ABN: 66 008 709 608

Pollution Incident Response Management Plan (PIRMP)

Rosehill Sustainable Road Resource Centre

11 Devon Street Rosehill NSW 2142

Revision Status

Issue	Version Date	Summary of Section Changes	Reviewed By	Approved By
1.0	07/04/2022	New Operational Site	Dale Thomas	Jason Hearn
1.1	05/08/2022	Post Incident Review	Colin Biggs	Paul Sherry
1.2	09/04/2023	Review	Colin Biggs	Paul Sheery
1.3	05/04/2024	Yearly Review Post Drill	Colin Biggs	Paul Sherry
1.4	06/05/2024	Update to meet the Environmental Legislation Amendment (Hazardous Chemicals) Act 2024 on 25 March 2024	Colin Biggs	Paul Sheery
1.5	05/06/2024	Update to meet the NSW EPA adoption of the Fire and Rescue Guideline for Bulk Storage of Rubber Tyres and Fire Safety in Waste Facilities	Colin Biggs	Paul Sherry
1.6	20/01/2025	Yearly TDS update and drill review	Colin Biggs	Paul Sheery

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1 PURPOSE AND SCOPE

The purpose of this plan is to ensure that systems are in place at the site to minimise the potential impacts associated with pollution incidents events. In order the streamline the processes onsite, the term "*pollution incident"* is considered an emergency event.

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:

- Asphalt Production
- Material Repurposing (Reconomy)
- Recycled Asphalt Repurposing (RAP)
- Quality Testing (Laboratory)

As an Environmental Protection Licence has been granted to the site, a 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, the following document had been developed for implementation at the Licenced site for the activities carried out on the site.

2 SITE EMERGENCY PROFILE

2.1 Site Details

Site Name:	Sustainable Road Resource Centre		
Address:	11 Devon Street, Rosehill NSW 2142		
Phone:	02 9897 4338		
Buildings and Structures:	▪ Security Hut ▪ Single Floor Production Office and Laboratory Building ▪ Dangerous goods container ▪ Laboratory Storage container ▪ Drivers Lounge ▪ Diesel Tank ▪ Rotary Drier / Mixer ▪ Cold Feed Bins and Conveyors ▪ Fly Ash/Lime/Silos ▪ Asphalt Plant Electrical Control Room ▪ Bitumen Tank Storage ▪ Vertical Bunkers Structure ▪ Toner Liquid Additive Store Shed ▪ Emulsion Tank Storage (not in use)		
Buildings and Structures (continued):	▪ IBC Storage Shed ▪ Detritus Recycling (Reconomy) Structure ▪ Reconomy Amenities ▪ RAP Structure & Asphalt Laydown Annex		
Shift Details & Hours of Occupancy	**Shift Name**	**Hours**	**No. of People**
	Day	6am – 5.00pm (Mon to Sat)	Approx. 25-30
	Night	7.00pm – 3.00am (Sun to Fri)	Approx. up to 13 (dependent on client's production requirements)
Security Service Provider:	NCI Services 0418 446 613		
Fire and Emergency Equipment Contact:	Wormald 133166		

2.1 Site Location

The Downer site is within an industrial area of Rosehill and Camelia. The site has an Environmental Protection License (EPL Licence No. 21611) and is listed for the following scheduled activities.

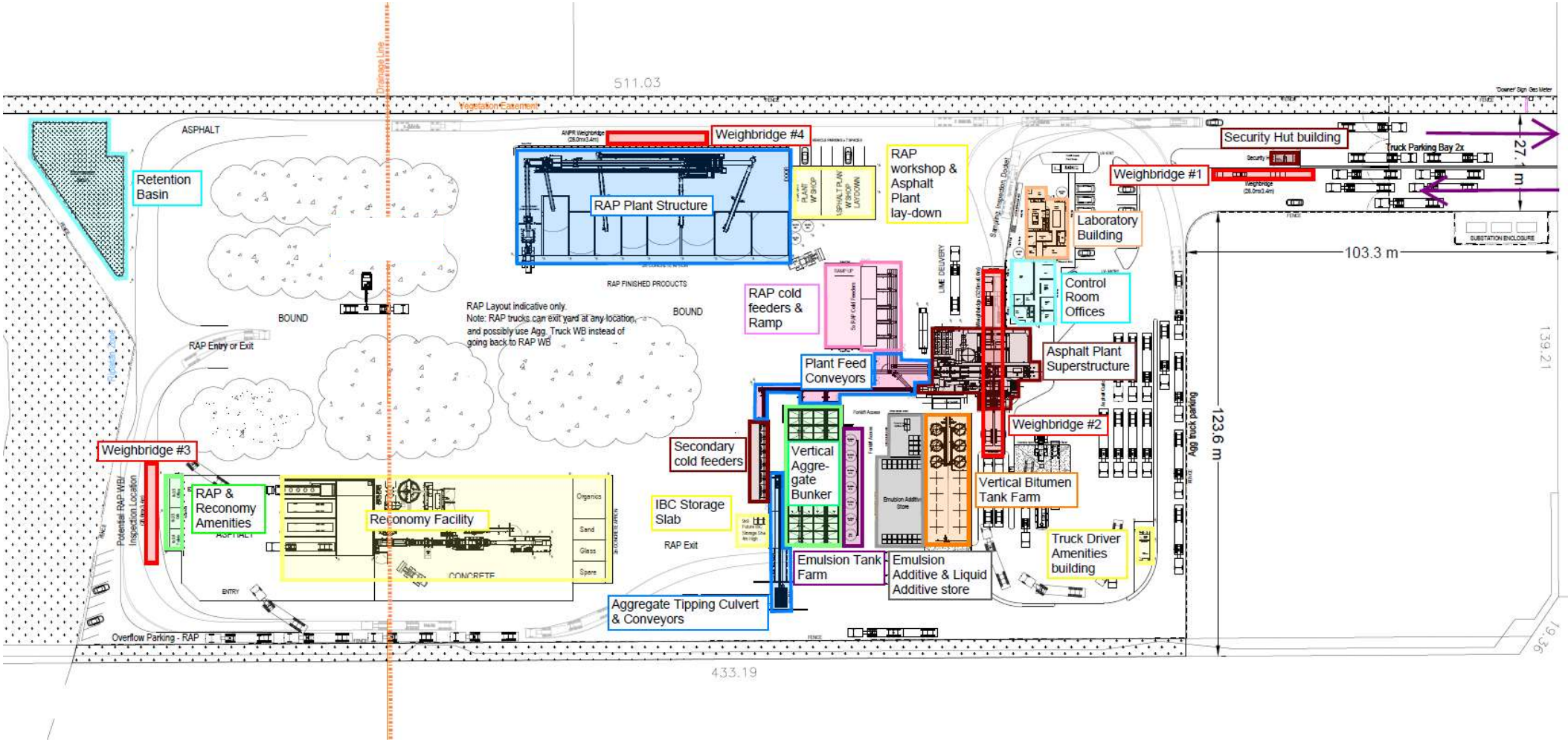
Scheduled Activity	Fee Based Activity	Scale
Chemical production	Petrochemical production	> 10000 - 30000 T annual production capacity
Resource recovery	Recovery of general waste	Any general waste recovered
Waste storage	Waste storage - other types of waste	Any other types of waste stored
Waste storage	Waste storage - waste tyres	> tyres stored
Ancillary Activity		
Asphalt Production		

While the site is listed for the activity of Chemical Production, this activity is not conducted on the Devon Street Site, as a result no products are stored in the Emulsion Tankl Farm or Emulsion Additive and Liquid additive Store show on 2.2 Site Layout. Also refer to **Section 7** Inventory of Pollutants.

Associated Recourse Recovery, and Waste Storage include.

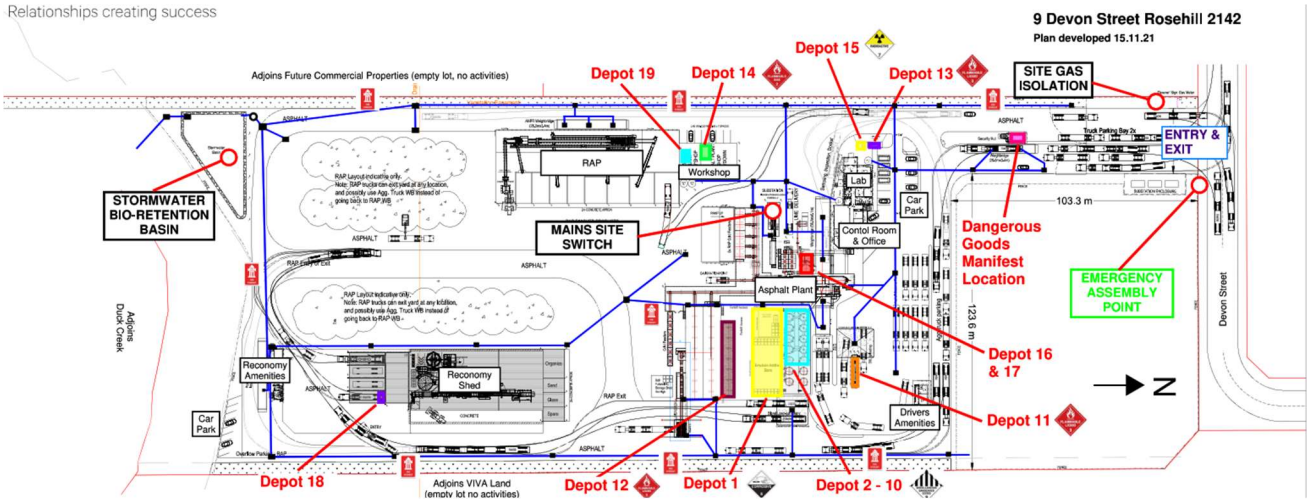
- Grit, Sediment, Litter and Gross Pollutants from Stormwater Devices
- Street Sweepings from classified roads
- Coal Ash
- Toner
- Asphalt waste (including asphalt)
- Waste tyres (crumbed rubber)
- Steel Furnace Slag, and
- Glass

2.2 Site Layout



2.3 Stormwater System Layout

The following figure shows the Stormwater System Layout in relation to Storage Depots, aslo refer to Section 7 for Inventory of Polutants for Depot Manifests.



2.4 Details of Neighbouring Facilities

Neighbouring Facilities	Contact Person & Phone number	Mechanism for Raising the Alarm and Ongoing Communication	Circumstance for Raising the Alarm
Rosehill Gardens	Mostyn Copper 1300 729 668	Phone	Emergency, Smoke, Fire, Bomb & Armed Threat, Spill
Rosehill Distribution Centre	Peter Small (Charter Hall) 02 8651 9481	Phone	Emergency, Smoke, Fire, Bomb & Armed Threat, Spill
James Hardie	Grant Overton 13 11 03	Phone	Emergency, Smoke, Fire, Bomb & Armed Threat, Spill
VIVA Energy	Adam Speers 0400 214 857	Phone	Emergency, Smoke, Fire, Bomb & Armed Threat, Spill
Goodman	Brendon Quinn 02 9230 7400	Phone	Emergency, Smoke, Fire, Bomb & Armed Threat, Spill

3 COMMUNICATION OF THIS PLAN

This PIRMP shall be communicated to Downer personnel and Visitors through site induction, at Toolbox and Pre-Start meetings and will be displayed on site and contained within the Site Zero Harm Management Plan (ZHMP). 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 is to 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 ***Downer Group Website***.

4 LEGISLATIVE REQUIREMENTS

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

In summary, this provision requires the following:

- All 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:

(1) For the purposes of this Part--

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

- 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 Pollution incidents causing or threatening material harm to be notified:

(1) Kinds of incidents to be notified This Part applies where a pollution incident occurs in the course of an activity so that material harm to the environment is caused or threatened.

(2) Duty of person carrying on activity to notify A person carrying on the activity must, immediately after the person becomes aware of the incident, notify each relevant authority of the incident and all relevant information about it.

(3) Duty of employee engaged in carrying on activity to notify A person engaged as an employee in carrying on an activity must, immediately after the person becomes aware of the incident, notify the employer of the incident and all relevant information about it. If the employer cannot be contacted, the person is required to notify each relevant authority.

(3A) Duty of employer to notify Without limiting subsection (2), an employer who is notified of an incident under subsection (3) or who otherwise becomes aware of a pollution incident which is related to an activity of the employer, must, immediately after being notified or otherwise becoming aware of the incident, notify each relevant authority of the incident and all relevant information about it.

(4) Duty of occupier of premises to notify the occupier of the premises on which the incident occurs must, immediately after the occupier becomes aware of the incident, notify each relevant authority of the incident and all relevant information about it.

(5) Duty on employer and occupier to ensure notification An employer or an occupier of premises must take all reasonable steps to ensure that, if a pollution incident occurs in carrying on the activity of the employer or occurs on the premises, as the case may be, the persons engaged by the employer or occupier will, immediately, notify the employer or occupier of the incident and all relevant information about it.

(6) Extension of duty to agents and principals This section extends to a person engaged in carrying on an activity as an agent for another. In that case, a reference in this section to an employee extends to such an agent and a reference to an employer extends to the principal.

5.1.1.2 Manner and form of notification:

Notification responsibilities for incidents that have caused or threaten to cause material harm to the environment are detailed in Section 149 of the POEO Act. In summary, these are broadly categorised as:

(1) If the regulations prescribe the manner or form of notifying pollution incidents under section 148, the notification is to conform to the requirements of the regulations.

(2) Without limiting subsection (1), the regulations--

(a) may require that verbal notification be followed by written notification, and

(b) may provide that notification to a designated person or authority is taken to be notification to the relevant person or authority under section 148.

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 (Section 153B) requirements the owners or occupiers of a premises in the vicinity of the premises to which the environment protection licence relates to, must notify a pollution incident and the local authority for the area (Parramatta Council) in which the premises to which the environment protection licence is located. In addition, the owners or occupiers of a premises to which the environment protection licence relates to, must notify;

- any area affected, or potentially affected, by the pollution, and
- any persons or authorities required to be notified by Part 5.7,

Furthermore, the POEO Act, ‘relevant authority’ means any of the following:

- appropriate regulatory authority (ARA) (i.e. Parramatta Council/Sydney Water).
- Environment Protection Authority (EPA) if they are not the ARA
- Ministry of Health
- SafeWork NSW (formerly WorkCover)
- local authority, if they are not the ARA
- Fire and Rescue NSW

Section 13 of the PIRMP lists the contact details for these authorities relevant to this site.

Notification responsibilities for incidents that have caused or threaten to cause material harm to the environment are detailed in Section 150 of the POEO Act. The Relevant information to be given is as follows:

(1) The relevant information about a pollution incident required under section 148 consists of the following--

(a) the time, date, nature, duration and location of the incident,

(b) the location of the place where pollution is occurring or is likely to occur,

(c) the nature, the estimated quantity or volume and the concentration of any pollutants involved, if known,

(d) the circumstances in which the incident occurred (including the cause of the incident, if known),

(e) the action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, if known,

(f) other information prescribed by the regulations.

(2) The information required by this section is the information known to the person notifying the incident when the notification is required to be given.

(3) If the information required to be included in a notice of a pollution incident by subsection (1) (c), (d) or (e) is not known to that person when the initial notification is made but becomes known afterwards, that information must be notified in accordance with section 148 immediately after it becomes known.

Notification responsibilities for incidents that have caused or threaten to cause material harm to the environment are detailed in Section 151 of the POEO Act. Incidents not required to be reported.

(1) A person is not required to notify a pollution incident under section 148 if the person is aware that the incident has already come to the notice of each person or authority required to be notified.

(2) A person is not required to notify a pollution incident under section 148 if the incident is an ordinary result of action required to be taken to comply with an environment protection licence, an environment protection notice or other requirement of or made under this Act.

6 DOWNER INCIDENT MANAGEMENT, REPORTING, & INVESTIGATION

6.1 Incident Reporting & Investigation

All Downer workers and visitors are required to report all accidents, incidents, and dangerous occurrences involving personal injury or plant and equipment damage to their immediate Supervisor (or escort for visitors) directly following the occurrence. Refer to ***DG-ZH-PR006 Incident Management Procedure*** for further information.

The Production Manager will be available 24 hours a day, seven days a week and have the authority to stop or direct works.

If the event is part of a larger emergency situation also refer to the Sites Emergency Management Plan ***EMP 11.07.2024.pdf*** for details of responsibilities, emergency response activities and recovery.

Further notifications follow the reporting timeframes in the following table (from ***DG-ZH-PR006 Incident Management Procedure***).

Site Specific Requirements

- The Emergency Management Plan for the facility is DG-ZH-TP015 ***NSWPR-EM-PN105 EMP 2023.pdf***
- The Safety Management Plan for the facility NSWPR-ZH-PN104 ***NSWPR-ZH-PN104 Safety Management Plan-Review 2023.pdf***

6.2 Incident Investigation

All incidents (irrespective of category) are subject to commencing an investigation within 48 hours of the incident occurring, as per ***DG-ZH-PR006 Incident Management Procedure***..

All investigations commence as soon as possible after the incident has occurred. All incident investigations focus on identifying the root cause(s) of the incident so that appropriate remedial and preventative control measures can be identified and implemented.

Incidents may also be investigated at the request of Downer's legal advisors for purposes associated with the provision of legal advice.

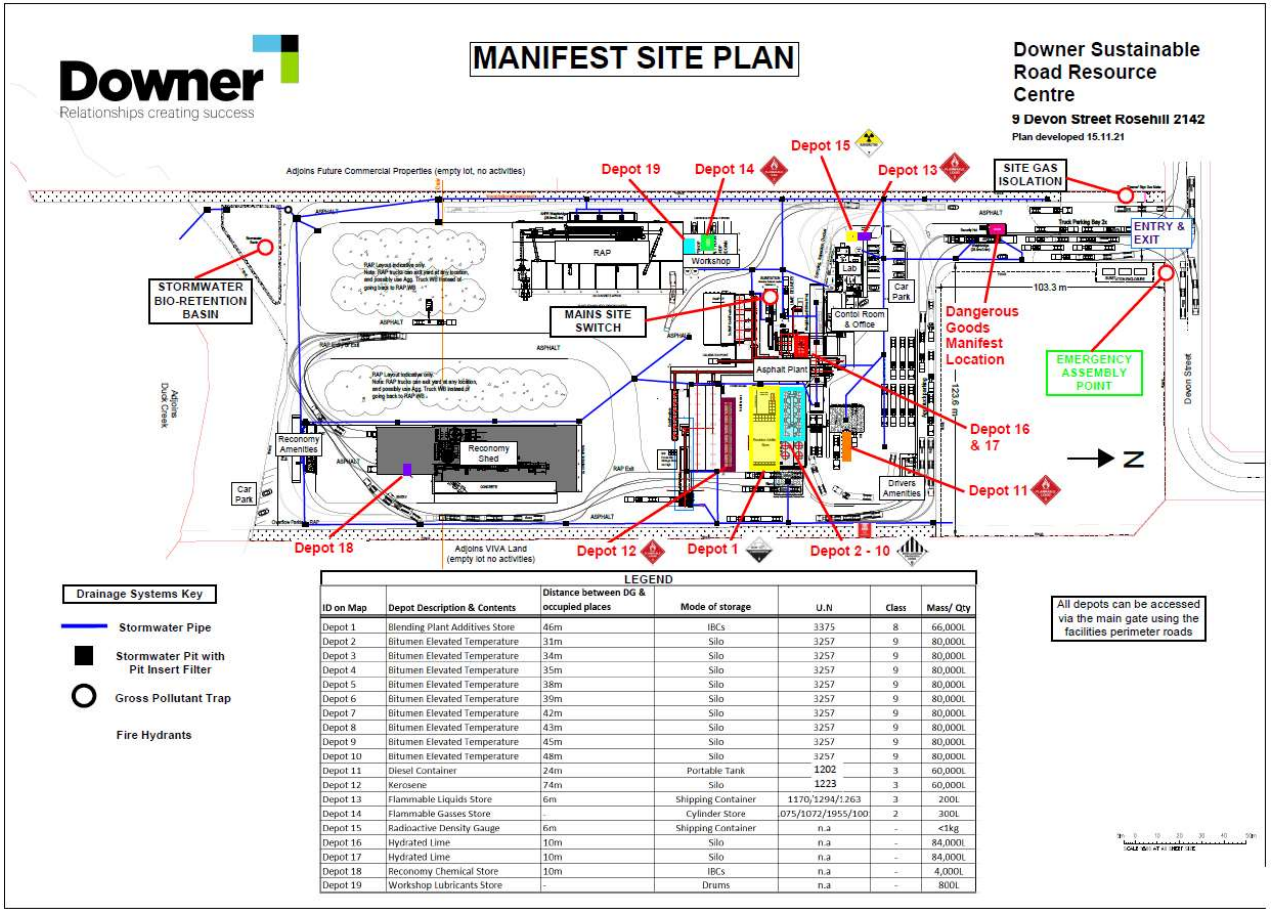
6.3 Incident Investigation Reports Review

All incidents (irrespective of category) are subject to an investigation review as per ***DG-ZH-PR006 Incident Management Procedure***.

Upon completion of the investigation, the findings and recommendations are distributed to the relevant work crews and personnel for discussion at a toolbox meeting.

All incidents and the results of the subsequent investigation are reviewed at the Operations management team meetings.

7 INVENTORY OF POLLUTANTS



LEGEND

ID on Map	Depot Description & Contents	Distance between DG & occupied places	Mode of storage	U.N	Class	Mass/ Qty
Depot 1	Blending Plant Additives Store	46m	IBCs	3375	8	66,000L
Depot 2	Bitumen Elevated Temperature	31m	Silo	3257	9	80,000L
Depot 3	Bitumen Elevated Temperature	34m	Silo	3257	9	80,000L
Depot 4	Bitumen Elevated Temperature	35m	Silo	3257	9	80,000L
Depot 5	Bitumen Elevated Temperature	38m	Silo	3257	9	80,000L
Depot 6	Bitumen Elevated Temperature	39m	Silo	3257	9	80,000L
Depot 7	Bitumen Elevated Temperature	42m	Silo	3257	9	80,000L
Depot 8	Bitumen Elevated Temperature	43m	Silo	3257	9	80,000L
Depot 9	Bitumen Elevated Temperature	45m	Silo	3257	9	80,000L
Depot 10	Bitumen Elevated Temperature	48m	Silo	3257	9	80,000L
Depot 11	Diesel Container	24m	Portable Tank	1202	3	60,000L
Depot 12	Kerosene	74m	Silo	1223	3	60,000L
Depot 13	Flammable Liquids Store	6m	Shipping Container	1170/1294/1263	3	200L
Depot 14	Flammable Gasses Store	-	Cylinder Store	075/1072/1955/100	2	300L
Depot 15	Radioactive Density Gauge	6m	Shipping Container	n.a	-	<1kg
Depot 16	Hydrated Lime	10m	Silo	n.a	-	84,000L
Depot 17	Hydrated Lime	10m	Silo	n.a	-	84,000L
Depot 18	Reconomy Chemical Store	10m	IBCs	n.a	-	4,000L
Depot 19	Workshop Lubricants Store	-	Drums	n.a	-	800L

Additional information on the products, volumes and storage can be found in the Hazardous Material Screening Thresholds for Storage and Transportation Screening Thresholds located in **Annex A.**

8 HUMAN HEALTH CONSIDERATIONS

8.1 Hazardous Substances & Other Substances/ Materials

All hazardous substances in use on the Site are managed in accordance with Downers processes and procedures for hazardous chemicals and dangerous goods, which considers the following:

- Corrosive and hazardous materials are stored and handled in accordance with the standard and any local requirements.
- Fuel, oils, and substances in containers of 200 litres or more are stored in a bunded area with a capacity of at least 110% of the largest container/ tank.
- All fuel, oils, and substances are clearly labelled.
- Spill clean-up kits, including absorbent materials, are kept at each storage facility.
- Surface mobile equipment carries a 25-litre spill kit as an immediate environmental response to an oil leak (e.g. blown hydraulic oil hose).

The SDS Register of all chemicals, hazardous substances, and dangerous goods, including the related SDSs, and controls for high-risk substances are maintained throughout the operation of the facility. The SDS Register is filed in accordance with the Document Control Plan, and a controlled hard copy stored in the site office.

Site Specific Requirements

- The hazardous chemicals and dangerous goods protocols and SDS'S are available in the Dangerous Goods Manifest at front of Weighbridge.
- The Environmental Management Plan for the site is ***NSWPR-EN-PN111 Rosehill OEMP 2025.pdf***

8.2 Airborne Chemical Hazards

Exposure to any airborne fibres, dust or chemical hazards is considered when undertaking all activities. Refer to ***DG-ZH-PR081 Occupational Health and Hygiene Management Procedure*** or ***DG-ZH-ST086 Asbestos Management Standard*** for further information.

The sites operational team implements a program for the management of exposure to airborne chemical hazards which includes, but is not limited to:

- respirable dust
- respirable fibres
- fumes; and
- gases and vapours.

Management of identified risks must consider:

- exposure standards and workplace and/ or health monitoring where applicable
- access to the required expertise to read and understand test results, and advise on risk mitigation measures; and
- review of controls for the purposes of assessing their effectiveness.

Refer the sites Environmental Management Plan for detailed air quality management strategies.

Site Specific Requirements

- The Environmental Management Plan for the site is ***NSWPR-EN-PN111 Rosehill OEMP 2025.pdf***

8.3 Office Safety

As per national office health and safety guidelines a risk management approach to office health and safety is adopted and implemented prevent illness and injuries (including musculoskeletal conditions). All offices comply must ensure the office work environment is maintained in a clean and safe condition.

Chemicals and/ or substances required for office use are managed in accordance with the Sites processes and procedures for hazardous chemicals and dangerous goods.

8.4 Fire Safety

NSW EPA released the Fire safety in waste facilities in January 2020. The fire safety guideline outlines standard approaches for fire risk management, fire safety systems, storage, stockpiles and planning at waste facilities. It can be found on the Fire and Rescue NSW website, ***www.fire.nsw.gov.au***.

The guideline applies to any premises (existing or proposed) used for the storage, treatment, processing, sorting or resource recovery of combustible waste material. This includes unlicensed sites and those with an environment protection licence from the EPA.

Reconomy processes combustible waste material. Combustible waste is any solid waste material that can readily ignite and burn under normal conditions.

This includes:

• wood and wood-based products

• paper and cardboard • plastic and textiles

• rubber, including shredded or crumbed tyres

• waste-derived fuels

• metal with combustible contaminants

• any other waste material that may pose a notable fire risk.

Up to 10 tonnes of Crumbed Rubber is stored on site within Depot 19.

Dry chemical powder AB(E) fire extinguishers are used throughout the site. Other types of fire extinguishers may be used where fit for purpose, e.g. a foam extinguisher at fuel cells.

All fire protection, including the installation, maintenance, and use of fire protection devices, is in accordance with *AS/NZS 1841.1:2007 Portable Fire Extinguishers – General Requirements*.

Inductions include basic training and instruction on the safe use of portable fire extinguishers.

Fire extinguishers are checked, retested, and tagged every six months in accordance with *AS 1851-2012 Routine Service of Fire Protection Systems and Equipment* and as defined in section *11.1 Inspection & Audit Timing*.

Site Specific Requirements

- The Downer Sustainable Road Resource Centre is licensed by the NWS EPA under EPL 12611 to store No more than 10 tonnes for Crumbed Rubber to be stores at the premises at any one time.
- The Reconomy Facility is licensed to store and process up to 250 m3 of organics waste and up to 300 tonnes of incoming street sweeping waste.
- An external contractor is utilised to check, re-test and tag every six months Fire Extinguishers – Wormald
- Safety Warden and Emergency Drills are carried out on a regular basis

Firewater containment is provided on the bunded apron to the Reconomy receival bays at the southern end of the Reconomy shed. This area is bunded, has a blind pit and pump, capable of transferring the contaminated firewater to the NDD pit and disposal via the trade waste discharge point. Two fire hoses are readily accessible on either side of the bunded area. Organics located on the northern side of the Reconomy Shed are stored with a non-combustible three-sided open topped bunker, with appliance access on the northern side.

9 ALL BURNT WASTE MATERIAL WILL NEED TO BE STORED IN THE QUARANTINE AREA FOR DISPOSAL. LIKELIHOOD AND RISKS OF A POLLUTION INCIDENT

9.1 Risks to Surrounding Environment

The risk to the surrounding industries is limited primarily to air in the form of steam, dust and chemical discharge to air and water.

- Steam associated with the Asphalt Production burner is monitored, and heat-controlled via the computerised Amman Plant and poses minimal risk to the surrounding environment and properties. The risk is further reduced due to the Plant using the latest technology and ongoing maintenance schedule,
- Dust is controlled onsite with the use of dust suppression sprinklers, site owned water cart and street sweeper as part of the Dust Management of the Operational Environmental Management Plan. Bag house dust associated with the Asphalt production is monitored and controlled via the computerised Amman Plant as well as regular physical checks of the bag house. The Risk to human health are also mitigated due to the adjoining premises primary work is conducted indoors.

Chemical Discharge to Air

- Refer to **Section 8.2**. Bitumen tanks are fitted with a charcoal filter to prevent uncontrolled discharge to air limiting the risk to human health.

Discharge to Water.

- Duck River and the adjoining riparian reserve and the Duck River Flood Zone are located adjoin the rear of the site. A purpose-built bio basin was designed and built to treat all surface water (see stormwater system layout Section 2.4). The bio-basin discharge point has a knife valve gate that can isolate the site from Duck River, effectively acting as a retention point for any accidental discharges or on-site spills.

Also refer to Section 7 **Likelihood and Risks of a Pollution Incident** and **ANNEX B Environmental Impact and Consequence Classification Table Adapted from DG-ZH-PR006 Incident Management Procedure**.

In accordance with the Site Risk Assessment outcomes, it has been identified that the key applicable risks to human health, property and the environment identified for the site are as follows. These have been risk rated in accordance with ***DG-ZH-PR006 Incident Management Procedure***:

Risk	Likelihood x Consequence Risk Rating
Dangerous and/or Hazardous materials spillage and discharge to environment (including contaminant discharge and tank failure)	C
Discharge of airborne emissions/contaminants off site	C

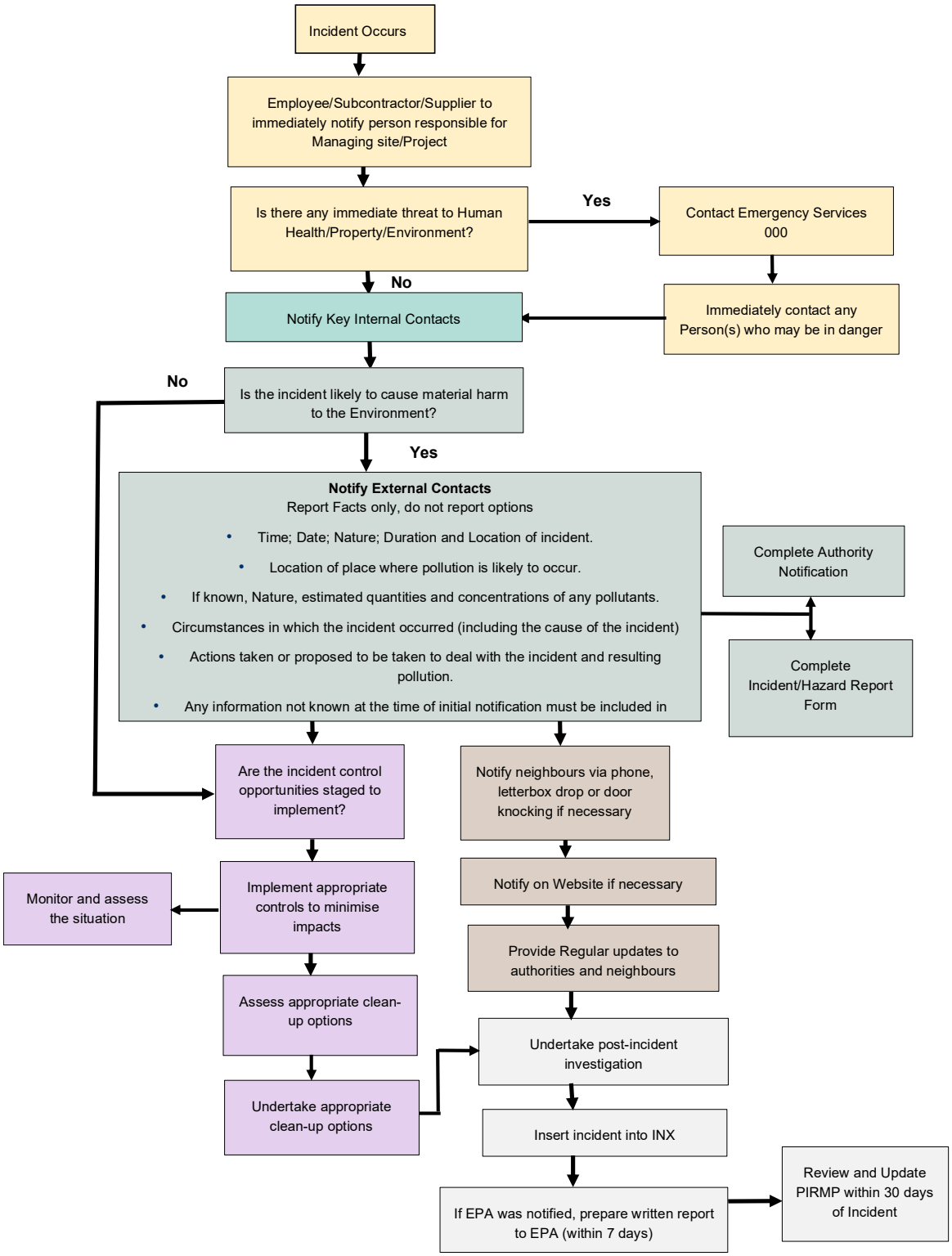
The likelihood of occurrence is to be reviewed regularly, following events, and in light of adverse weather conditions. Also refer to **ANNEX B** Environmental Impact and Consequence Classification Table adapted from DG-ZH-PR006 Incident Management Procedure.

9.2 Pre-emptive Actions

Table 7.2 in the ***Operational Environmental Management Plan (OEMP)*** provides measures to avoid, mitigate and manage the potential environmental impacts identified through the environmental impact assessment of the site. These measures are considered pre-emptive actions and the minimal accepted standard of care and aim to ensure any identified risk of harm is reduced. (Refer to **Section 14**)

9.3 Incident Response Plans

If a pollution incident occurs in the course of an activity so that material harm to the environment is caused or threatened, the management of these events is to be in accordance with ***DG-ZH-PR006 Incident Management Procedure***. The following flow chart should be used to identify the appropriate course of action.



In addition to this, specific pollution Incidents may be managed in accordance with the response action plans included in **Section 14** of this document.

10 ROLES AND RESPONSIBILITIES

Position	Responsibility
Employees and Contractors	• Following the procedures outlined in the PIRMP and related documents • Immediately alerting Site Manager or Team Leader of any environmental incidents or near-misses.
Team Leaders / Front Line Supervisors	• Following the procedures outlined in the PIRMP and ***DG-ZH-PR006 Incident Management Procedure***. • Immediately alerting Site Manager or, in case of their unavailability, Environmental Representative or Environment Manager of any potentially material environmental incidents or near-misses. • Assist in conducting incident investigations.
Site Manager and/or Environmental & Sustainability Advisor / Zero Harm Advisor and/or Environmental & Sustainability Manager / Zero Harm Manager	• Authorisation, administration, maintenance and implementation of the PIRMP • Assessing 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: ○ external emergency services (e.g. police, fire services or Workplace health and safety authority) take control of the site; or ○ the event subsides. • Coordinate communication to neighbours. • Ensuring that 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 Wardens)	The Emergency Response Team (ERT) Warden(s) 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
Flood Response Warden(s)	The Emergency Response Team (ERT) is responsible for taking on the roles listed as Flood Warden (s) in the Flood Action List in Annex C.

Further Information is provided in **Section 4** of the **Rosehill Emergency Management Plan** ***NSWPR-EM-PN105 EMP 2025.pdf***

If an emergency situation arises…

- The alarm will be raised by sounding the portable horn 3 times.
- Personnel are to prepare for Evacuation (shutdown plant and equipment if safe to do so) and await further instruction.
- Chief Warden determines appropriate action in line with nature of emergency & initiates evacuation procedure.
- Warden(s) responds to emergency.
- Wardens commences immediate evacuation of all site offices and directs personnel to nearest exit points. UHF Communication with Loader, RAP Facility, Reconomy Site & Trucks in yard.
- UHF Communication with LAB (Main Office), Lab Personnel to sound portable horn 3 times, to initiate evacuation of Main Office Building and all areas are clear of personnel.
- Wardens to take Visitors book & Site Register of workers and contractors on site to Emergency Assembly / Muster Point
- Wardens checks all areas clear of personnel.
- Wardens directs and follows all personnel to Emergency Assembly / Muster point.
- Wardens advises Site Supervisor all areas are clear.
- Wardens hold personnel in muster area until directed by the Chief Warden or Emergency Services Personnel.

Mechanism to Account for Persons

- Pre- start sign on from each Department Building, visitor's book.
- Full Control Room Office Evacuation

Evacuation Strategies for Occupants/Visitors with Disabilities or Mobility Impaired Persons

Details of persons with disabilities or any mobility impairment whether permanent or temporary are to be kept on a register maintained by the Wardens. In the event of an emergency such people are to be assisted by an Warden or a nominated staff member to a place of safety

11 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 and ZH Team) 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	▪ Warmold	As per systems frequency	Downer
Site/ area evacuation drills	▪ All persons on site	Annually	Downer

Requirements	Who Should Attend	Frequency	Training Provider
Emergency Response Training	▪ All Production Personnel	Bi-Annually	Registered Training Organisation
Warden	▪ All Production 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.

12 EMERGENCY FACILITES & EQUIPMENT

12.1 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

- Nitrogen dosing located as part of AMMANN equipment at top drum
- Portables fire extinguishers on all levels of the Asphalt plant and surrounds (C02, Dry Chemical ABE & Foam AFF 90ltr)
- Portable powder fire extinguishers in electrical rooms
- Portable C02 fire extinguishers around diesel tank and bitumen tanks
- 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 southern side
- 8 x Hydrants located around Asphalt plant
- Hose Reels located around plant and on plant – 20 in total

(Please refer to the Emergency Evacuation and Equipment Diagrams on the following pages for locations)

Firewater

- Firewater will be retained onsite and should not be allowed to enter the bio basin of the stormwater drainage system.
- Spill kits will be deployed to prevent/divert fire water from entering the Bio Basin/Stormwater System.

- Pollution control equipment (cut off valve) will be activated to prevent any loss to Duck River if fire water does enter the stormwater system.

12.2 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 site map below.

12.3 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 ***DG-ZH-PR116.1 Inspections Procedure***
- The Rosehill Sustainable Road Resource Centre has 2 safety showers. Located at tank farm and near the lime silo loading point behind the laboratory (Please refer to the Emergency Evacuation and Equipment Diagrams on the following page for location)

12.4 Spill Response Equipment

Spill response equipment will be provided commensurate with nature, quantity and risk of substances in each area. The Spill Response Equipment Needs Assessment Form has been be used to determine the number, location and type of spill kits required.

The spill kit locations are as per the Emergency Evacuation and Equipment Diagrams on the following pages.

12.5 Emergency Signs & Lighting

Emergency signs as per Australian Standards for Workplace facilities

Emergency Lighting

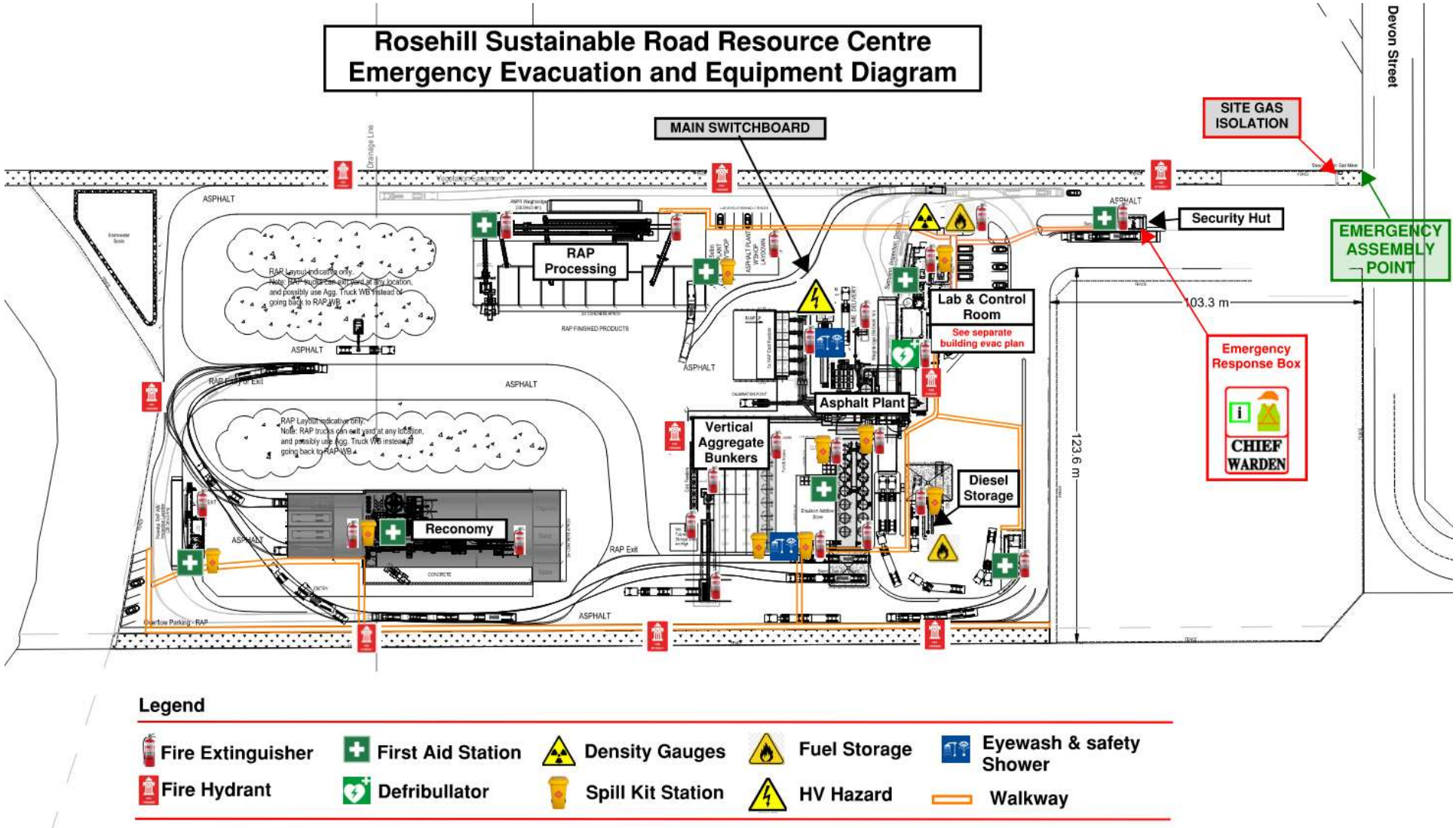
- Illuminated exit lights on all exits of enclosed building
- Flood lights on plant

Emergency Exits

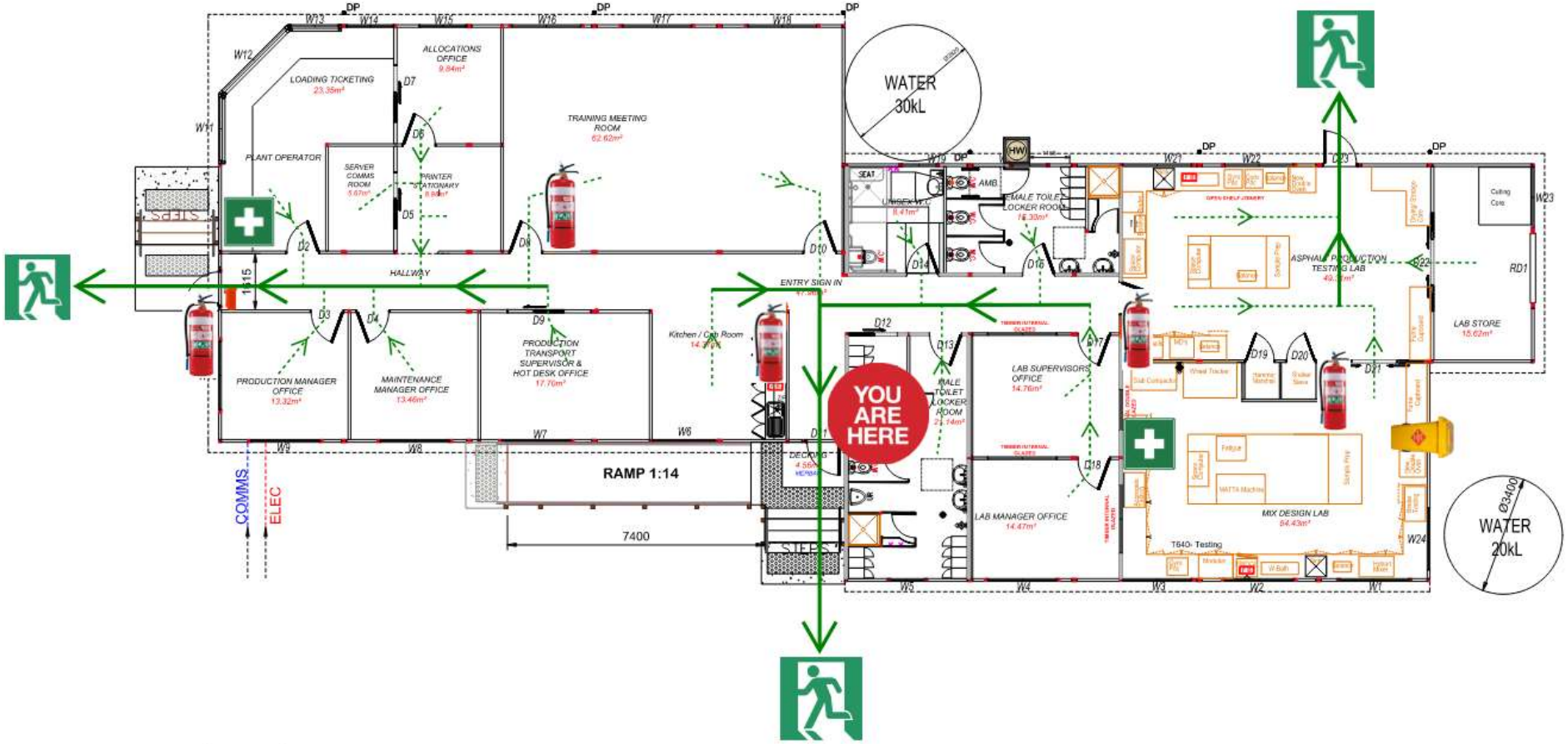
- Evacuation Signs located in all areas showing emergency exits

12.6 Electronic Discharge Valve

An electronically controlled submersible Actuator Valve with manual override and jammed valve protection is located between the bio retention basin and the site's discharge point. In the case of a major incident occurring onsite, this valve can be actuated from the Main Control Room preventing any fluids from leaving site.



Rosehill Office & Laboratory
Emergency Evacuation and Equipment Diagram



Legend

Building Exit | Main Evacuation Route | Room Exits | Fire Extinguisher | First Aid Kits | Spill Kit Station

13 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 at each Building and department.
- response procedures for Pollution scenarios with a high likelihood of occurring, as identified in the Emergency Management Plan and 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 within INX.
- 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 and recorded using ***DA-ZH-FM015.5 Emergency Drill Observers Checklist***. Records shall be kept within INX and sent to the Site Manager / Zero Harm Team for performance review.

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

Test Date	Version of PIRMP Tested	Incident Type Drilled	Emergency Drill Lead
21.02.2023	1.1	Fire in DG container	Haralampos Papaaeleou
06.03.2024	1.2	Hydrocarbon Spill	Mark Connor
09.10.2024	1.4	Tanker Spill	Paul Sherry

14 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 including Fire Water	1. Identify the substance if possible 2. Wear appropriate PPE 3. Follow emergency procedure as per SDS sheets which are in the batch office 4. Contain the substance 5. If required, activate Discharge Valve at Bioretention basin to contain any liquids being discharged from site. 6. Where discharge has occurred, and liquids have been retained within the bio basin 7. Bund the area with equipment from the spill kit (check site map for location) 8. Block off or barricade area 9. Ensure appropriate fire extinguishers are nearby in case fire breaks out 10. Advise site manager 11. Alert neighbours, EPA and Downer ZH manager as required, and if material harm has occurred.
Discharge of substance to Duck River	1. If required, activate Discharge Valve at Bioretention basin to contain any liquids being discharged from site. Where discharge has occurred, and liquids have been retained within the bio basin. 2. Do not discharge the water to Duck Creek 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 ***Environmental & Sustainability Advisor*** and notify that a Pollution Incident has occurred. 4. The ***Environmental & Sustainability Advisor*** will advise what samples are to be collected (from next to the discharge grate within the bio basin) 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 Laboratory (Eurofins Girraween). 6. 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.
Extreme Rainfall Events	1. If safe to do so shut down plant as per shutdown procedure and isolate any other power, water sources. 2. Consider contingency measures for increased surface water and wastewater volumes. 3. Ensure all sediment and erosion controls for unsealed or exposed bunds/stockpiles are in good working order.

Emergency Event	Response/ Rescue Method
	4. Keep bunds empty and take all measures to prevent them being filled with stormwater. 5. Keep chemicals stored above areas that are prone to inundation. 6. Secure all loose items to prevent them encountering floodwater. 7. Reduce any wastewater storage etc. on the site and consider the capacity of any effluent irrigation areas to manage your effluent under prolonged wet conditions. 8. Refer to Annex C – Action Checklist extract from OEMP – Annex C Flood Management Plan
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 (familiarize yourself with the location of fire extinguishers) 3. If the fire is too large activate the fire alarm system by pushing the button on 2 of the signed manual call 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 neighbours and Downer ZH manager as required
Loss of Product / Tank 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 sheets which are in the batch office 4. Activation of any associated sump pumps or shut-off valves to contain and isolate 5. If required, activate Discharge Valve at Bioretention basin to contain any liquids being discharged from site. 6. Contact Cleanaway of similar service provider to pump out bund contents 7. Ensure spill kit available for any release from containment 8. Advise site manager 9. Alert neighbours, EPA and Downer ZH manager as required, and if material harm has occurred. 10. Repair / Replace Tank 11. Refill Tank
Toxic emission to atmosphere	1. Identify the substance if possible 2. Notify Management and Zero Harm 3. Follow emergency procedure as per SDS sheets which are located in the batch office 4. Contain the substance, if possible. 5. Alert neighbours, 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: 4. sweep roadways and hardstand 5. Turn on sprinkler/water systems to wet down source. Ensure there is no excess runoff into storm water system. 6. Cover stockpiles 7. Turn off asphalt plant and inspect baghouse or plant for potential cause of emission 8. Clean PPE and wash hands thoroughly following task. 9. Advise site manager

Emergency Event	Response/ Rescue Method
	10. Alert neighbours, EPA and Downer ZH manager as required, and if material harm has occurred. 11. Investigate Incident

A 'minor environmental incident' is where there has been no potential or actual material harm to the environment. Examples are excessive dust sighted by the site team or a small, contained hydrocarbon spill that does not leave a site boundary and are 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 government notification. All minor or major incidents will be recorded in Downers INX system. A minor incident does not constitute a non-compliance with the consent. (Refer to Section 10.3.4 OEMP Rev 4).

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 and all relevant information about the incident. For example, where an Incident has occurred and retained onsite, there is no duty to notify, until a release results in a receiving environment may be harmed.

When notifying relevant Authorities, EPA and other relevant authorities be provided with a written incident notification via the Major Projects website within 24 hours after the incident.

A written notification will:

- Identify the development and application number.
- Provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident).
- Identify how the incident was detected.
- Identify when the Applicant became aware of the incident.
- Identify any actual or potential non-compliance with conditions of consent.
- Describe what immediate steps were taken in relation to the incident.
- Identify further action(s) that will be taken in relation to the incident.
- Identify a site contact for further communication regarding the incident.

14.1 Community Notification and Communication

Communicating with neighbours and the local community is an important element in managing the response to any pollution incident. Downer 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.

15EMERGENCY CONTACTS

Downer Australia Internal Emergency Contacts			
24-Hour Emergency Number 1300 366 538			
Administration (contact number and hours): 02 9897 4333 between 7am and 5pm			
Downer Rosehill contacts	**Contact No.**	**After Hours No.**	**Details**
Sydney / Newcastle Surfacing Manager - Darren Prosser	0419 302 046	0419 302 046	
Production Manager – Paul Sherry	0419 789 505	0419 789 505	Additional 24-hour contact
Recycling / Maintenance Manager – Roy Stiff	0407 228 098	0407 228 098	
Matthew Wade – Reconomy Manager	0419 244 748	0419 244 748	
Chief Fire Warden – Gordon Mclisky (day) Harry Papaeleou(night)	0439 702 110	0476 790 413	All Incidences and Emergencies
Emergency Response Team (ERT)	02 98974351		All Incidences and Emergencies
First Aid Officer – Matthew Wade	0419 244 748	02 98974351	First Aid
Downer Australia External Emergency Contacts			
Ambulance, Fire, Police	**000** **Mobile: 112**		**Life Threatening Emergencies**
Fire Brigade - Silverwater 122 Adderley Street Silverwater	02 9647 1246	02 9647 1246	Fire and Chemical spills
Police - Granville 2 Carlton Street Granville	02 9897 4199	02 9897 4199	Security matters
Medical			
Public Hospital - Westmead Hawkesbury Rd & Darcy Road, Westmead	02 9845 5555	02 9845 5555	Serious Injury
Medical Centre – Merrylands Family Practice 189 Merrylands Road Merrylands	1300 637 000	1300 637 000	Injury
Poisons Information Centre	13 11 26	13 11 26	Poisons Information

Other Authorities as required by legislation **Reportable following instruction with Regional Zero Harm Manager / Environmental Manager / Site Manager or delegate**			
State Emergency Services	13 25 00	13 25 00	Notifiable incidents immediately
Local Council - Parramatta	1300 617 058	1300 617 058	Notifiable incidents immediately
Department of Public Health	02 9845 5555	02 9845 5555	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 - Endeavour	131 003	131 003	Electricity
Gas - Jemena	131 009	131 009	Gas
Water – Sydney Water	13 20 92	13 20 92	Water

15.1 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

ANNEX A HAZARDOUS MATERIAL SCREENING THRESHOLDS FOR STORAGE

APPENDIX B. HAZARDOUS MATERIAL SCREENING THRESHOLDS FOR STORAGE

Classification	Class	Sub	PG	Material	Storage location	Mode of storage	Storage quantity (tonnes)	Total quantity (tonnes)	SEPP 33 Threshold	SEPP 33 determination	Threshold exceeded?	Inclusion in PHA?	SDS Reference
Gases	2	2.1	-	Acetylene	Gas Cage (SE corner of asphalt plant workshop)	Cylinders	0.008	0.035	Class 2.1 Flammable gases - Pressurised (excluding LPG): Table 1, screening threshold is 100kg (0.1 tonnes).	Total Class 2.1 - Pressurised (excluding LPG) does not exceed SEPP 33 threshold.	No	No	Typical properties - information provided by client.
				Belt Grip	DG Store (SE corner of asphalt plant workshop)	Packages	0.005						
				Galmet Cold Galv	DG Store (SE corner of asphalt plant workshop)	Containers	0.012						
				WD40	DG Store (SE corner of asphalt plant workshop)	Packages	0.01						
		2.1	-	LPG gas	Gas Cage (SE corner of asphalt plant workshop)	Cylinders	0.018	0.018	Class 2.1 - LPG Aboveground: Table 1, screening threshold is 10 tonnes.	Total Class 2.1 - LPG Aboveground does not exceed SEPP 33 threshold.	No	No	
		2.2 SR 5.1	-	Oxygen	Gas Cage (SE corner of asphalt plant workshop)	Cylinders	< 0.1	5	No threshold for Class 2.2 (non-hazardous) based on SEPP 33 Class 5.1 has a screening threshold, so use sub risk.	Does not exceed SEPP 33 threshold.	No	No	
Flammable liquid	3	-	II	Unleaded Petrol	DG Store (SE corner of asphalt plant workshop)	Containers	0.016	1.6	Class 3PGII: Table 1, minimum quantity for further evaluation is 5 tonnes More than 50 m from kerosene Class 3 PGIII, not cumulated – treat as separate storages.	Total Class 3PGII does not exceed SEPP 33 minimum threshold and does not required assessment.	No	No	Typical properties - information provided by client.
				Toluene	Chemical storage (Lab store)	IBC	0.8						
				Ethanol	Chemical storage (Lab store)	IBC	0.8						
	3	-	III	Kerosene	Blending Plant Additive Store (see 'Emulsion Additive Store)	Fuel Tank (self bunded)	48	48	Class 3PGIII: Table 1, quantity greater than 5 tonnes, requires use of Figure 9 to evaluate. 65kL kerosene tank	Total Class 3PGIII exceeds SEPP 33 threshold for evaluation however is separated by more than 8 m from boundary as per Figure 9 so not potentially hazardous.	No	No	
Corrosive	8	-	II	Cationic Emulsifier - polyamine	Blending Plant Additive Store (see 'Emulsion Additive Store)	IBC	15	62	Class 8 PGII: Table 3, screening threshold is 25 tonnes. Note: Class 8 PGIII is stored in the same area as PGII and therefore falls under that threshold.	Total Class 8 does exceed SEPP 33 threshold.	Yes	Yes	Chemwatch : 23-0489 Issue date: 23/09/2017
				Cationic Emulsifier - tallow triethylenedia	Blending Plant Additive Store (see 'Emulsion Additive Store)	IBC	34						Chemwatch : 84-3402 Issue date: 01/11/2019

Classification	Class	Sub	PG	Material	Storage location	Mode of storage	Storage quantity (tonnes)	Total quantity (tonnes)	SEPP 33 Threshold	SEPP 33 determination	Threshold exceeded?	Inclusion in PHA?	SDS Reference
				mines ethoxylated									
				Hydrochloric Acid	Blending Plant Additive Store (see 'Emulsion Additive Store)	IBC	8						Chemwatch : 6095-44 Issue date: 01/11/2019
			III	Ceca Base	Blending Plant Additive Store (see 'Emulsion Additive Store)	IBC	5						Chemwatch : 23-0487 Issue date: 01/11/2019
Miscellaneous dangerous substances and articles, including environmentally hazardous substances	9	Combustible		Diesel	Immediately north of asphalt truck spray gantry	Fuel Tank	45	985	No threshold for Class 9 based on SEPP 33. Note for diesel and bitumen: Page 16 'If combustible liquids of class C1 are present on site and are stored in a separate bund or within a storage area where there are no flammable materials stored they are not considered to be potentially hazardous. If, however, they are stored with other flammable liquids, that is, class 3PGI, II or III, then they are to be treated as class 3PGIII, because under these circumstances they may contribute fuel to a fire'.	Diesel in separate self-bunded tank 60kL, immediately north of asphalt truck spray gantry. Diesel therefore not cumulated with kerosene inventory. Bitumen in bulk tanks in separate bund, not cumulated with kerosene inventory.	No	No	Typical properties - information provided by client
				Bitumen	Bitumen Tanks (6 x western tanks labelled PMB and C450 in the bitumen tank farm).	Tank	780		Not within same area/bund as Class 3. No threshold.	In process circuit only. Not cumulated with kerosene inventory.	No	No	Typical properties - information provided by client
				Bitumen Class 170 or 320	Blending Plant Tank Farm.	Bulk tank	160						
		-		Delvac 1330	DG Store (SE corner of asphalt plant workshop).	Containers		< 5	No threshold for Class 9 based on SEPP 33 - excluded from Screening.	Screening not required. Class 9 — are miscellaneous dangerous goods, which pose little threat to people or property. They may be substances which pose an environmental hazard.	No	No	Typical properties - information provided by client
				Mobilith SHC 220	DG Store (SE corner of asphalt plant workshop).	Containers							

Classification	Class	Sub	PG	Material	Storage location	Mode of storage	Storage quantity (tonnes)	Total quantity (tonnes)	SEPP 33 Threshold	SEPP 33 determination	Threshold exceeded?	Inclusion in PHA?	SDS Reference
Not classified as DG	n/a	-					No thresholds.						
				Caesium 137 (Nuclear gauge) * 5	Stored in cabinet complying with relevant standards next to Lab store.	Yellow case inside storage cage							
				Cationic Emulsifier - tall-oil maleated amidoamines	Blending Plant Additive Store (see 'Emulsion Additive Store').	IBC							
				Calcium Chloride	Blending Plant Additive Store (see 'Emulsion Additive Store').	IBC							
				Non Ionic Asphalt Emulsifier	Blending Plant Additive Store (see 'Emulsion Additive Store').	IBC							
				Cationic Styrene Butadiene Rubber Latex	Blending Plant Additive Store (see 'Emulsion Additive Store').	IBC							
				Polyfloculant	Reconomy Chemical Storage.	IBC							
				AntiFoam	Reconomy Chemical Storage.	IBC							
				Coagulant	Reconomy Chemical Storage.	IBC							
				Lubricants	Reconomy Chemical Storage.	packaged <5L							
				Hydrated Lime	Lime Silos (round circle with two squares on to east of lime delivery).	Bulk silos							

APPENDIX C. TRANSPORTATION SCREENING THRESHOLDS

Trip Type (Receipt of Goods by Truck)	Average Traffic Generation (indicative)		Average Annual Delivery (tonne)	DG Class	Load per quantity	SEPP 33 Threshold Vehicle Movements (Table 2)		Minimum Quantity [Note 1] per Load (tonne)		Threshold Exceeded?
	Annually	Peak Weekly				Annually	Peak Weekly	Bulk	Package	
Acetylene	2	-	0.008	Class 2.1	1 x 7.0m3	>500	>30	2	5	No
Belt Grip	1	-	0.005		12 x 750g cans					
Galmet Cold Galv	1	-	0.012		12 x 750g cans					
WD40	2	-	0.010		12 x 750g cans					
LPG gas	8	-	0.018		2 X 9kg					
Unleaded Petrol	-	1	0.016	Class 3 PG II	20L	>750	>45	3	10	No
Toluene	26	-	0.8		1000L					
Ethanol	26	-	0.8		1000L					
Kerosene	26	1	48	Class 3 PG III	35000L	>1000	>60	10	No limit	No
Cationic Emulsifier - polyamine	2	-	15	Class 8 PG II/III	8 tonnes	>500	>30	2	5	No
Cationic Emulsifier - tallow triethylenediamines ethoxylated	3	-	34		15 tonnes					
Hydrochloric Acid	24	-	8		3 tonnes					
Ceca Base	4	-	5		5 X 1000L IBC					
Bitumen	-	15	480	Class 9	23 tonnes	>1000	>60	No limit	SEPP 33 does not have value	-
Delvac 1330	1	-	0.08		2 X 40L drum					
Mobilith SHC 220	1	-	0.06		2 X 40L drum					
Bitumen Class 170 or 320	-	7	160		25 tonnes					
Diesel	12	-	48		3.5 tonnes					

Notes:
1) load sizes below this quantity do not require assessment. As per the guideline, if quantities are below this level, the potential risk is unlikely to be significant.

ANNEX B ENVIRONMENTAL IMPACT AND CONSEQUENCE CLASSIFICATION TABLE ADAPTED FROM DG-ZH-PR006 INCIDENT MANAGEMENT PROCEDURE

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						
Downer 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 licence/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	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	Irreparable damage to highly valued sites, structures, or objects of heritage/ archaeological significance.

Incident Classification	Risk Consequence	Impact Descriptors						
Downer 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)
			and on-going management attention.				blast fume events incurring ongoing complaints and action associated with prosecution and potential termination of contract.	
5	Significant impact on the environment; and/or Prolonged community outrage.	Prolonged loss of Regulatory licence/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	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	Disturbance causing significant damage to a highly valued site(s), structures, or objects of heritage/ archaeological significance.

Incident Classification	Risk Consequence	Impact Descriptors						
Downer 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)
						eradicate >5 years with continual management.	exclusion zone, incurs prosecution and potential suspension of contract.	
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 attention.	Short term loss of Regulatory licence/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 remediated.	Unauthorised works to waterway, groundwater source or associated engineered structure resulting in "material harm"[3]. Dam or sediment control failure leading to 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	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 disposal of waste in dumps or backfill.	Isolated death of multiple individuals from a species (flora and fauna) of conservation significance. Unauthorised clearing of land or vegetation areas of conservation significance. Introduction of declared weed, pest or plant disease that can be eradicated within 1-5 years, with continual management.	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, permit or approval conditions requiring intervention from customer or regulator. Post blast fume event that breaches exclusion zone or	Disturbance causing significant harm to a known heritage or archaeological site of moderate to high significance or land subject to native title or has Maori land status. Situation that is considered of concern by customer or traditional owners or requires intervention from the regulator.

Incident Classification	Risk Consequence	Impact Descriptors						
Downer 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)
				delivers large volumes in a short period or occurs over several days.			regulator issues fine.	
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 notification to the regulator.	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 of activities as	Disturbance causing moderate harm to a known heritage or archaeological site of moderate significance or land subject to native title or has Maori land status that may require notification to the regulator.

Incident Classification	Risk Consequence	Impact Descriptors						
Downer 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)**
							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 licence or approval notifiable to the regulator. E.g. didn't submit an annual return on time. Works commence without an environmental licence 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,	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	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						
Downer 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)**
				wetland, or drainage system) or other environmentally sensitive areas.			regulated substance (e.g. ozone depleting) without authorisation or outside licence/ approval conditions.	
1	Negligible impact on the environment; or No or unfounded community complaint.	Administrative Breach to licence that can be rectified immediately. Non-conformance to a licence outside of Downer 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 Downer, 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.

ANNEX C ROSEHILL FLOOD MANAGEMENT PLAN EXTRACT – ACTION CHECKLIST

Stage	Trigger for Action	Action	Who is responsible	What is needed
Before A Flood	Always	The site Project Manager will make all staff on site aware of the possibility of flooding and the procedures to be followed in a flood.	Project Manager	N/A
		The Project Manager will appoint a Flood Warden. This should be a senior staff member who is familiar with this Flood Emergency Response Plan and who is always on site when the site is open. If necessary, to ensure that at least one Flood Warden is always on site, the Project Manager may appoint two or more Flood Wardens.	Project Manager and Flood Warden (s)	N/A
		An airhorn will be always kept on site. This is to be used to alert everyone on site in case of emergency. All staff on site will be trained during their site induction to immediately go to the muster point at the front of the site when the airhorn sounds.	Project Manager and Flood Warden (s)	Airhorn
		A set of at least two wireless radio communication transceivers with charged spare batteries will be kept on site at all times. The Flood Warden will make sure that the main and spare batteries are changed at all times.	Project Manager and Flood Warden (s)	Wireless radios with batteries

Before A Flood	Always	A flood warning sign will be kept on the premises. The sign should read a message to this effect: *The site is temporarily closed due to flood risk. For your own safety, leave the area immediately. You will be notified once it is safe to come back.*	Project Manager and Flood Warden (s)	Flood warning sign
		The Project Manager and the Flood Warden will make sure they always have a smartphone or tablet handy. The smartphone/ tablet will need to have 3G/4G/5G internet access and at least 12 hours independent power supply.	Project Manager and Flood Warden (s)	Smartphone or tablet, internet
		Using the above smartphone/ tablet, the Project Manager and the Flood Warden will subscribe to the City of Parramatta Council's FloodSmart warning system for the area of Parramatta CBD and will make sure that the relevant notifications are given "push-up" priority (i.e. high-priority) so that these can be read as soon as they are received.	Project Manager and Flood Warden (s)	Smartphone or tablet, internet
		Using the above smartphone/ tablet, the Project Manager and the Flood Warden will bookmark links to the BoM warning webpage and FloodSmart for easy access.	Project Manager and Flood Warden(s)	Smartphone or tablet, internet
		Every morning, the site Project Manager will check the Bureau of Meteorology weather forecast and warnings. At the time this report was prepared, the BoM weather forecast and warnings for NSW were available at the following link: New South Wales Warnings Summary (bom.gov.au).	Project Manager and Flood Warden(s)	Smartphone or tablet, internet

		An emergency contact sheet will be kept on site. A suggested format for these details and other necessary contact details is provided in Appendix B.	Project Manager	Emergency Contact Sheet
		The Project Manager will keep an updated register of the people. who are on site at all times. The list will have to include as a minimum name, mobile number, and emergency contact details.	Project Manager	Register of people on site
		The Project Manager will maintain an emergency kit including a portable radio and torch with spare batteries and a first aid kit.	Project Manager	Emergency kit with radio, torch, batteries, and first aid kit
When a flood is possible	During working hours When there is an active BoM Flood Watch for the Parramatta River	The site Project Manager will notify the Flood Warden(s) that there is a risk that the site may flood and the procedures to be followed in a flood.	Project Manager and Flood Warden(s)	N/A
		The Project Manager and the Flood Warden(s) will notify everyone on site, as well as any workers arriving to the site later in the day, that there is a risk that the site may flood and the procedures to be followed in a flood.	Project Manager and Flood Warden(s)	Phones
		The Flood Warden will monitor the BoM warning webpage and any notifications from Floodsmart every 30 minutes.	Flood Warden(s)	Smartphone or tablet, internet

		Everyone on site will ensure they can be ready to evacuate within 30 minutes should an evacuation order be issued by the Project Manager.	Everyone on site	N/A
	Outside of working hours When there is an active BoM Flood Watch for the Parramatta River	The site Project Manager will monitor the BoM warning webpage and any notifications from FloodSmart every two hours, and one last time one hour before any works commence at the site.	Project Manager	Internet
		Upon opening of the site, the actions to be undertaken during working hours, listed above, will apply.	Project Manager	N/A
During a flood	During working hours When there is an active Flood Watch for the Parramatta River and the BoM issues a Severe Weather Warning with risk of flash flooding or local flooding for the Sydney Metropolitan Area,	The Flood Warden will notify the Project Manager that the site must be immediately evacuated.	Project Manager and Flood Warden(s)	N/A
		The Flood Warden will take the radio transceiver, the flood warning sign and the register of everyone who is on site and go to the site vehicular access point on Devon Street.	Flood Warden(s)	Radio, warning sign and register of people on site

	OR When a FloodSmart Warning for Minor, Moderate or Major Flooding is issued for the Parramatta River. Note: a FloodSmart flood warning may or may not be preceded by a BoM Flood Watch.	The Project Manager will issue an evacuation order by sounding the airhorn. As per the site induction training, everyone on site will immediately muster at the front of the site where the Project Manager or Flood Warden will notify them of the reason for the evacuation and any evacuation procedures to comply with	Project Manager	Airhorn
		The Project Manager will sound the airhorn every five minutes until everyone has left the site.	Project Manager	Airhorn
		As each vehicle leaves the site, the Flood Warden will record they have left in the register and will remind all drivers that under no circumstances they should drive through floodwaters.	Project Manager and Flood Warden(s)	Register of people on site
		The Project Manager will contact the NSWSES and communicate that the site is being evacuated as per the FERP.	Project Manager	Phone
		Using the radio transceiver, the Flood Warden will let the Project Manager know when everyone has left. The Flood Warden will put the flood warning sign in place and then leave the site.	Flood Warden(s)	Radio
		The Project Manager will patrol the site on their car for no more than five minutes to ensure that no one is left on the premises. They will then shut off all power supplies, close access to the site and leave.	Project Manager	N/A
		Once the Project Manager has evacuated, they will contact everyone due to arrive to the site on that day and communicate that the site is closed due to flood risk until further notice.	Project Manager	Phone

		The Project Manager will keep monitoring the BOM weather warnings and any further notifications for FloodSmart every two hours	Project Manager	Smartphone or tablet and internet
	Outside of working hours *When there is an active FloodWatch for the Parramatta River and the BOM issues a Server Weather Warning with a risk of flash flooding or local flooding for the Sydney Metropolitan Area,* *OR* *When a FloodWatch Warning for Minor, Moderate or Major Flooding is issued for the Parramatta River.* *Note: a FloodSmart flood warning may not be preceded by a BOM Flood Warning*	The Project Manager will contact everyone expected to go to the site on the following day and communicate that the site will be closed due to flood risk until further notice	Project Manager	Smartphone or tablet and internet
		The Project Manager will keep monitoring the BoM weather warnings and any FloodSmart notifications every two hours.	Project Manager	Smartphone or tablet and internet
	When a FloodSmart notification of, 'NO FURTHER IMPACTS' for Parramatta CDB is received,	The Project Manager will inspect the site to check if access roads are clear and if the site was affected by flooding.	Project Manager	N/A
		If access roads are clear and the site was not affected, the emergency has passed, and the site can re-open.	Project Manager	N/A

After a Flood	OR If a FloodSmart warning was never issued, when BOM cancels the Severe Weather Warning with risk of flash flooding for the Sydney Metropolitan Area.	Extra care will be taken of potential slips on a muddy floor if floodwaters have entered the mobile offices or other structures.	Everyone On site	N/A
		All flood-affected parts of the premises will be appropriately cleaned, and utilities checked by professionals before anyone can return to the site.	Project Manager	Cleaning supplies
		A hazard assessment will be undertaken for the clean-up, safe work methods statements will be prepared, and personal protective equipment supplied consistent with the known hazards which can be associated with floods: Slips, trips and falls; Sharp debris; Venomous animals; Contaminated water and sediments.	Project Manager	Hazard assessment/ safe work methods statement
		Following the re-commencement of the site activities, a de-brief will be held with key management staff and may involve Council flood staff or the NSWSES. The flood event and response, including the use of this FERP and any emergency procedures will be reviewed.	Project Manager, Flood Warden (s), Council and NSWSES	FERP
		Changes may be made to the FERP and the requirements for future emergency response should the review identify any improvements which may be made.	Project Manager	FERP