicly available on the RCPA website.

4 LEGISLATIVE REQUIREMENTS

Specific requirements for pollution incident response management plans are set out in Part 5.7A of the POEO Act 1997 and Clauses 131 of the Protection of the Environment Operations (General) Regulation 2009 (POEO(G) Regulation).

In summary, this provision requires the following:

- All applicants/holders of environment protection licences must prepare a pollution incident response management plan.
- The plan must include the information detailed in the POEO Act and be in the form required by the POEO(G) Regulation.
- Licensees must keep the plan at the premises to which the environment protection licence relates.

- Licensees must test the plan in accordance with the POEO(G) Regulation.
- If a pollution incident occurs in the course of an activity so that material harm to the environment is caused or threatened, licensees must immediately implement the plan.

5 DEFINITION OF 'POLLUTION INCIDENT' AND NOTIFICATION REQUIREMENTS

The definition of a pollution incident is:

> pollution incident means an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.

A pollution incident is required to be notified if there is a risk of 'material harm to the environment', which 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.*
>
> *(2) For the purposes of this Part, it does not matter that harm to the environment is caused only in the premises where the pollution incident occurs.*

Notification responsibilities for incidents that have caused or threaten to cause material harm to the environment are detailed in Section 148 of the POEO Act. In summary, these are broadly categorised as:

5.1.1.1 Duty of an employee or any person undertaking an activity:

Any person engaged as an employee or undertaking an activity with regard to the site will, immediately after becoming aware of any potential incident (even if outside of normal business hours), notify the Production Manager of the incident and all relevant information about it. The Production Manager will be available 24 hours a day, seven days a week and have the authority to stop or direct works.

5.1.1.2 Duty of an employer or occupier of the premises to notify:

The employer or occupier of the premises (in this case, the Production Manager) on which the incident occurred, who is notified (or otherwise becomes aware of) of the incident, will immediately notify the relevant authorities about the incident and all relevant information.

Under the POEO Act, 'relevant authority' means any of the following:

- The appropriate regulatory authority – the Environment Protection Authority (EPA).
- If the EPA is not the appropriate regulatory authority – the local authority for the area in which the pollution incident occurs (i.e. council).
- NSW Public Health Unit.
- SafeWork NSW.
- Fire and Rescue NSW.

Section 15 of the PIRMP lists the contact details for these authorities.

6 INVENTORY OF POLLUTANTS

List of potential pollutants found at the plant are listed below:

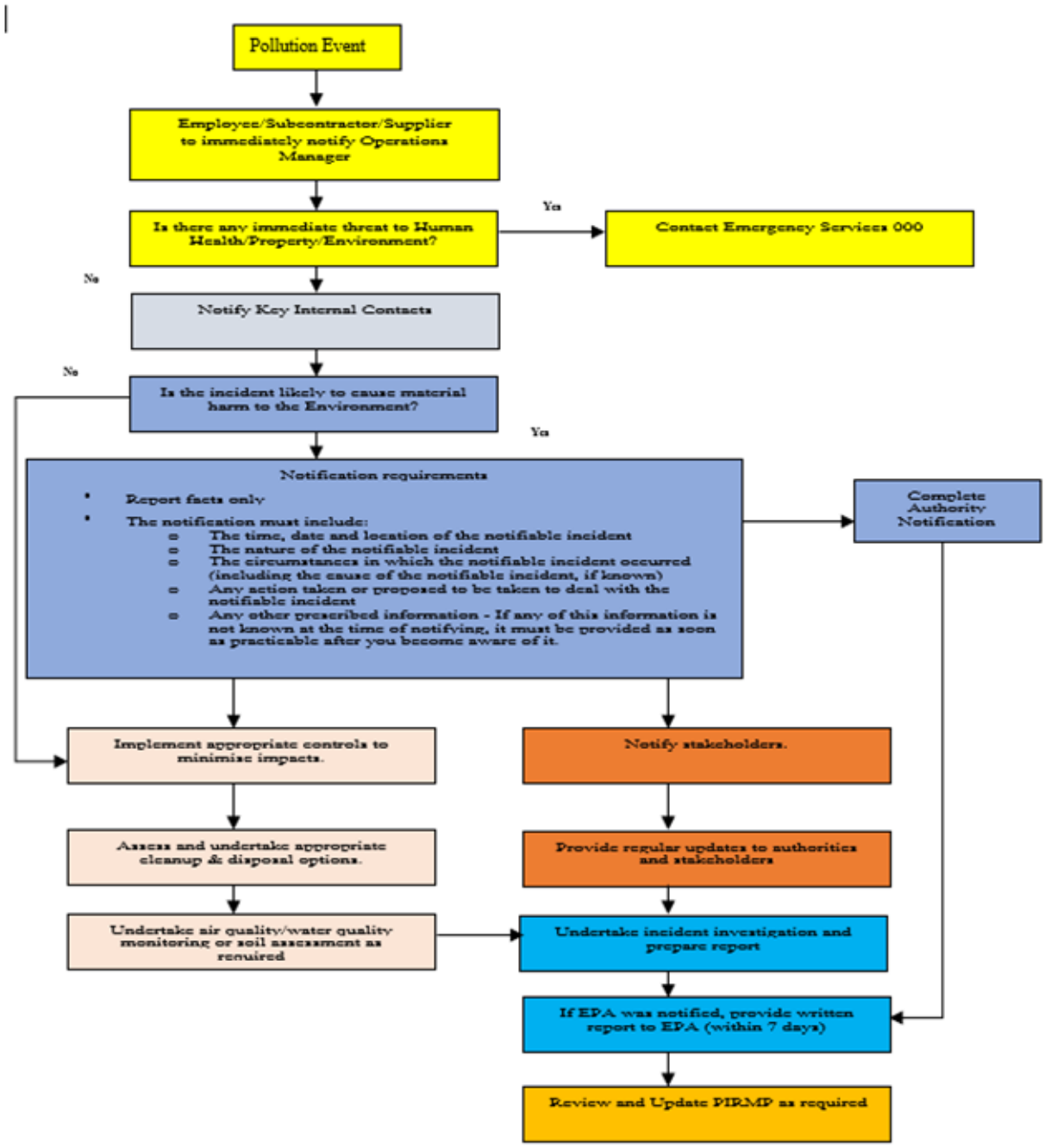
- Diesel – Shell V Power
- Betopro ABAK 115 – Ecoratio
- DARASET® NC 90 – GCP
- QUANTEC PL-433 – GCP
- NCRA-191 – Nucal Trading
- LANOX-mx4 – Inox

Additional information on the products above can be found in Appendix D – Safety Data Sheets.

7 INCIDENT RESPONSE PLAN

If a pollution incident occurs in the course of an activity where material harm to the environment is caused or threatened, the management of these events is to be in accordance with the below flow chart.

In addition to this, specific pollination Incidents may be managed in accordance with the response action plans included in Section 12 of this document.



8 ROLES AND RESPONSIBILITIES

Position	Responsibility
Employees and Contractors	• Follow procedures outlined in the PIRMP and related documents • Immediately alert Site Manager or Team Leader of any environmental incidents or near-misses.
Team Leaders / Front Line Supervisors	• Follow procedures outlined in the PIRMP. • Immediately alert Site Manager or, in case of their unavailability, HSE Representative of any potentially material environmental incidents or near-misses. • Assist in conducting incident investigations.
Site Manager and/or HSE Representative and/or HSE Representative	• Authorisation, administration, maintenance and implementation of the PIRMP • Assess whether the incident has caused or threatens "material environmental harm" and communicate details to management. • Make a determination as to whether the incident (as defined in section 147 of the POEO Act) is reportable to external agencies • Responsible for taking control of the site after the occurrence of a Pollution event and activating the implementation of this PIRMP until such time either: o external emergency services (e.g. police, fire services or Workplace health and safety authority) take control of the site; or o the event subsides • Coordinate communication to neighbouring stakeholders Ensure investigations are undertaken to a level corresponding to the level of risk and impact. • Inform the Senior Leadership Management Team / Group Management and Notification to External Agencies • Undertake notifications as defined in PIRMP
Emergency Response Team (ERT)	The Emergency Response Team (ERT) is responsible for taking control of the site after the occurrence of a relevant safety and/or fire emergency event and activating the implementation of this PIRMP until such time either: • external emergency services (e.g. police, fire services or Workplace health and safety authority) take control of the site; or • the event subsides

9 EMERGENCY TRAINING AND AWARENESS

All Personnel shall be provided with general Emergency Management Training as part of the site induction training process, and such training shall cover as a minimum:

- the locations of all emergency equipment and the correct method for its use.
- Risk awareness training to encourage awareness of the dangers presented by the site and the means for preventing it.

Personnel who have assigned responsibilities in an emergency situation (i.e. ERT, Fire Wardens, Evacuation Wardens, Site Management) shall be inducted into the PIRMP and provided with appropriate training.

Refer to the Facilities specific Training Needs Analysis/ Skills matrix for training schedule and completed training. This is to include emergency pollution response.

Requirements	Who Should Attend	Frequency	Training Provider
Site emergency systems: - Alarms - Communications - Fire detection - Fire suppression	- Survival Solutions All Personnel on site	As per systems frequency	Survival Solutions
Site/ area evacuation drills	- All persons on site	Annually	RCPA
Emergency Response Training	- ERT Personnel	Bi-Annually	Registered Training Organisation
Fire Warden	- All Fire wardens Personnel	Yearly	Registered Training Organisation

Incident and Emergency Preparedness includes all activities that focus on essential emergency response capabilities through the development of plans, procedures, the organisation and management of resources, and associated training and education.

10 EMERGENCY FACILITES & EQUIPMENT

10.1 Fire Fighting Equipment

The following requirements for fire equipment shall be taken into consideration:

- Location - extinguishers and hoses are to be placed in readily accessible locations and in areas where risk of fire is likely.

  In addition, Portable extinguishers and fire blankets are present on all Oxy-Acetylene Mobile Trolleys, and portable extinguishers are present on all Mobile Plant.
- Access - clear access is to be maintained around fire extinguishers and hoses at all times.
- Signage - signage is to be provided at each location, indicating the type of fire extinguisher and fire types that they are suited for.
- Mounting - Fire extinguishers are to be mounted on purpose made hooks or brackets and suspended above the floor.
- Inspection - Fire extinguishers are to be inspected and serviced every 6 months.

Fire Suppression Systems Details

- Portables fire extinguishers in all areas of the plant and surrounds (C02, Dry Chemical ABE)
- Portable powder fire extinguishers in electrical rooms
- Portable C02 fire extinguishers around diesel storage
- Portable fire extinguishers and Fire blankets in all buildings (offices and amenities)
- Hydrants around plant, main control at front gate as per diagram below

Hydrants and Hose Reel Details

- Mains are located at front gate on north eastern corner
- 8 x Hydrants located around factory
- Hose Reels located around plant and on plant – 6 in total
  (Refer to the site map for locations)

10.2 First Aid Facilities

First Aid provisions will be maintained and accessible to personnel, and all necessary training will be organised and communicated through Pre-Start / Toolbox Meetings, Inductions and information placed on Noticeboards.

First aid requirements are assessed upon reviewing applicable legislation and using the First Aid Needs Assessment Form at site setup and during review. First aid services and arrangements shall consider the types of hazards to persons at the workplace, potential activities to be performed, and the number of persons at the workplace and the risk level of identified hazards.

First Aid provisions will be maintained and accessible to personnel, and all necessary training will be organised and communicated through Pre-Start / Toolbox Meetings, Inductions and information placed on Noticeboards.

First Aid kit locations for this site are as per the Evacuation Diagram below.

10.3 Emergency Showers and Eyewash Stations

Safety showers and eye wash facilities shall be inspected, tested and cleaned.

- Safety showers and eye wash facilities shall be inspected, tested and cleaned in accordance with the plant inspection program. (Please refer to the site map on the following page for location)

10.4 Spill Response Equipment

Spill response equipment will be provided commensurate with nature, quantity and risk of substances in each area.

The spill kit locations are as per the Evacuation Diagram below.

10.5 Emergency Signs & Lighting

Emergency signs as per Australian Standards for Workplace facilities

Emergency Lighting

- Illuminated exit lights on all exits of enclosed building
- Flood lights on plant

Emergency Exits

- Evacuation Signs located in all areas showing emergency exits

EVACUATION DIAGRAM

EVACUATION PROCEDURES

- Follow all instructions given by Wardens or Fire Officers.
- Leave immediately by the nearest safe exit.
- Move quickly, do not run.
- If possible, close doors behind you.
- Report to your designated Assembly Area.
- Advise a Warden immediately if you are aware of people trapped in the building.
- Do not leave the Assembly Area until the Chief Warden gives the "All-Clear".
- If any injuries are sustained, notify a Warden.

IN THE EVENT OF FIRE

Remove persons from immediate danger area.

Alert nearby staff and members of the public and call Triple ZERO (000).

Confine fire and smoke. Close windows and doors (if safe). Keep low, under the smoke.

Extinguish and control the fire (if safe to do so).

Site Plan

149 Somersby Falls Road, Somersby

SIGN Ref: AG - YAH - 1

EVACUATION DIAGRAM - NOT TO SCALE

Reinforced Concrete Pipes Australia - Factory Floor

LEGEND

Main Switchboard | Emergency Eye Wash | Carbon Dioxide | Dry Chemical Powder | Fire Blanket | First Aid Point
Hose Reel | Hydrant | Smoking Area | Spill Kit | Exit | Evacuation Path | Assembly Area

Issue Date: 05/2022 Review Date: 05/2027

11 TESTING EMERGENCY RESPONSE PROCEDURES

Emergency evacuation and response drills will be conducted at regular intervals to verify the effectiveness of response arrangements and refresh emergency responders in requirements and their functions.

As a minimum:

- evacuation drills will be conducted Annually.
- response procedures for Pollution scenarios with a high likelihood of occurring, as identified in the PIRMP, will be tested Annually (minimum), and within one month of any pollution incident occurring.
- records of emergency evacuation and response drills will be maintained and stored.
- evacuation and response drills will be assessed by the Supervisor to identify any deficiencies or improvements required and the assessment documented; and
- where deficiencies or improvements are identified, the Supervisor/Manager will generate an action plan and monitor progress to completion.

Testing is to be carried out in such a manner as to ensure that the information included in the plan is accurate and up to date, and that each plan is capable of being implemented in a workable and effective manner.

The two usual methods of testing are undertaking desktop simulations and practical exercises or drills. Testing must cover all components of the plan, including the effectiveness of training.

Drills are conducted then evaluated, sent to the Site Manager for review & records filed of future reference.

A summary of Emergency Drills undertaken is shown in the table below:

Test Date	Version of PIRMP Tested	Incident Type Drilled	Emergency Drill Lead
		First drill to be conducted by end July 2023	

12 EMERGENCY EVENT HAZARD RESPONSE

The following table provides a list of potential foreseeable emergency events and the response/ rescue method and equipment required for each. Refer to the operation's risk register for the risk rating/ level for each event.

Evacuation is always to be considered if fire or explosion potential exists.

Emergency Event	Response/ Rescue Method
Discharge of substance to drains	1. Identify the substance if possible 2. Wear appropriate PPE 3. Follow emergency procedure as per SDS 4. Contain the substance 5. Where discharge has occurred, confirm liquids have been retained within the bio-retention basin or stormwater pit 6. Bund the area with equipment from the spill kit (check site map for location) 7. Block off or barricade area 8. Ensure appropriate fire extinguishers are nearby in case fire breaks out 9. Advise Plant Manager 10. Alert neighbors, EPA and RCPA manager as required, and if material harm has occurred.
Discharge of substance to Sediment/Bio-retention	1. Confirm contamination has been retained within the bio-retention basin 2. Do not allow discharge of contaminants via overflow until sampling results indicate that no material harm to the receiving environment has been confirmed. Contamination of water includes anything that alters the physical, chemical or biological properties of the receiving waters. 3. Contact Plant Manager & Group Environmental Manager and notify that a Pollution Incident has occurred. 4. The Group Environmental Manager will advise what samples are to be collected and directions on how to prepare the samples bottles (on ice/ice bricks in an esky), fill out the Chain of Custody, Turnaround Times (24hr TAT) and organise the samples to be sent/delivered to nearest Laboratory. 5. Where there is a possibility of Blackwater (Sewer) inclusion; The median bacterial content in samples of fresh or marine waters should not exceed: • 150 faecal coliform organisms/100 mL • 35 enterococci organisms/100 mL Pathogenic free-living protozoans should be absent from bodies of fresh water. (It is not necessary to analyse water for these pathogens unless the temperature is greater than 24°C.) Secondary contact; the median bacterial content in fresh and marine waters should not exceed: • 1000 faecal coliform organisms/100 mL; • 230 enterococci organisms/100 mL.
Fire (inside facilities)	1. Assist any person in immediate danger or who is injured (Call ambulance if anybody is injured) 2. If the fire is small attempt to put fire out with fire extinguisher (familiarise yourself with the location of fire extinguishers)

Emergency Event	Response/ Rescue Method
	3. If the fire is too large activate the fire alarm system by pushing the button on the signed alarm points throughout the plant. One at the control room and the other inside the main office entry, 4. If the fire is in a building close all doors as everybody is evacuated to stop the fire from spreading 5. Call the fire brigade. 6. Alert neighbors and Plant Manager as required
Loss of Product / System Failure	1. Shutdown of processes and equipment associated with the spill if safe to do so 2. Wear appropriate PPE 3. Follow emergency procedure as per SDS 4. Activation of any associated sump pumps or shut-off valves to contain and isolate 5. Contact service provider to pump out bund contents 6. Ensure spill kit available for any release from containment 7. Advise Plant Manager 8. Alert neighbors, EPA & Group Environmental Manager as required, and if material harm has occurred. 9.
Emission to atmosphere	1. Identify the substance if possible 2. Notify Plant Manager 3. Follow emergency procedure as per SDS 4. Contain the substance, if possible. 5. Alert neighbors, EPA and SafeWork NSW
Dust Emissions from Site	1. Determine the cause of the dust emissions and if possible, immediately address the cause (i.e. turn off plant/equipment). 2. Wear correct PPE for task 3. Implement most suitable management measure for task. Management measures for this may include: - Sweep roadways and hardstand - Turn on sprinkler/water systems to wet down source. Ensure there is no excess runoff into storm water system. - Cover stockpiles 4. Turn off plant and inspect plant for potential cause of emission 5. Clean PPE and wash hands thoroughly following task. 6. Advise Plant Manager 7. Alert neighbors, EPA and Group Environmental Manager as required, and if material harm has occurred. 8. Investigate Incident

A ‘minor environmental incident’ is where there has been no potential or actual material harm to the environment. Example, small contained hydrocarbon spill that does not leave a site boundary and cleaned up without residual on-site environmental harm.
Minor environmental incidents will still be handled under the process outlined in Section 10.3.3 except there will be no requirement for Authority notification. All incidents will be recorded in RCPA’s HSE system. A minor incident does not constitute a non-compliance with the consent.

Under the provisions of the POEO Act, there is a duty to notify any incident that has caused or threatens to cause material harm to the environment. 'Material harm to the environment' is defined in section 147. Material harm includes on-site harm, as well as harm to the environment beyond the premises where the pollution incident occurred.

Notification is 'immediately' (promptly and without delay) if there is an incident that causes or is likely to cause material harm to the environment.

Under section 150 of the amended POEO Act, the information about a pollution incident that must be notified is:

- the time, date, nature, duration and location of the incident
- the location of the place where pollution is occurring or is likely to occur
- the nature, the estimated quantity or volume and the concentration of any pollutants involved, if known
- the circumstances in which the incident occurred, including the cause of the incident, if known
- the action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, if known
- other information prescribed by the regulations

Notification is required immediately after a pollution incident becomes known. Any information required that is not known at the time the incident is notified must be provided when it becomes known.

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12.1 Community Notification and Communication

Communicating with surrounding stakeholders and the local community is an important element in managing the response to any pollution incident. RCPA will provide accurate communications information to relevant stakeholders and the community regarding operational activities and environmental matters, including:

- Prior to commencement of operations: a program of commencement and details of mitigation measures to minimise community impacts.
- During and/or following Significant Environmental incidents where applicable, including any associated community impacts and mitigation measures.

13 EMERGENCY CONTACTS

Reinforced Concrete Pipes Australia (RCPA) Somersby Plant - Emergency Contacts			
Administration (contact number and hours): 1800 88 72 72 between 7am and 5pm			
Somersby contacts	Contact No.	After Hours No.	Details
Operations Manager – Nick Fraser	0499-036-087	0499-036-087	
Production Manager – Dane Stoddart	0409-624-243	0409-624-243	
HSE / Fire Response Alex Giles	0409-713-235		All Incidents and Emergencies
First Aid Officer – Alex Giles	0409-713-235		First Aid
Reinforced Concrete Pipes Australia - External Emergency Contacts			
Ambulance, Fire, Police	000 Mobile: 112		Life Threatening Emergencies
Fire Brigade - Kariong 1 Central Coast Highway NSW 2250	02 4337 9741	02 4337 9741	Fire and Chemical spills
Police – Gosford 1/9-11 Mann St Gosford NSW 2250	02 4323 5599	02 4323 5599	Security matters
Medical			
Public Hospital – Gosford Holden St, Gosford Medical Centre – Absolute Medical Services Shop 21, 1 Parsons Rd, Lisarow	02 4320 2111 02 4328 2500	02 4320 2111	Serious Injury or after hours Injury
Poisons Information Centre	13 11 26	13 11 26	Poisons Information

Other Authorities as required by legislation Reportable following instruction with NSW Manager / Group Environmental Manager / Plant Manager or delegate			
State Emergency Services	13 25 00	13 25 00	Notifiable incidents immediately
Local Council – Central Coast Council	02 4306 7900	02 4306 7900	Notifiable incidents immediately
Department of Public Health (Gosford)	02 4320 9730	02 4320 2111	Notifiable incidents immediately
Workplace Safety Regulatory Body (eg WorkSafe)	13 10 50	13 10 50	Notifiable incidents immediately
Environment Protection Authority	131 555	131 555	Notifiable incidents immediately
Supply Authorities:			Supply Issues
Electricity - Origin	13 24 61	13 24 61	Electricity
Gas - Jemena	131 009	131 009	Gas
Water – Sydney Water	13 20 92	13 20 92	Water

13.1 EMERGENCY EVENT PUBLIC INFORMATION SOURCES

Organisation	Medium	Contact
NSW Ministry for Police and Emergency Services	Website	www.nsw.gov.au
NSW State Emergency Service (SES)	Website	www.ses.nsw.gov.au
NSW Rural Fire Service	Website	www.rfs.nsw.gov.au
NSW Police Force	Website	www.police.nsw.gov.au
NSW Ambulance	Website	www.ambulance.nsw.gov.au
Bureau of Meteorology	Website	www.bom.gov.au

APPENDIX A ENVIRONMENTAL IMPACT AND CONSEQUENCE CLASSIFICATION TABLE

Environmental Incidents shall be classified initially in accordance with the "Risk Consequence" descriptors for "Environmental and Community Impact" (see Column "B"). The examples/ impacts descriptors included in columns "C" to "I" are provided to assist in determining the appropriate environmental incident classification/ category.

Incident Classification	Risk Consequence	Impact Descriptors						
Incident Severity Rating Level (A)	Environmental and Community Impact[i] (B)	Regulatory Licence/ Approvals (C)	Spills/ Chemical and Hydrocarbon Storage (D)	Water (E)	Waste Disposal (F)	Flora/ Fauna/ Biosecurity (G)	Air, Odour, Dust, Fume Noise and Vibration (G)	Heritage[ii]/ Archaeological (I)
6	Catastrophic widespread impact on the environment resulting in irreversible damage; and/ or Complete loss of trust by affected community leading to long term social unrest and outrage.	Prolonged loss of multiple Regulatory license/approval for business-critical infrastructure.	Spills causing "material harm"[iii] and widespread environmental impact that cannot be contained within a waterway (e.g. dam, creek, groundwater source, wetland, or drainage system) or other environmentally sensitive areas. Requires 3rd party intervention and prolonged monitoring, remediation and on-going management attention.	Unauthorised works to sensitive waterway or groundwater source causing widespread irreversible damage. Prolonged non-compliant contamination[iv] of waterway, groundwater or catchment area (>5 days), causing widespread environmental impact.	Incorrect disposal (dumping) of regulated waste over a sustained period. Requires 3rd party intervention and on-going management attention.	Death of numerous endangered species. Unauthorised widespread clearing or damage to endangered vegetation (communities).	Generation of air, odour, dust, noise or vibration resulting in widespread damage, e.g.: • vibration that causes extensive structural damage • uncontrolled release of hazardous emissions (e.g. asbestos dust, or toxic gas). Prolonged and recurring post blast fume events incurring ongoing complaints and action associated with prosecution and potential termination of contract.	Irreparable damage to highly valued sites, structures, or objects of heritage/ archaeological significance.

Incident Classification	Risk Consequence	Impact Descriptors						
Severity Rating Level (A)	Environmental and Community Impact[i] (B)	Regulatory Licence/ Approvals (C)	Spills/ Chemical and Hydrocarbon Storage (D)	Water (E)	Waste Disposal (F)	Flora/ Fauna/ Biosecurity (G)	Air, Odour, Dust, Fume Noise and Vibration (G)	Heritage[ii]/ Archaeological (I)
5	Significant impact on the environment; and/or Prolonged community outrage.	Prolonged loss of Regulatory license/approval for business-critical infrastructure.	Spills that cause "material harm"[3] and the extent of impact cannot be restricted within a waterway (e.g. dam, creek, groundwater source, wetland, or drainage system) or other environmentally sensitive areas. Requires 3rd party intervention and on-going management attention.	Unauthorised works to sensitive waterway or groundwater source resulting in "material harm"[3]. Sustained and non-compliant discharge that delivers large volumes in a short period; or occurs over several days. Persistent discharge of pollutant/ contaminated water or sediment >3 days.	Incorrect disposal (dumping) of regulated waste. Any illegal or unpermitted waste dumping outside the mining lease. Requires 3rd party intervention and on-going management attention.	Death of one endangered species or significant number of species of conservation significance. Unauthorised clearing of endangered vegetation (communities). Introduction of a declared weed, pest or plant disease that threatens ecosystems and requires longer term control to eradicate >5 years with continual management.	Generation of air, odour, dust, noise or vibration emissions causing prolonged periods (>5 days) of inconvenience or disruption to the environment. Consecutive breaches of licences, permits or approval conditions. Recurring post blast fume events that breach exclusion zone, incurs prosecution and potential suspension of contract.	Disturbance causing significant damage to a highly valued site(s), structures, or objects of heritage/ archaeological significance.

4	Significant impact or material harm[3] on the environment; or A notifiable incident[v]; or Long term community irritation leading to disruptive actions and requiring continual management	Short term loss of Regulatory license/approval for business-critical infrastructure.	Spills that cause "material harm"[3] and enter sensitive land or sensitive waterways (e.g. dam, creek, groundwater, wetland, or drainage system). Spill can be contained, cleaned-up and	Unauthorised works to waterway, groundwater source or associated engineered structure resulting in "material harm"[3]. Dam or sediment control failure leading to	Incorrect disposal (dumping) of non-regulated waste. Requires 3rd party intervention and on-going management attention. Any illegal or unpermitted waste dumping inside the mining lease, including the	Isolated death of multiple individuals froma species (flora and fauna) of conservation significance. Unauthorised clearing of land or vegetation areas of conservation significance. Introduction of	Any activity (blast, construction or maintenance) that is in breach of air, odour, dust, noise or vibration emissions that damages property or infrastructure. Consecutive non-compliance (internal) or breach of licence,	Disturbance causing significant harm to a known heritage or archaeological site of moderate to high significance or land subject to native title. Situation that is considered of concern by

Incident Classification	Risk Consequence	Impact Descriptors						
Severity Rating Level (A)	Environmental and Community Impact[i] (B)	Regulatory Licence/ Approvals (C)	Spills/ Chemical and Hydrocarbon Storage (D)	Water (E)	Waste Disposal (F)	Flora/ Fauna/ Biosecurity (G)	Air, Odour, Dust, Fume Noise and Vibration (G)	Heritage[ii]/ Archaeological (I)
	attention.		remediated.	discharge of sediment laden water to a waterway (e.g. dam, creek, groundwater, drainage system) or other environmentally sensitive areas. Sustained and non-compliant discharge that delivers large volumes in a short period or occurs over several days.	disposal of waste in dumps or backfill.	declared weed, pest or plant disease that can be eradicated within 1-5 years, with continual management.	permit or approval conditions requiring intervention from customer or regulator. Post blast fume event that breaches exclusion zone or regulator issues fine.	customer or traditional owners or requires intervention from the regulator.

3	Moderate impact or material harm[3] on the environment; or A notifiable incident[6]; or Short term community unrest and dissention.	Licence/ Approval breach notifiable to regulator. Works commence without an environmental licence/ approval. Works suspended due to non-conformances of Licence/ Approval	Spills that cause "material harm"[3] to non-sensitive land or non-sensitive waterways.	Unauthorised works to a waterway, groundwater source or associated engineered structure. Brief/ limited volume of water discharge that was monitored and found to be non-compliant, or unmonitored and presumed to be non-compliant (exceeds permit or water quality limits) resulting in	Regulated or non- regulated waste being taken to a waste facility not licensed to accept that type of waste (e.g. dangerous goods or hazardous materials disposed of at general landfill). Regulated waste being transported by unlicensed company or individual.	Deaths of multiple individuals of a common species. Isolated death of a single individual of one species (flora or fauna) of conservation significance. Unauthorised clearing of land or vegetation of low conservation significance. Introduction of a declared weed, pest or plant disease that can be eradicated within 12 months.	Any complaints where air, odour, dust, noise and vibration emissions cause sustained periods (repetitive or >1 day) of inconvenience and are found to be non-compliant. Any activity (blast, construction or maintenance) that is in breach of air, odour, dust, noise and vibration emissions limits. Failure to notify local community	Disturbance causing moderate harm to a known heritage or archaeological site of moderate significance or land subject to native title that may require notification to the regulator.

Incident Classification	Risk Consequence	Impact Descriptors						
Severity Rating Level (A)	Environmental and Community Impact[i] (B)	Regulatory Licence/ Approvals (C)	Spills/ Chemical and Hydrocarbon Storage (D)	Water (E)	Waste Disposal (F)	Flora/ Fauna/ Biosecurity (G)	Air, Odour, Dust, Fume Noise and Vibration (G)	Heritage[ii]/ Archaeological (I)
				notification to the regulator.			of activities as required by licence, permit or approval. Post blast fume event that does not breach exclusion zone but has multiple community complaints.	
2	Minor impact on the environment; or Community complaint founded requiring intervention and management attention.	Administrative Breach to license or approval notifiable to the regulator. E.g. didn't submit an annual return on time. Works commence without an environmental license or approval where one is required.	Any spill outside the secondary containment or operational area or a spill that can be cleaned up and managed appropriately. Any spill that does not cause "material harm"[3].	Any unplanned water discharge that resulted in a minor exceedance that does not trigger notification to the regulator. Water delineation structures (e.g. bunds or other secondary containment) failed to prevent contamination of waterway (e.g. dam, creek, groundwater, wetland, or drainage system) or other environmentally sensitive areas.	Non-regulated waste being taken to a facility not licensed to accept that type of waste. Littering from business related activities blown or disposed of away from work site or associated with transport and storage of waste.	Deaths of multiple individuals from a common species. Unnecessary or unauthorised disturbance of vegetation or land. Introduction of a non-declared weed, pest or plant disease that can be eradicated within 3 months.	Generation of air, odour, dust, noise and vibration emissions causing temporary period (<1 day) of inconvenience. Post blast fume event which does not breach blast exclusion zone and incurs single, one-off, community complaint. Import/ export or use of a regulated substance (e.g. ozone depleting) without authorisation or outside license/ approval conditions.	Disturbance causing minor harm to a known heritage or archaeological site of low significance that does not trigger notification to the regulator.

Incident Classification	Risk Consequence	Impact Descriptors						
Severity Rating Level (A)	Environmental and Community Impact[i] (B)	Regulatory License/ Approvals (C)	Spills/ Chemical and Hydrocarbon Storage (D)	Water (E)	Waste Disposal (F)	Flora/ Fauna/ Biosecurity (G)	Air, Odour, Dust, Fume Noise and Vibration (G)	Heritage[ii]/ Archaeological (I)
1	Negligible impact on the environment; or No or unfounded community complaint.	Administrative Breach to license that can be rectified immediately. Non-conformance to a license outside of RCPA control– e.g. rainfall exceeds stormwater treatment design criteria	Minor spills contained within immediate area. Spills contained within the secondary containment (e.g. bund) or operational area (e.g. mine site).	A water discharge with negligible harm to the waterway.	Waste going into the incorrect receptacle. Recycling material being disposed of incorrectly when recycling facilities are available.	One off or isolated interaction or death of a single common species (e.g. grey kangaroo or established tree or shrub struck by vehicle).	One-off or isolated air, odour, dust, noise and vibration emission. Post blast fume event does not breach exclusion zone, no associated community complaint.	Unknown heritage or archaeological object found unexpectedly, and disturbance occurred, causing negligible harm.

[i] One or more of the criteria in the Impact Descriptors columns triggers the classification/ level to be declared for an incident. The incident classification will be taken as the highest number of all the impact descriptors.

[ii] "Heritage" includes European and non-European, known or unknown items of significance such as buildings, landscapes, monuments, moveable objects and non-European heritage such as items of significance to local community (e.g. burial sites, shell middens, scar trees, or engravings).

[iii] Material Harm – for classifying environmental incidents for RCPA, harm to the environment is "material" if:

- it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial; or
- it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding $10,000; and
- 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, including the costs of consultants and associated reports. Consideration is to be given to environmental harm caused beyond the immediate vicinity of where the pollution incident occurred.

[iv] Contamination of water includes anything that alters the physical, chemical or biological properties of the receiving waters.

[v] Notifiable incident – any incident classified at ≥ level 3, where there is a duty to notify the relevant authority(s) of a pollution incident, where "material harm" to the environment is caused or threatened. The definition of "material harm" differs slightly between the regulatory jurisdictions so it is important to check the relevant legislation.

APPENDIX B OPERATIONAL SOIL AND WATER MANAGEMENT PLAN

APPENDIX C SAFETY DATA SHEETS

APPENDIX D WATER QUALITY MANAGEMENT PROCEDURE

APPENDIX E DANGEROUS GOODS STORAGE & COMPATIBILITY MATRIX