Pollution Incident Response Management Plan

Dunmore Resource Recovery Centre
Environment Protection Licence 12903

November 2024

Executive Summary

The Dunmore Recycling and Waste Disposal Depot is comprised of two licenced sites. One site is the Resource Recovery Centre on Environment Protection Licence 12903, which includes the Transfer Station, Administration Office and Food Organics Garden Organics (FOGO) Facility. The second site represents the Dunmore Recycling and Waste Facility that applies waste to landfill on Environment Protection Licence 5984.

This Pollution Incident Response Management Plan has been developed for the Resource Recovery Centre, operating under **Environment Protection Licence 12903**.

This document has been set out to fulfil the requirements of Part 5.7A of the *Protection of the Environment Operations Act 1997* and chapter 4 of the *Protection of the Environment Operations (General) Regulation 2022*. The objectives of this document are to:

- minimise the risk of a pollution incident occurring as a result of licensed activities, by identifying risks and the actions proposed to minimise and manage those risks;
- have established clear and effective notification, action and communication procedures to ensure the right people are notified, warned and quickly provided with updates and information they may need to act appropriately, including people who may need to be involved in incident responses – including staff at the premises; the NSW Environment Protection Authority ; and other relevant authorities (such as Fire and Rescue NSW, NSW Health and local councils) and industrial, commercial and residential neighbours and other members of the community; and
- have properly trained staff and up-to-date incident management information available to ensure the potential impact of a pollution incident is minimised.

This is a working document that requires the changes to site conditions, operating procedures or licence requirements, to be reviewed and incorporated where applicable. This document is reviewed after any incident and following the annual test exercise.

Below is a summary of the immediate steps to be taken in the event of a pollution incident (**Table 2)**.

Table 1 - Table of revisions

Revision	Date Issued	Author/Reviewer	Organisation	Details
0	30 August 2012	Daniel Robinson	Environmental Earth Sciences NSW	PIRMP
1	31 August 2012	Daniel Robinson	Environmental Earth Sciences NSW	Changes required by council.
2	11 September 2012	Daniel Robinson	Environmental Earth Sciences NSW	Addition of Flow chart and council changes
3	28 April 2015	Nicole Cheung	Environmental Earth Sciences NSW	Reviewed by Shellharbour City Council Waste Services
4	16 February 2016	Duncan Moffitt (02) 4239 5700	Project Coordination Australia Pty Ltd 2 Lady Penrhyn Drive Unanderra NSW	Dunmore Resource Recovery Development construction environmental management plan
5	20 September 2017	Dianne Tierney	SCC Waste Services	Document updated prior to site re-opening after construction.
6	June 2018	Dianne Tierney	SCC Waste Planning	Document updated after testing the Plan
7	22 May 2019	Joel Coulton	Shellharbour City Council Waste Planning and Operations	Document review due to testing of the Plan, 22 May 2019.
8	16 June 2020	James Brumpton	Shellharbour City Council Waste Planning and Operations	Document review due to testing of the Plan, 13 May 2020.
9	12 May 2021	Shanin Neveling	Shellharbour City Council Waste Planning and Operations	Document review due to testing of the Plan, 1 December 2020.
10	11 May 2022	Joel Coulton	Shellharbour City Council Waste Planning and Operations	Document review due to testing of the Plan, 14 December 2021.
11	18 May 2023	Ryan Stirling	Shellharbour City Council Waste Planning and Operations	Routine review and update
12	4 August 2023	Ryan Stirling	Shellharbour City Council Waste Planning and Operations	Document review due to testing of the Plan – Fire Incident, August 2023
13	23 November 2023	Ryan Stirling	Shellharbour City Council Waste Planning and Operations	Document review due to testing of the Plan – Ordinance Incident, November 2023
14	22 November 2024	Glenn Holden	Shellharbour City Council Waste Services	Routine review and update

Table 2 - Summary of pollution incident response procedure

In the event of a pollution incident			**Section of Report**
Step 1	Contact the Operations Coordinator	Operations Coordinator - 0421 044 158	Section 9
Step 2	Is there an immediate threat to human health and the environment?	Call emergency Services (000) or 112 for mobile phones	Section 9
Step 3	Does the site need to be evacuated?	Initiate evacuation procedure Safely follow pollution incident procedures	Section 8.2.6
Step 4	Operations Coordinator to contact the Operations Manager and Executive Manager Waste Services	Follow the pollution incident response plan contacting the relevant authorities as required	Section 6
Step 5	**Additional staff responsibilities**		Section 6
Onsite Staff	**Operations Coordinator**	**Executive Manager Waste Services**	
Assist with clean up	Coordinate onsite activities	Call relevant regulatory authorities (EPA, SafeWork NSW) following order specified in **Table 4**	
Follow instructions of Operations Coordinator	Barricade off area and notify staff onsite	Engage appropriate consultants	
Staff to check and clear areas as directed by Operations Coordinator	Call relevant regulatory authorities (EPA, SafeWork NSW) following order specified in **Table 4**	Review and submit incident report form to EPA.	
ReGrow and RRA supervisors to report to Operations Coordinator that their areas are clear of staff and contractors	Complete incident reporting form	Review PIRMP within 30 days of report.	

It is expected that all sections of this document are read, and the appropriate training undertaken, prior to responding to an incident.

The below table specifies the order these contacts are to be called and who is responsible to contact them as required.

Table 3 – List of contacts

Name	Position	Role	Organisation	Contact
Kerry Penfold	Operations Coordinator	Chief Warden / Activating the plan and managing on site response.	Shellharbour City Council	0421 044 158
Glenn Holden	Operations Manager	Support Operations Coordinator / Executive Manager Waste Services / 2IC to managing the response	Shellharbour City Council	0492 173 162 (02) 4221 6325
Ryan Stirling	Executive Manager Waste Services	Managing the off-site response	Shellharbour City Council	0416 915 580 (02) 4221 6141
Sean Anderson	Plant Operator	WHS Rep / First Aid	Shellharbour City Council	0432 382 844
Daniel Zgela	Weighbridge Operator	First Aid	Shellharbour City Council	02 4221 6305
Peter Dudley	Plant Operator	First Aid	Shellharbour City Council	02 4221 6200
NSW Fire and Rescue	-	Emergency Response	-	000 or 112 for mobile phones (02) 4224 2000
Police	-	Emergency Response	-	000 or 112 for mobile phones (02) 4295 2699
Ambulance	-	Emergency Response	-	000 or 112 for mobile phones 131 233
EPA Hotline	To be contacted if this is a notifiable incident	Environmental reporting	NSW EPA	131 555 or (02) 9995 5555
SafeWork NSW	To be contacted if this is a notifiable incident	Incident reporting	SafeWork NSW	13 10 50 or contact@safework.nsw.gov.au
Rohan Last **Taite Beeston**	Environmental Consultants	Environmental advice	ENRS	(02) 4448 5490
Public Health Unit	Public Health Officer	Surveillance and public health response	NSW Health (from Wollongong Hospital)	1300 066 055 (Business hours) (02) 4222 5000 (After hours) ask for Public Health Duty Officer on call

Name	Position	Role	Organisation	Contact
Allan Mitchell	Re.Grow Site Manager	Management of FOGO Facility	Re.Grow	UHF Channel 66 0475 519 962 02 9235 1377
Jarrod Roskell	RRA Site Manager	Management of RRA Facility	Resource Recovery Australia	0403672080
Glenn Steggles	Owner of Dunmore Resource and Recycling	Owner	Dunmore Resource and Recycling	Ph 4237 5033 Mob 0420 683 062

Table 4 - Contact order

Name/ Organisation	Role	Person responsible to call	24 Hr Contact
Emergency Services: Fire and Rescue NSW, Ambulance, Police	First responders. They are responsible for controlling and containing incidents. Can be used to contact surrounding neighbours	Operations Coordinator	000 or 112 for mobile phones
Operations Manager, **Executive Manager Waste Services /Shellharbour City Council**	Contact appropriate regulatory authorities, manage the response	Operations Coordinator	(02) 4221 6141 or 0416 915 580 (02) 4221 6325 or 0492 173 162 (02) 4221 6241 or 0417 494 545
NSW Environment Protection Authority	Regulatory authority under the POEO act for this licensed site	Operations Coordinator to report incident as soon as possible and provide the Incident Number to the Operations Manager and Executive Manager Waste Services	131 555
Public Health Unit	In the event this could cause impact to the community and workers the Public Health Unit provides advice on the response	Operations Manager	1300 066 055 (Business hours) (02) 4222 5000 (After hours) ask for Public Health Duty Officer on call
SafeWork NSW	To be contacted if this is a notifiable incident	Operations Manager	13 10 50 contact@safework.nsw.gov.au
ENRS or other environmental consultants	Environmental advice on possible monitoring places for surface water, ground water and storm water catchment information	Operations Manager	02 4448 5490

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1 Introduction

The *Protection of the Environment Operations Act 1997 (POEO Act)* specifies within Section 147 that there is a duty to report a pollution incident if there is a threat or material harm to the environment. A pollution incident is defined as follows:

"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.

If a pollution incident occurs in the course of an activity at the premises so that material harm to the environment (within the meaning of Section 147) is caused or threatened, the person carrying out the activity must immediately implement the pollution incident management response that was developed to meet the requirements of the *POEO Act*.

1.1 Legislative requirements

This pollution incident response management plan (PIRMP) for the Resource Recovery Centre is a document set out to fulfil the requirements of Part 5.7A of the *POEO Act* and the *Protection of the Environment Operations (General) Regulation 2022 (POEO(G) Regulation).* In summary, this provision requires the following:

- All holders of environment protection licences must prepare a pollution incident response management plan (Section 153A, *POEO Act*).
- The plan must include the information detailed in the *POEO Act* (Section 153C) and be in the form required by the *POEO(G) Regulation* (clause 71).
- Licensees must keep the plan at the premises to which the environment protection licence relates or, in the case of trackable waste transporters and mobile plant, where the relevant activity takes place (Section 153D, *POEO Act*).
- Licensees must test the plan in accordance with the *POEO(G) Regulation* (clause 75).

1.2 Site description and operations

The Dunmore Recycling and Waste Disposal Depot is comprised of two licenced sites:

- The Resource Recovery Centre, covered by Environment Protection Licence 12903 (EPL 12903); and
- The putrescible landfill, covered by EPL 5984.

This PIRMP only relates to the Resource Recovery Centre/EPL 12903, which is located on land at 44 and 58 Buckley's Road, Dunmore, 4 km south of Shellharbour (refer to **13.1**). It is over Part Lot 1 DP 110135, Part Lot 1 DP 419907 and Part Lot 21 DP 653009. The site is owned and maintained by Shellharbour City Council.

The Dunmore Recycling and Waste Disposal Depot is subject to the conditions of development consents 55/1995, 166/2009 and 523/2014.

The Resource Recovery Centre is comprised of two weighbridges, a Transfer Station that includes the Community Recycling Centre, Administration Office, and FOGO Facility.

Transfer Station and associated Administration Office
All vehicles are weighed in and out at the weighbridges. Dedicated bays within the Transfer Station are for various separate material streams, including those within the NSW EPA's Community Recycling Centre Program (CRC). Refer to **Appendix 15.7** for Transfer Station Drop Off Bay Layout.

Shellharbour Community Recycling Centre (CRC)
The Shellharbour CRC is located inside the Transfer Station. The quantity of materials held on site (in particular oil based paint) will generally be above the threshold quantities under the *Model Work Health and Safety Regulations*. As a result, a separate "Risk Management Plan for Shellharbour CRC" has been prepared for the drop-off and storage area, covering both design and operations. Refer to **Appendix 14.9**.

The CRC Emergency Plan and procedures have been incorporated into this PIRMP and tested annually in conjunction with the testing of the PIRMP.

The NSW Environment Protection Authority's (EPA) online "drop off waste" reporting system will be necessary for use as a register of hazardous materials stored within the area designated as the CRC.

All Safety Data Sheets (SDS's), personal protection equipment (PPE), training records, a copy of the PIRMP and container labels pertaining to the CRC are stored in the "Safety Centre". In addition, documents required for the CRC are located inside a waterproof box located at the front door of the Administration Office and just inside the site front entrance.

The number of storage receptacles are controlled to limit the total volume of materials held on site at any one time to under 5 tonnes. This should minimise risks and remove the requirement for licence amendments.

The following safety equipment is provided within the CRC designated area:
- Safety shower and eyewash;
- Spill response kit;
- Fire extinguishers;
- PPE;
- First aid equipment and supplies.

Procedures implemented regularly for:
- Testing the operation of the safety shower and eyewash;
- Replenishing the first aid equipment and supplies;
- Replenishing the PPE;
- Replenishing the spill response equipment.

FOGO Facility

The FOGO Facility consists of the following:

- A tunnel composting food organics and garden organics (FOGO) facility – This consists of four primary elements: a pre-treatment building, a loading corridor, composting tunnels, and a bio-filter.
- Lined, external, open-air pads - used to mature composted material after tunnel composting of FOGO.
- Storage area - for incoming self-haul green organics and shredding area for batch processing of material.

The FOGO Facility is operated under contract by Re.Grow. Any emissions of gases, vapours and odours from the composting process are mitigated through:

- Enclosed tunnel composting buildings
- Air being continuously extracted from the pre-treatment and tunnel composting buildings and processed through the site scrubber and bio-filter (controlled environment).
- Ensuring that all facility doors remain closed other than when required to be open for operational reasons.
- Evaluation of climatic conditions prior to the undertaking of any activities, with the potential to create fugitive emissions (in external environments)

Re.Grow operate the FOGO Facility under a contract and lease arrangement, and have their own Emergency Management Plan with monitoring of:

- Bio-filter - maintenance, operation and routine replacement of medium
- Maturation area operations - aeration of pond, avoiding operation in adverse atmospheric conditions and covering of truck
- Stormwater pond - maintenance and monitoring
- Final product and reporting.

1.3 Surrounding land use

The surrounding land is zoned for a variety of uses. Based on the Shellharbour *Local Environmental Plan 2000* and *Local Environmental Plan 2013*, neighbouring land is zoned as: 1(a) 'Rural' 'A', 5(a) 'Special uses', 5(b) 'Special uses (Railways)', 7(a) 'Environmental Protection (wetlands)' or 7(f2) 'Environmental Protection (foreshore)'.

The land use surrounding the site is summarised below.

Reviva Centre – (Tip Shop) Is located at the main entrance, on the northern part of the site. The centre is operated by Resource Recovery Australia, under a contract arrangement with Shellharbour City Council. The Reviva Centre is not a part of EPL 12903 or 5984. The Reviva Centre accepts post-consumer recyclables and at the discretion of the operator, recovers goods and materials for re-sale. Goods include a wide variety of household items such as clothing, furniture, appliances, construction material and tools.

West of Site

- The adjoining area to the west is utilised as a landfill for putrescible waste under licence EPL 5984 Dunmore Recycling and Waste Disposal Depot. The site is owned and operated by Shellharbour City Council.
- To the South West is an environmental protection area including wetlands part of a vegetated corridor that fronts Rocklow Creek.
- To the immediate west, on the western side of the Princess Highway is:
    - Dunmore Lakes Sand Extraction, operated by Dunmore Sand and Soil.
    - South coast train line and State Highway No. 1; and
    - Blue Metal Industries quarry within 2 km of the site.

North of Site:

- Approximately 20 houses along Dunmore Road, which are approximately 200 metres from site. A rural fire brigade is also located in the village;
- Endeavour Energy Shellharbour Depot to the north east;
- Shellharbour links golf course 500 metres to the north of site; and
- Residential development to the north and northeast.

South of Site:

- SEPP 14 Wetlands on the south eastern boundary fronting Rocklow Creek; and
- Further south is the Minnamurra Waste and Recycling Centre on Riverside Drive

East of Site:

- Commercial industry operating "Dunmore Resources and Recycling" located at 57 Buckley's Road Dunmore. It is an existing sand extraction quarry. Currently reprocessing bricks and concrete and blending soils for sale.
- Further east is the Killalea State Park, which includes a mix of modified and natural landscape fronting the coastline.
- Further east is the Boral Dunmore Quarry and Sand and Soil site.

2 Description and Likelihood of Hazards

2.1 Description of the licensed activity and hazards to human health and environment

Scheduled activities authorised by EPL 12903 include:

- Composting and
- Waste Storage.

From these scheduled activities, the hazards to human health and the environment include:

- water pollution;
- air pollution; and
- pollution as a result of an unexpected material disposed on site.

Based on these activities, the severity of any pollution incident should be ranked based on the extent to which a pollution hazard poses to humans and the environment (refer to the below table).

Table 5 - Pollution event severity index

Description of the pollution event	Severity score
Pollution could affect only those in the immediate vicinity	**1**
Pollution could affect others within the site	**2**
Pollution could affect surrounding neighbours	**3**

The below table identifies a list of foreseeable hazards that could occur on this site as a result of regular operating procedures.

Table 6 – Hazard assessment summary table

Type of Pollution	Hazard	Likelihood of hazard occurring	Consequence	Risk Score
Soil and Water Pollution	Ground water pollution by migrating leachate from composting	Rare	Moderate	2
	High sediment load into receiving waters	Rare	Minor	5
	Generation of excessive contaminated water	Major	Minor	4
	Overflow of sediment dam due to flooding	Rare	Moderate	3
	Runoff of surface water	Likely	Insignificant	3
	Soil and water pollution as a result of refuelling plant and equipment on site	Rare	Moderate	3

Type of Pollution	Hazard	Likelihood of hazard occurring	Consequence	Risk Score
	Ignition of accumulated landfill gas	Rare	Major	2
Air Pollution	Excessive impurities, pathogens and/ or toxins admitted to the air	Rare	Minor	5
	Discovery of orphan waste on site	Possible	Insignificant	6
	Uncontained asbestos in waste stream	Possible	Major	1
	Fire in waste stored within Transfer Station	Unlikely	Major	2
	Fire in FOGO stockpile	Possible	Major	1
Other Identified Hazards	Military Ordinance	Rare	Major	2

Type of Pollution	Hazard	Likelihood of hazard occurring	Consequence	Risk Score
CRC materials collected hazards due to: **CF: Container Failure** **or** **CD: Container Dropped** **or** **VC: Vehicle Collision**	CF: Acids & Alkalis	Rare	Minor	5
	CD: Acids & Alkalis	Rare	Minor	5
	VC: Acids & Alkalis	Rare	Minor	5
	CF: Corrosives e.g. lead acid batteries	Rare	Minor	5
	CD: Corrosives e.g. lead acid batteries	Rare	Minor	5
	VC: Corrosives e.g. lead acid batteries	Rare	Minor	5
	CF: Used oils including paints	Rare	Minor	5
	CD: Used oils including paints	Rare	Minor	5
	VC: Used oils including paints	Rare	Minor	5
	CF: Paint Water Based	Rare	Insignificant	6
	CD: Paint Water Based	Rare	Insignificant	6
	VC: Paint Water Based	Rare	Insignificant	6
	CF: Smoke detectors-Low level radioactive substances	Rare	Insignificant	6
	CD: Smoke detectors-Low level radioactive substances	Rare	Insignificant	6
	VC: Smoke detectors-Low level radioactive substances	Rare	Insignificant	6
	CF: Toxic-Fluorescent tubes and light fittings	Rare	Insignificant	6
	CD: Toxic-Fluorescent tubes and light fittings	Rare	Insignificant	6
	VC: Toxic-Fluorescent tubes and light fittings	Rare	Insignificant	6

Refer to the below Risk Management Table to score the risk associated with any particular hazard.

Table 7 - Risk management table

Likelihood	Consequences				
	Catastrophic **Death Permanent disabling injury or extensive permanent environmental damage**	**Major** **Extensive permanent injury or extensive temporary or minor permanent environmental damage**	**Moderate** **Significant non-permanent injury. Overnight hospitalisation. Temporary environmental damage consultants required for assessment and cleanup**	**Minor** **Medical help needed. Treatment by medical professional. Environmental cleanup done in house**	**Insignificant** **Dealt with in house**
Almost certain to occur in most circumstances	1	1	1	2	2
Likely to occur frequently	1	1	2	2	3
Possible and likely to occur at some time	1	1	2	3	4
Unlikely to occur but could happen	1	2	3	4	5
May occur but only in rare and exceptional circumstances	2	2	3	5	6

3 Preventative and Incident Management

As a condition of EPL 12903 the Resource Recovery Centre is required to have in place controls that manage water and air pollution that may occur on site. These have been detailed in the Site Management Plan and are summarised below.

The pollution events that are most likely to occur are those associated with spills on site and extraordinary weather events that could cause overflow into surrounding areas. These should be contained immediately by staff and evaluated by the Operations Coordinator to determine the level of action necessary.

Groundwater and landfill gas pollution events are not likely to be a discrete pollution event and cannot be mitigated with one off control measures. Environmental monitoring is carried out on the adjoining landfill site and results that exceed guidelines over a period of two or more rounds will need to be investigated and remedial options considered as outlined in the Site Management Plan.

Another pollution event that may occur is a fire that may produce offensive or hazardous fumes. A small isolated fire inside the Transfer Station or FOGO Facility may be controlled by staff using fire extinguishers, fire hose reels attached to hydrant pressure or the water trucks stored on site until emergency services arrive. Where smoke or fumes are of unknown nature, the fire will be controlled by NSW Fire and Rescue.

3.1 Water pollution management

3.1.1 Collection system

The FOGO Facility has an area for the maturation of processed compost. This windrow area is lined to prevent any surface water egress from site. The purpose of this barrier system is to provide a physical containment to prevent a pollution event of the groundwater or receiving water bodies. Water captured from this area is diverted to a 20mm first flush system directed to a 1.5ML leachate storage pond. This enables full capture of small rain events, with some discharge via a secondary sedimentation pond in wet weather.

This process allows potentially nutrient and sediment rich waters to be held in detention and treated prior to any discharge from site. This protects the local environment while enabling the various environmental benefits of regional organics recycling.

3.1.2 Surface water and sediment

Sediment fences/silt bags are to be used as necessary. Sediment tracked onto roads will be swept as required. Where necessary, a street sweeper will be engaged on a regular basis. Spill response kits are to be provided and easily accessible at both the Transfer Station and FOGO Facility.

On the site, the surface water is classified into two categories:

- Stormwater – runoff from areas that are directed to sediment control ponds; and
- Leachate- first flush (20mm) of water that has come into contact with processed compost.

The objectives of the surface water controls are to:

- Prevent unacceptable sediment loads in receiving waters;
- Prevent any surface water mixing with waste; and
- Prevent erosion of landscaped areas.

Current practice to control surface water and sediment includes stormwater diversion drains and one sedimentation pond, and are managed in the following ways:

- Clean stormwater coming from adjoining land is intercepted by a well-vegetated drainage channel and directed into Rocklow Creek. Other clean surface water is diverted away from activities and towards the table drain to the east of site and directly to the culvert under the road and discharges offsite. This drainage channel is well vegetated.
- Storm water from the roof catchment is collected and directed to the rain water tanks.
- High speed floating aerator is installed into the leachate storage pond to prevent anaerobic conditions and ensure rapid degradation of the fine organic solids. This will also increase the rate of evaporation, which will help in maintaining working levels within the pond.
- First flush water captured from the compost maturation area goes to the leachate treatment pond and can be reused in the composting process.

Erosion control methods to minimise erosion and sedimentation are used for all works where there is the potential for erosion to occur. The Site Management Plan specifies the following measures used on site:

- reducing the area of exposed soil;
- diverting clean water away from disturbed area;
- reducing flow concentration by the construction of flow spreading bunds;
- reducing the length and steepness of slopes;
- rehabilitating disturbed areas in a timely manner;
- applying sedimentary control measures to intercept and retain sediment on site; (e.g. sediment fences, hay bales, existing table drains around perimeter and sedimentation ponds); and
- inspection of maintenance and cleaning program for control structures to maintain capacity and integrity.

3.1.3 Leachate, groundwater and surface monitoring

A regular ground and surface water monitoring program is undertaken for the adjacent landfill site, under EPL 5984. The monitoring points surround the EPL 12903 site and therefore provide monitoring of the Resource Recovery Centre and FOGO Facility.

3.1.4 Water pollution assessment program

If pollution is encountered during any monitoring event, an assessment and subsequent contingency plan has been detailed in the Site Management Plan and this document. The objective is to have procedures in place in the event that groundwater or surface water pollution is identified.

3.2 Air pollution management

Landfill gas is a by-product generated in the breakdown of waste in a landfill. The Transfer Station will be used by self-haul visitors. Any putrescible waste will be transported daily to the Dunmore Waste Facility operating on licence EPL 5984.

The Transfer Station is well ventilated with vents in all walls enabling the recirculation of air by natural means.

Dust suppression within the Transfer Station will be provided as required.

The FOGO Facility operates under negative air pressure, which diverts all internal air to scrubbers for cleansing. Air emissions from the processing tunnels are directed to the bio-filter.

The premises will be maintained in a condition that minimises or prevents the emission of dust from the premises. All operations and activities occurring at the premises will be carried out in a manner that will minimise the emission of dust from the premises. Trucks entering and leaving the premises that are carrying loads will be covered at all times, except during loading and unloading

3.3 Management of material to landfill

The licence specifies the material that is scheduled to be received and the activity that is allowed for each waste stream. The Site Management Plan details how this material is to be processed, monitored and regulated.

Preventative measures that are in place to prevent a pollution incident as a result of unscheduled material being dumped on site are:

- signage to indicate the types of waste allowed and those prohibited;
- entry via the weighbridge;
- customer declaration of waste;
- waste is screened at the weighbridge and CCTV is available to visually inspect loads;
- screening, separation and checking waste at transfer station;
- recording of all information and archived for at least four years;
- prohibited waste to be immediately notified to the Transfer Station Operator or FOGO Facility operator; and
- regular training of staff to supervise tipping and screening of waste.

3.4 Early warnings

In the event of a pollution incident those at the scene are to immediately contact the Operations Coordinator by mobile phone or UHF radio channel 68.

The Operations Coordinator is to continually assess the situation and inform the staff at the weighbridge of instructions for staff and general public. If the pollution incident presents and imminent and lethal risk to safety then weighbridge staff have the authority from Council's Crisis Management Team to let customers out without paying fees.

The primary means of warning will be across UHF radio on channel 68 (Transfer Station) and channel 66 (FOGO Facility) and mobile telephone.

Where evacuation procedures need to initialised, the siren is to be switched on and the procedure conducted as described in Section **8.2.6**.

The Weighbridge Operator will make the following announcement twice on channel 68

Emergency, Emergency- The evacuation procedure for the Dunmore Resource Recovery Centre has been activated. Please proceed to assembly point located near staff carpark".

After the weighbridge operator completes the announcement, they are to grab the portable T-Way radio and proceed outside and stand in front of the incoming weighbridge to prevent unauthorised vehicle entry (secure access road gate) and direct emergency service vehicles as required. Operations Coordinator to request ReGrow and RRA supervisors clear their areas of staff, contractors and general public and report back when complete.

Where a pollution event has the potential to have impact offsite, communication with surrounding neighbours will be undertaken. The decision to notify adjoining owners will be made by the Operations Coordinator.

3.5 Updates

Updates to staff and the surrounding community will be required for all pollution incidents.

Monitoring data is required to be presented to the EPA in the form of an annual return. Additional updates to the EPA will be directly requested and provided by Waste Services at Shellharbour City Council.

POEO Act requires that all monitoring data is to be published within 14 days of obtaining the data. This is published on the Dunmore Recycling and Waste Disposal Depot section of Council's website www.shellharbourwaste.com.au

In the event that a pollution incident occurs on site requiring immediate attention in the form of clean-up and containment and or evacuation, the early response by the Operations Coordinator is to assess the risk associated with the incident and initiate the incident response.

When the initial pollution has been stabilised by reducing the immediate threat to human health and the environment updates are required to be made until the pollution incident has been rectified.

Onsite updates are made by the Operations Coordinator and will include:

- communication over UHF Channel 68 to workers on the Transfer Station site;
- communication over UHF Channel 66 to workers at the FOGO Facility;
- briefing the weighbridge operator on the status of the incident and instructing them on the response to calls and queries from the public;
- signage upon entry to the site of the status closed or open;
- regular phone updates to the Operations Manager and Executive Manager Waste Services; and
- regular updates by phone to onsite contractors signed in who do not have access to UHF radio.

The information that is required to be conveyed in these updates will include:

- the status of the area or site. Is it open or restricted?
- the area where the incident has occurred;
- the hazard that is present;
- what is being done to rectify this incident;
- when the next update is due; and any additional safety requirements required by staff working near or around the area.

4 Inventory of Pollutants

The main potential pollutants associated with the CRC in the Transfer Station are detailed below.

Table 8 - Potential pollutants in the CRC

Material	ADG Class	GHS Classification	Placard Quantity	Manifest Quantity
Batteries - Household				
Lithium	9 Miscellaneous	None	25kg	250kg
Other Types	None	None	25kg	250kg
Batteries - Lead Acid	8 Corrosive: packing group II	Skin Corrosion: Category 1A	250kg or L	2,500kg or L
Fire Extinguishers	2.2 Compressed gases	Compressed Gas	1,000L	10,000L
Fluorescent Tubes - light fittings	6.1 Toxic: packing group II	Acute toxicity - Category 1	250kg or L	2,500kg
Gas Cylinders LPG or Propane	2.1 Flammable gas	Flammable gases - Category 1	200L	5,000L
Oil - Heating	3 Flammable liquid: packing group II	Flammable liquid: Category 3	1,000L	10,000L
Oil - Motor and Cooking	None	None	1,000L	10,000L
Paint - Water Based	None	None	1,000L	10,000L
Paint - Oil Based	3 Flammable liquid	Flammable liquid		
	Packing Group II	Category 2	250L	2,500L
	Packing Group III	Category 3	1,000L	10,000L

Additional goods that are stored on site include:

- domestic quantities of cleaning products;
- garden waste;
- smoke alarms;
- e-waste;
- polystyrene;
- food and garden organics waste (FOGO);
- metals including white goods, copper, brass, aluminium;
- re-use items – Reviva shop;
- small clean timber items;
- tyres; and
- x-rays.

For all chemicals stored on site, a safety data sheet (SDS) is stored in the “Safety Centre” and Administration Office. Refer to site map (**13.6**) and Transfer Station bay layout (**14.7** and **14.8**).

The main potential pollutants associated with the FOGO Facility are detailed in **Table 9**.

Table 9 - Main potential pollutants in the FOGO Facility

Material	Quantity	Use/storage
Sulphuric Acid 98%	12,000 Litres	Air scrubbers-stored in purpose-built tanks within a concrete bunded area
Diesel	5,000 Litres	Generator- stored in purpose-built diesel tank
Grease & Oils	Various	Minor quantities for mobile plant

5 Safety Equipment

5.1 Personal protective equipment

Staff members are issued with PPE that includes leather gloves, hi-vis clothing, protective eyewear and steel toe footwear. Additional safety equipment for designated tasks is located in the storage areas in the Transfer Station and FOGO Facility.

These include and are not restricted to:

- long and short PVC chemical resistant gloves;
- leather gloves;
- Ty-vek coveralls;
- safety goggles;
- gumboots;
- hearing protection (ear defenders);
- P2 class face masks; and
- respiratory protection.

Other safety equipment is provided in the Transfer Station adjoining the CRC:

- Safety shower and eyewash;
- Spill response kit;
- Fire extinguishers; and
- First aid equipment and supplies.

Spill response equipment include adequate quantities of suitable absorbent materials. This includes a sufficient quantity of resealable waste recovery containers compatible with the substances being kept, marked for emergency use only, and shovels, brooms and scrubbing brushes. Spill response equipment must be located at both the drop-off area and the storage area.

Dry chemical powder type fire extinguishers are appropriate for all types of CRC materials except for cooking oil, for which a wet chemical type is provided.

6 Contact Details

Table 3 provides the list of contacts in the case of a pollution incident or emergency, and **Table 4** provides the contact order.

The Operations Coordinator, Operations Manager and Executive Manager Waste Services must be contacted in the case of any pollution incident or emergency as soon as practical and prior to the close of business depending on the time of event.

Section 9 of this plan outlines in detail the actions immediately to be taken in the event of an incident.

7 Communication

Communication between Dunmore Recycling and Waste Disposal Depot and the community will be through updates on the website located at: www.shellharbourwaste.com.au. This website displays environmental monitoring and the Pollution Incident Response Management Plans under the *Environmental Reports* link.

Community concerns can also be made in the "contact us" email feedback section. More urgent queries can be made by directly calling Waste Services at Shellharbour City Council on (02) 4221 6111.

When a pollution event occurs, the severity of the event will be established by the Operations Coordinator and reported to the Operations Manager and Executive Manager Waste Services.

The following procedures for communications are as follows:

- **Severity 3 event** – neighbours, surrounding businesses and staff notified;
- **Severity 2 event** - internal staff notified as per protocols;
- **Severity 1 event** - internal staff notified as per protocols and the area cordoned off.

The proximity of neighbours is described in **Section 1.3** and shown in **Section 13.1**.

Based on the nature of pollutants at this site, it is unforeseeable that a pollution event on this site could occur that would pose an immediate threat to the surrounding neighbours. In the event that one does occur, the following will be undertaken to inform the identified neighbours:

- NSW Fire and Rescue will be utilised to doorknock residents of Dunmore Village;
- in the event that NSW Fire and Rescue cannot inform the local residents, they will be door knocked by a Council representative and informed of the incident; and
- in the event a resident is not home, a concise note with detailed information will be left on the door. This will include the nature of the hazard to the resident, any action the neighbour is to take and the contact number to call for regular updates.

The below table presents the businesses operating near the site. These business will be contacted in the event of a Severity 3 event.

Table 10 - Businesses operating near the DRWDD

Business Name	Location	Phone Number
Reviva Shop: Resource Recovery Australia Attention Jarrod Roskell	North of site	(02) 4237 5193 0403 672 080
Endeavour Energy Shellharbour Works Depot 7 Buckleys Road Dunmore	North East of Site	Emergency 131 003
Dunmore Resources and Recycling; Glenn Steggles 57 Buckleys Road Dunmore	East of site	(02) 4237 5033

Business Name	Location	Phone Number
The Links Shell Cove (Golf Course) Corner of Southern Cross Boulevard & Shellharbour Rd Shell Cove	500m North East of site	(02) 4237 5955 6am-6pm
Minnamurra Waste & Recycling Centre. Kiama Council, 446 Riverside Drive Minnamurra	500m to the south of the site	(02) 4237 5148 8am-4pm
Re.Grow **Attention Allan Mitchell**	South of site	02 9235 1377 0475 519 962

8 Minimising Harm to Persons on the Premises

8.1 Persons likely to be onsite

Persons likely to be on site are:

- employees of the Dunmore Recycling and Waste Disposal Depot;
- employees of Re.Grow;
- employees of Shellharbour City Council Works Depot;
- contractors e.g. Resource Recovery Australia, Flagstaff, ALS;
- subcontractors working on site e.g., electricians and plumbers; and
- customers.

The site is open to the public during the hours of:

- 7.30 am - 4.00 pm on weekdays;
- 8.00 am - 4.00 pm on weekends and public holidays; and
- Closed Christmas Day and Good Friday with the exemption of kerbside collection vehicles.

Staff will generally be situated around the site within 30 minutes of the opening and closing times. During this time the weighbridge records all vehicles/visitors in and out of the facility.

Subcontractors are required to be inducted onto the site by the Operations Coordinator. They are required to sign in and out at the weighbridge. As part of their induction the Operations Coordinator, Re.Grow Site Manager and/or Supervisor of Resource Recovery Australia are required to sight their safe work method statement (SWMS) for the work they are conducting.

8.2 Measures used to minimise harm to persons on the premises

Minimising harm to persons on the premises is conducted through:

- training;
- signage;
- personal protective equipment;
- administrative procedures such as data management and reporting; and
- engineering controls.

8.2.1 Training

Staff training is an important measure used to minimise harm to persons on the premises. Practices and procedures can be reinforced to those working on site and updates communicated at toolbox meetings. Details of staff training are specified in **Section 10** of this plan.

8.2.2 Signage

Personal safety and visual warning signs are used across the site. These also include pedestrian marking to indicate safe walking areas or loading zones.

8.2.3 Personal protective equipment

Personal protective equipment has been detailed in **Section 5.1** of this plan. Shellharbour City Council requires a risk assessment be undertaken for all tasks conducted. This assessment specified the required PPE for the job.

8.2.4 Administrative procedures

Administrative procedures that are in place to minimise harm to persons include systems and instructions that are followed by all staff at the Dunmore Recycling and Waste Disposal Depot. These procedures relate to the various site areas, including:

- Resource Recovery Centre (EPL 12903);
- FOGO Facility (Re.Grow); and
- The landfill (EPL 5984).

A copy of these systems pertaining to each site are located in the various Operations Coordinator's offices.

These are detailed in the Site Management Plan, Operations and Management Handbook CRC, FOGO Facility Site Management Plan and employee intranet requirements of Shellharbour City Council. Procedures most relevant to this site include:

- Inductions for all staff members;
- Risk assessments undertaken for work on site;
- Daily reports completed by the Operations Coordinator;
- Measurement and recording of wastes received;
- Replacement of signage across the site;
- Dangerous goods register;
- Asbestos Policy and Procedures;
- Operations and Management Handbook-2nd Edition Community Recycling Centres.

These procedures are in place to inform staff of the hazards on site and the different mechanisms to control materials entering the site and those operating on the site.

8.2.5 Engineering solutions

Engineered solutions to isolate and control the hazards that are in place on site to mitigate harm to persons on site include:

- Drainage lines designed to divert surface water;
- Sedimentation ponds to manage surface water sediment loads and retain sediment on site;
- Safety showers – located in the weighbridge, Transfer Station, Leachate Treatment Plant and FOGO Facility;
- Isolated areas for retrieved gas bottles,
- Fire hose reels located through the Transfer Station;
- Eight CCTV locations through the Transfer Station; and
- Fire extinguishers (powder and wet) located in CRC drop off location and storage areas.
- Safety Centre located adjacent to the CRC drop off location and storage area.

8.2.6 Evacuation procedure

An evacuation procedure is in place in the event that the Operations Coordinator needs to assembly all staff onsite to control an incident that has the potential to cause harm to human health on site. The Operations Coordinator and/or the Operations Manager are to assess the extent of the incident and initiate the procedure where there is a risk to persons on site.

NOTE: 000 is the first contact for an emergency as the primary responders to an incident that poses an immediate threat to human health. **Section 9** details the procedure for action during a pollution incident.

Duties
The primary role of the duty wardens is to ensure, as far as practicable, the safety of the occupants and the orderly evacuation from the danger zone to the assembly point.

Chief Warden
This position assumes control of the occupants of the entire site from the time that an incident occurs until the arrival of relevant emergency services. The Chief Warden on site is to be the Operations Coordinator or person appointed to this position in their absence.

Warden
Appointed to a particular work area to facilitate the evacuation and communicate instructions from the Chief Warden. Wardens are required to know who is working in their area and the safe passage to the emergency assembly point. Wardens will be the most senior staff member for a particular work group and will be addressed during the toolbox talk each morning.

Evacuation Procedure
When the evacuation procedure has been initiated:

- The Operations Coordinator instructs the weighbridge operator to switch on the siren. Alternatively, the siren is activated at either end of the Transfer Station. The siren is to be left on until the risk has been mitigated and switched off by the Operations Coordinator.
- Over UHF Channel 68 (Resource Recovery Centre) the weighbridge operator is to announce twice: "**Emergency, Emergency- The evacuation procedure for the Resource Recovery Centre has been activated. Please proceed to either assembly point 1 carpark in front of the Administration Building or assembly point 2 southern end of the property".**
- Over UHF Channel 66 (FOGO Facility) the weighbridge operator is to announce twice: "**Emergency, Emergency- The evacuation procedure for the Resource Recovery Centre has been activated. Proceed to either assembly point 1 carpark in front of the Administration Building or assembly point 2 southern end of the property. Please change to UHF channel 68 now for further instruction".**
- After the weighbridge operator completes the announcement, they are to lift the boom gate, grab a portable UHF radio and front entrance gate key, remove temporary bollards at the rear of the weighbridge building and walk along the incoming road directing traffic to turn around and remove their vehicle from the site to allow emergency vehicles to enter. If the pollution incident presents and imminent and lethal risk to safety then weighbridge staff have the authority from Council's Crisis Management Team to let customers out without paying fees.
- The Weighbridge Operator shall walk along the incoming driveway towards the turning circle near the Reviva and close the steel boom gate, making sure all vehicles have been removed from the drive way and wait for emergency vehicles to arrive. Open the secondary gates and await their arrival. You may need to flag them towards the correct entrance. This will enable the Reviva and the landfill site to operate under normal conditions.
- If members of the public, contractors or subcontractors are present, the staff are to communicate to any public that an evacuation procedure has been initiated and they will be escorted to the emergency assembly point;
- Staff are to ensure they have safely shutdown and isolated their machinery and direct staff to the emergency assembly point;

- Staff are to look around their work area and ensure everyone has left their area;
- Primary assembly point is located in the Administration Office car park. If unable to safely navigate to the primary assembly point a secondary assembly point is located at the southern end of the property boundary near the rear sedimentation pond. Refer to **Section 13.6**. The Operations Coordinator will select the appropriate assembly point.
- At the assembly point the Operations Coordinator is to account for all staff members and signed in visitors and await further instructions from emergency services; and
- Once emergency response staff have been called, the Operations Coordinator is to assess the situation and if the risk has been mitigated, determine if it is okay to return to work or to direct staff to leave the premises.
- Where a pollution event has the potential to have impact offsite, communication with surround neighbours will be undertaken. The decision to notify adjoining owners will be made by the Operations Coordinator.

8.2.7 Assembly points and alarms

The primary assembly point for this site is located at the car park located in the front of the Administration Office. In the event that this site is unsafe, the Operations Coordinator will ensure the secondary assembly point is announced. This decision is based on site conditions.

Audible alarm are located at the Weighbridge, inside the Transfer Station an outside of the Transfer Station facing the Re.Grow facility. These alarms can be heard across the site. The control switch for the alarm is located in the weighbridge. The weighbridge operator is to ensure no unauthorised vehicles enter the site and provide the Operations Coordinator with a report of all vehicles on site.

8.2.8 Contact details for available consultants and contractors

In the event that a consultant or contractor is required at short notice for a pollution incident the following table lists their details.

If a hazardous waste contractor is required, one will be appointed. Waste disposal and spill containment services operate 24 hours.

These numbers do not replace the need to report to the appropriate regulatory authority or call emergency services if there is immediate threat to persons and the environment.

Table 11 - Contact details for consultants and contractors

Consultant	Role	Contact Number
ENRS	Environmental consulting and monitoring of ground water bores, surface water, leachate, gas and dust monitoring	(02) 4448 5490
Ivan Chinnock Chinnock Plumbing Services	Plumber for internal services including potable water, onsite sewage system and leachate	0408 423 725, 4296 1897
Sydney Water	Plumbing to the street junction	Report a fault 132 090 Questions 132 092 Connections 1300 082 746 (Mon-Fri)
Endeavour Energy	Power outage/restore power to site	Emergency 131003 Enquiries 133718/131081 Dial before you dig 1100
Graham Jurd Graham Jurd Electrical Contractors	Power installation and repairs inside the site.	0418 603 259, 4256 6535
Brendan Fraser Operations Manager - Landfill Gas Industries	Landfill gas installation and monthly monitors of flare and vertical and horizontal gas lines	Tel: 07 3211 2225 Mob: 0475 607 277 brendan.fraser@lfgas.com.au www.lgi.com.au

9 Actions During and After Incident or Pollution Event

9.1 Actions during and after incident or pollution incident

The following information details the action to be taken during and after a pollution incident. The primary person could be either the Operations Coordinator, emergency services or other authorised officer from the EPA or Department of Health. Following this, additional information has been included based on site specific hazards.

In the event of a pollution incident:

- The Operations Coordinator/primary person at the pollution incident, where safe to do so, will initiate a response to ensure any immediate threat to human health and environment is reduced. This will include, and not be limited to, removing surrounding people from the danger area and if the pollution incident presents and imminent and lethal risk to safety then weighbridge staff have the authority from Council's Crisis Management Team to let customers out without paying fees.
- The primary person is to ensure all members of the public in the immediate area are removed from any potential danger and asked to proceed to the assembly point;
- The primary person will contact the Operations Coordinator to initiate the response. The Operations Coordinator is responsible for managing the response on site;
- The Operations Coordinator is responsible for documenting the incident. An Incident Reporting Form (**Appendix 14.1**) is required to be complete for each incident; and
- The nature of the incident should be established to whether it is a chemical spill, fire or other;
- The Operations Coordinator will call the emergency response authorities (Fire and Rescue, Ambulance, Police) if required;
- The primary person at the site of the incident, where safe to do so, will initiate spill containment measures appropriate to the pollutant at the instruction of the Operations Coordinator. Information on the chemical/pollutant will be found the SDS located at the "Safety Centre", red manifest box and/or Administration Office and the risk assessment for the appropriate task:
- In the event that it is unsafe to do so, the staff member will be directed to move a safe distance away from the area and prevent others from entering the area until the Operations Coordinator advises otherwise;
- The Operations Coordinator will call the Executive Manager Waste Services and assess the risk based on the pollutant and the severity score;
- The Executive Manager Waste Services will contact the Group Manager Asset Strategy. If the Group Manager Asset Strategy cannot be contacted, the Executive Manager Waste Services will directly call the Director of Amenity and Assets;
- The Executive Manager Waste Services is required to contact the appropriate authorities, dependant on the nature of the incident, as specified in Section 6:
- **Appendix 14.2** presents a Fact Sheet on when to notify SafeWork NSW;
- If the **severity score is 1**, it is a localised low risk incident. The Operations Coordinator is to assign appropriately trained staff or contractors to combat the incident. The area is to be cordoned off with hi-visibility markers and signage:

a) the Operations Coordinator will inform staff over the UHF Channel 68 or Channel 66 on the incident if required; and

b) the Operations Coordinator is to brief the weighbridge operator to inform the public not to enter the area and provide information to staff if required;

- If the **severity score is 2**, the incident requires site evacuation. The Operations Coordinator is to turn on the siren and announce over UHF Channel 68 and Channel 66 that an evacuation procedure is in place and to assemble at the emergency assembly point:

    a) Staff from different work areas are to follow the evacuation procedure directing public and staff to the assembly point;

    b) the Operations Coordinator will ensure no one is left on site and will provide directions as informed by the emergency response crews and in consultation with the Executive Manager Waste Services;

    c) where safe to do so, a Weighbridge Operator will be directed to return to the weighbridge by the Operations Coordinator and provide information to any queries.

- Where the **severity score is 3**, the incident requires site evacuation and surrounding community consultation:

    a) the Operations Coordinator is to initiate the evacuation procedure on site;

    b) Staff from different work areas are to follow the evacuation procedure directing public and staff to the assembly point;

    c) once at the assembly point, employees may be directed by the Operations Coordinator, to door knock the appropriate residences with the potential to be exposed to the pollution incident;

    d) where safe to do so, a Weighbridge Operator will be directed to return to the weighbridge by the Operations Coordinator to provide information to any queries from neighbours; and

    e) once emergency services have the incident under control, access to site will be at the direction of the Operations Coordinator, Operations Manager and/or as instructed by Executive Manager Waste Services.

9.2 Chemical spills

There is the potential for a chemical spill to occur on this site in the form of container failure, vehicle collision or container dropped.

The following points should be undertaken. These points should only be conducted if the area is safe to do so:

- identify the type of incident and chemical involved. The chemical should be detailed on the dangerous goods register onsite;
- determine if the spill can be safely contained by staff on site and that it will not enter any drains;
- where no immediate safety hazard exists read the SDS located in the “Safety Centre” and collect any necessary PPE based on the spill clean-up information;
- equipment on site will be utilised to clean up spills and authorised material will be used from the site to prevent liquid migration into drainage lines;
- if the **spill occurs on an unsealed surface**, initial response will be to stop the leak. The SDS obtained from the “Safety Centre” or Administration Office should

be read for safe handling of the chemical and no open sources of ignition should be in the area:

a) an excavator or bulldozer will be used to move the contaminated soil into a bunded stockpile and where practical move to a sealed surface. If a sealed surface is not possible, medium density polyethylene (MDPE) sheets will be laid out on the ground and the soil stockpiled on this. All stockpiles will be covered with MDPE;
b) the soil will need to be tested to determine if the material is suitable for disposal on site or offsite; and
c) a 24-hour hazardous waste contractor may be called to dispose of the chemical waste.

9.3 Fires

EPL 12903 conditions specify that the licensee must take all necessary steps to extinguish all fires burning as soon as possible. The operational procedures in the Site Management Plan detail fire management protocols. A fire is considered an incident and will need to be reported to the EPA, as specified in the Site Management Plan.

In the event a fire does occur, the safety of persons in the area is of primary importance and should be assessed prior to combating an incident. Emergency services should be contacted where there is any risk to the health and safety of workers. Evacuation and incident procedures are detailed in **Section 8.2.6**.

The following points are noted for a fire incident:

- The Operations Coordinator will immediately contact emergency services “000”;
- A fire should always be approached from the upwind side to prevent exposure to smoke and potentially hazardous fumes;
- Determine the source of fire and check the area for surrounding hazards such as fuel or other flammable liquids. Where safe to do so, remove these away from the area;
- If safe to do so approach with fire extinguisher or fire hose reel;
- All plant on site must have an appropriate fire extinguisher. Extinguishers are also located at the weighbridge; and
- the fire needs to be documented for incident reporting. This should include;

    a) time, date and location of any fire ignited or reported at the site;
    b) prevailing weather conditions and observations regarding smoke directions and dispersion; and
    c) time and date the fire was extinguished.

9.4 Spill response and containment

In the event of a spill the following initial response should be followed:

- Protect yourself by putting on appropriate PPE as required
- Protect others, identifying all people in the vicinity including members of the public,
- Stop the leak (e.g. by turning off the tap, righting the drum or container, or placing in an outer container if possible)
- Contain the leak by placing appropriate absorbent or bunding material in place (using the spill kits that are available)
- Avoid contact with the spilled material
- Advise the Operations Coordinator or Operations Manager

- If you consider it necessary seek specialist advice and/or spill response, providing details of the chemical if known
- Clean up spill
- Complete incident response form as soon as possible after the situation has been contained.

Clean up spills in the following way:

- Contain the spill using appropriate absorbent material
- Scoop up and recover spilled material and put into a waste container
- Repeat using appropriate absorbent material as many times as necessary in order to remove as much of the spilled material as is practical
- Clean brush and shovel of absorbent material, also placing this into the waste container
- Label waste container with details of contents if known including the absorbent material used
- Place waste container into the appropriate area of the CRC (e.g. Applicable to the spilled material).

9.5 Shutdown of processes/equipment

Plant and machinery is operated by suitably trained personnel. In the event that staff need to leave their equipment as a result of a pollution incident the following measures will need to be undertaken to ensure the machinery is shut down and left correctly:

- Move the machinery to a position where there is no risk to the operator or others on site. Following directions of the Operations Coordinator;
- Follow shut down procedures appropriate for the equipment; and
- If the machinery is going to elevate or increase the risk associated with the incident, the Operations Coordinator is to be contacted and an alternative area nominated for shut down.

10 Staff Training

When commencing work in the CRC, operators must be instructed in the following:

- General layout of the drop-off and storage areas, in particular the location of safety equipment such as the Safety Data Sheets, PPE, safety shower, eyewash, first aid cabinet and evacuation points.
- Administrative procedures for controlling risks, such as permit to work systems
- Hazardous areas and restrictions on ignition sources, especially vehicles and portable items
- Security measures, signs and procedures
- Record keeping, in particular recording the quantity of materials currently on hand
- General emergency procedures for the facility, including the Fire Plan and Emergency Evacuation Procedures.

The objectives of the training is to ensure all staff members on site are aware of the hazards in the workplace and the contents of the PIRMP such that they know of their responsibilities in the event of a pollution incident.

Staff that are responsible for the initiation of the PIRMP are familiarised with the PIRMP upon commencement in their role. They are also involved in regular reviews and testing of the PIRMP.

Site specific induction training is delivered by the Operations Coordinator. This training will be specific to the individual role of the staff member and includes a detailed review of the PIRMP.

Records showing who was trained, when they were trained, and by whom, are maintained for the following training:

- Site induction
- Site specific risk register
- Training by the EPA's CRC collection contractor
- Training in the use of the Safe Work Method Statements or equivalent.

Further information is provided to site personnel through toolbox meetings, which are recorded using the template in **Appendix 14.3**, and pre-shift communications.

A training register is to be kept onsite and updated when a staff member undertakes training. This form is included in **Appendix 14.5**.

10.1 Ongoing training

Hazard identification and safe work method statements are required when any new task is to be undertaken on site. This is to be reviewed by staff undertaking that task and will be need to be included in the training register.

Types of ongoing training that may be required for a specific duty may include:

- First Aid Training;
- Chemical Handling Training;
- Training in use of fire extinguishers/ fire management;
- High Risk Work Training; and
- Workplace Health and Safety training.

Periodically (at least annually), the CRC facility operators are to undertake a performance self-assessment of operations at the facility, note any issues, and implement any actions required to ensure the facility is operating safely and efficiently. (Refer to CRC Operations and Management Handbook-2nd edition). This performance self-assessment is to include the following:

- Condition of infrastructure
- Encroachment of surrounding activities
- Licencing-note any changes in operations that may affect licencing
- Materials storage and handling
- Customer supervision
- Workplace health and safety procedures are understood by staff and implemented.

10.2 Simulated exercises

A test of this PIRMP is to undertaken annually, either as a practical drill or a desktop simulation. The objective of this exercise is to test the effectiveness of the plan and provide an interactive training exercise for staff.

The Executive Manager Waste Services is responsible for ensuring these exercises are undertaken. The planning of this exercise is to be undertaken by the Waste Operations Manager and the Operations Coordinator.

The goal of this exercise is to provide a situation that is reflective of an incident that may be encountered on site. Safety is paramount for this exercise and no actual hazard should be conducted (such as the lighting of a fire). These simulated incidents may include:

- Spill; or
- Fire.

If a practical drill is undertaken, the requirements of these exercises are:

- inform those on site that a simulation will be taking place that day;
- inform the public that a simulation will be taking place at the weighbridge and on the website. Specify the time and the date;
- at the toolbox talk on the morning of the simulation, the Operations Coordinator will refresh the staff on the PIRMP and inform them that the simulation will occur that day;
- designate a location on site for the incident to occur;
- define the incident. This will include a pollutant common to site, volume or size of the pollutant, the people involved;
- activate the evacuation procedure and assembly all staff to the assembly point; and
- allocate an officer for auditing/supervising this simulation (this should be an officer who is not responsible for the activation of the plan, e.g. Council's WHS officer or a representative of Waste Services).

The outcome of this exercise is to:

- instruct staff on how to implement this plan;
- contain and manage an incident relative to the site;
- initiate an evacuation;
- document an incident;
- ensure all reporting paperwork is filed and the relevant authorities contacted (only call internal staff and indicate this is part of a simulation. Do not call external authorities); and

- provide feedback to all staff. Where there are non-compliances with the plan, this can be used to refine the PIRMP and provide further training if required.

10.3 Frequency of training

The following table indicates the frequency and location of each type of training on site.

Table 12 - Frequency of training

Training type	Frequency	Reporting Requirement	How records are kept
General Induction	Commencement of employment	Signed on to the induction record	With the employment records of staff at Shellharbour City Council
Site Specific Induction	Commencement of employment	Understanding and sign onto the induction record	Induction records to be managed in accordance with Council's document management system
Toolbox talks	Daily and additional at discretion of Operations Coordinator	Not Recorded	Not Recorded
Toolbox talks	Monthly and additional at discretion of Operations Coordinator	Recorded on form	Form stored in the Site Administration office and records saved to Council's record management system
Other job specific training	On a needs basis or when: • There is a change in procedure • Change in regulations • New equipment • Deficiencies in job performance • Errors in data reporting/procedure	Complete the training record form	Form stored in the Site Administration office and records saved to Council's record management system
Simulation exercises	Yearly	Complete the exercise simulation form	Form stored in the Site Administration office and records saved to Council's record management system PIRMP is reviewed and updated as required.
Performance self assessment	Yearly	Complete checklist	Managed in accordance with Council's document management system

Training type	Frequency	Reporting Requirement	How records are kept
Fire/evacuation Drill	Yearly	Record this with the WHS training	Form stored in the Site Administration office and records saved to Council's record management system

11 Administration of the Plan

11.1 Testing

To ensure compliance with Part 5.7A Section 153E of the *POEO Act* and Chapter 4, Section 75 of the *POEO Regulation*, testing of the PIRMP will occur:

a.) routinely at least once every 12 months; and
b.) within one month of any incident occurring.

Testing will ensure that information contained within it is accurate and that the PIRMP is capable of being implemented in a workable and effective manner.

Testing will be conducted via either desktop simulation, or practical exercises and drills in accordance with **Section 10.2** above. These will be used to test the practical effectiveness of the PIRMP and define areas of improvement. All tests will be documented using the record sheet template provided in **Appendix 14.6**.

A record of tests is provided in **Table 13** below.

Table 13 - Record of PIRMP tests

Date of Test	Person Who Carried Out the Test
23 May 2017	Kerry Penfold
1 June 2018	Don Cesco
22 May 2019	Kerry Penfold
13 May 2020	Kerry Penfold
1 December 2020	Kerry Penfold
14 December 2021	Kerry Penfold
24 November 2022	Kerry Penfold
18 May 2023	Ryan Stirling
22 November 2024	Kerry Penfold

11.2 Reviewing and maintaining

Systematic reviews of the PIRMP will occur to ensure any changes that could affect a pollution incident are captured. **Table 1 - Table of revisions** provides a register of document revisions.

The requirements for the document review are:

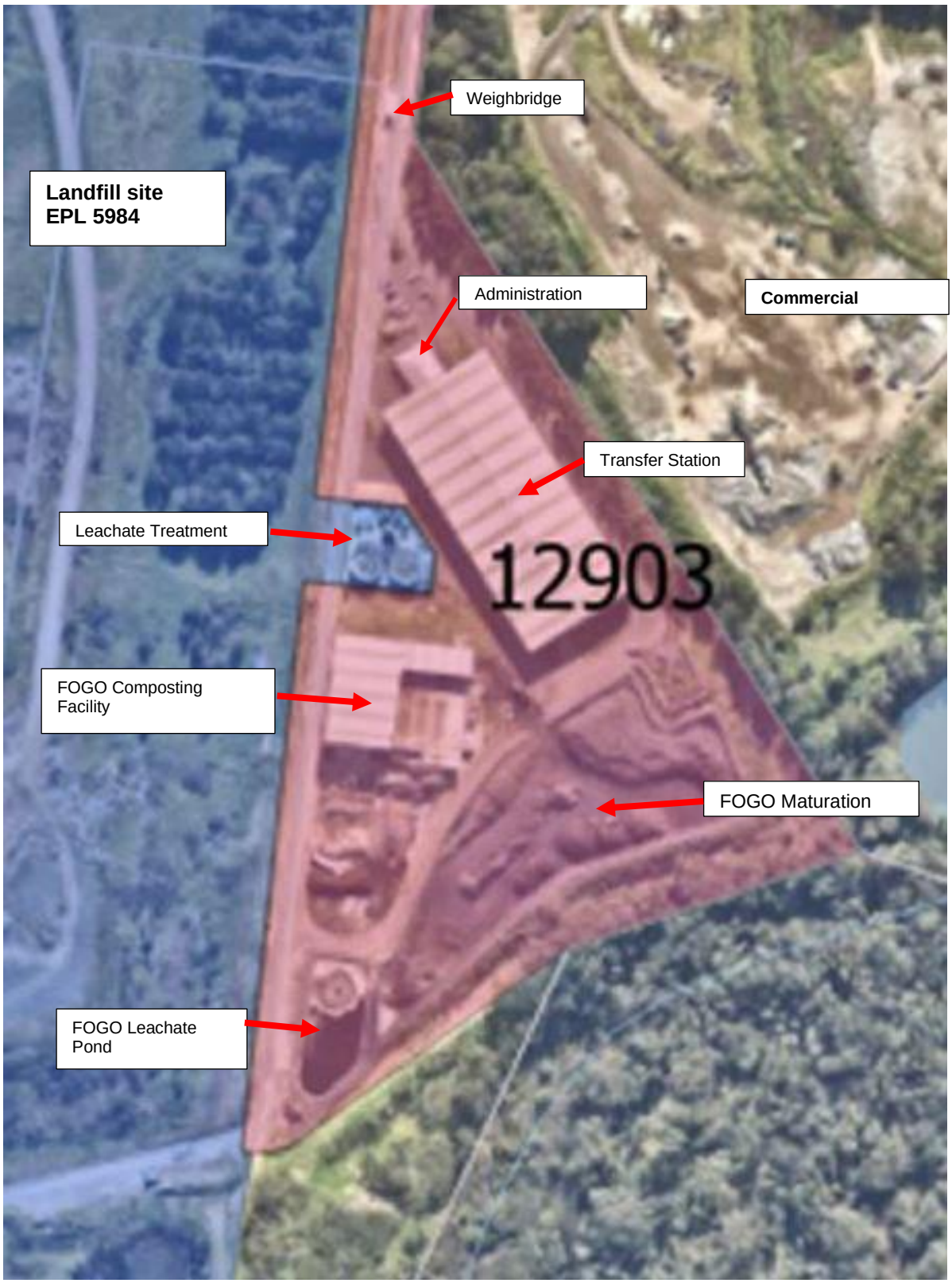
- the review is to be conducted annually from the date of the first version of the document;
- the document is to be reviewed if there is any significant change in process or operation on the site;
- the document is to be reviewed where there is a change in the legislation or the requirements of EPL 12903;
- the document is to be reviewed where the testing of the plan identifies a failure or inefficiency;
- a review is required to be completed within 30 days of a pollution incident; and
- The document is to be posted onto Shellharbour City Council waste website www.shellharbourwaste.com.au

12 References

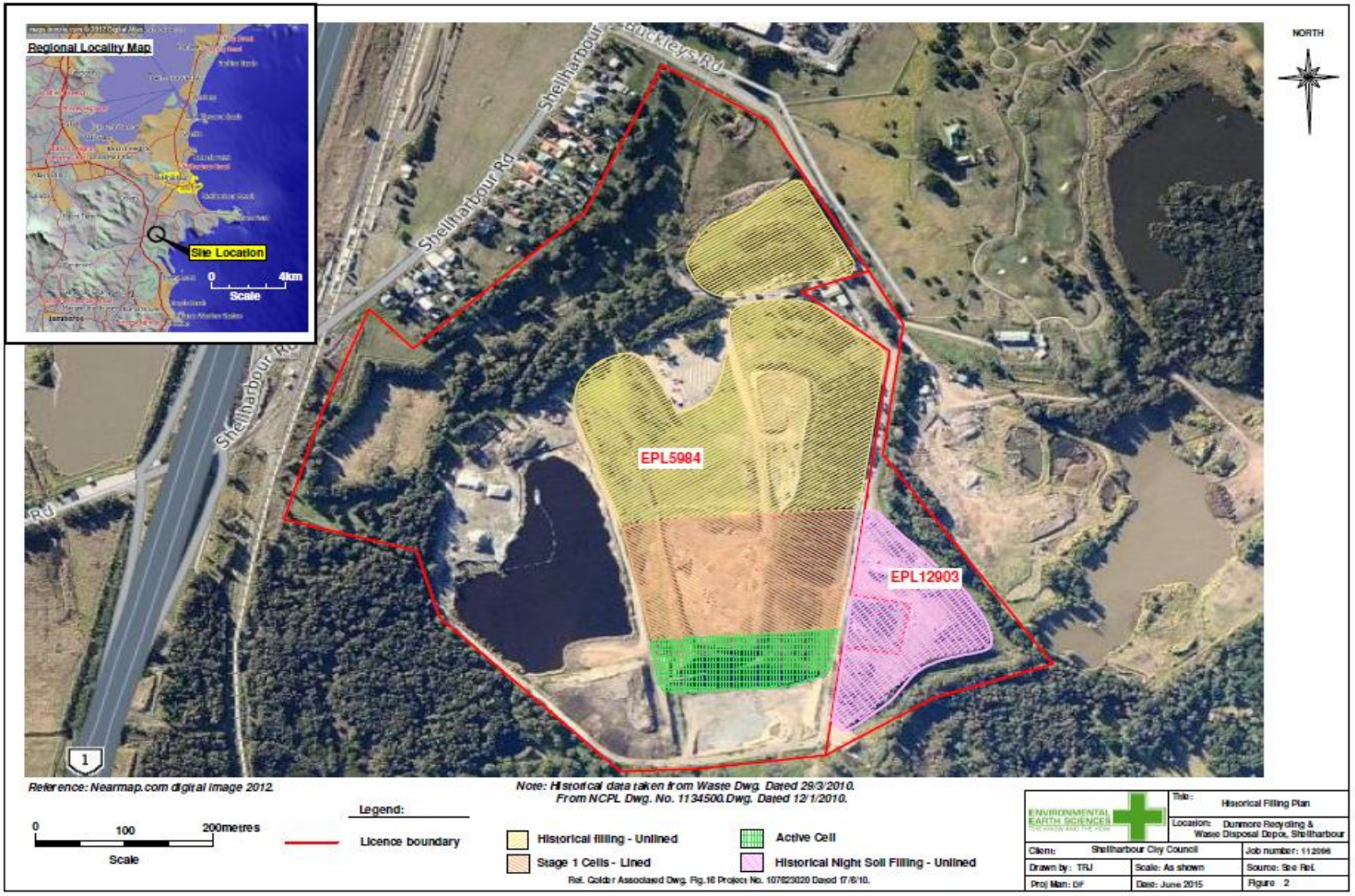
1. Protection of the Environment Operations Act 1997
2. Protection of the Environment Operations (General) Regulation 2022
3. Golder Associates 2010, Site Management Plan: Dunmore Recycling and Waste Disposal Depot. (Report Number 107623020-001-R-RevD)
4. Environmental Protection Authority NSW, *Environmental Guidelines: Solid Waste Landfills,* Second Edition 2016
5. Shellharbour Local Environmental Plan 2000
6. Shellharbour Local Environmental Plan 2013
7. EPA Community Recycling Centres Operations and management handbook-2nd ed.(2017) State of NSW and Environment Protection Authority

13 Figures

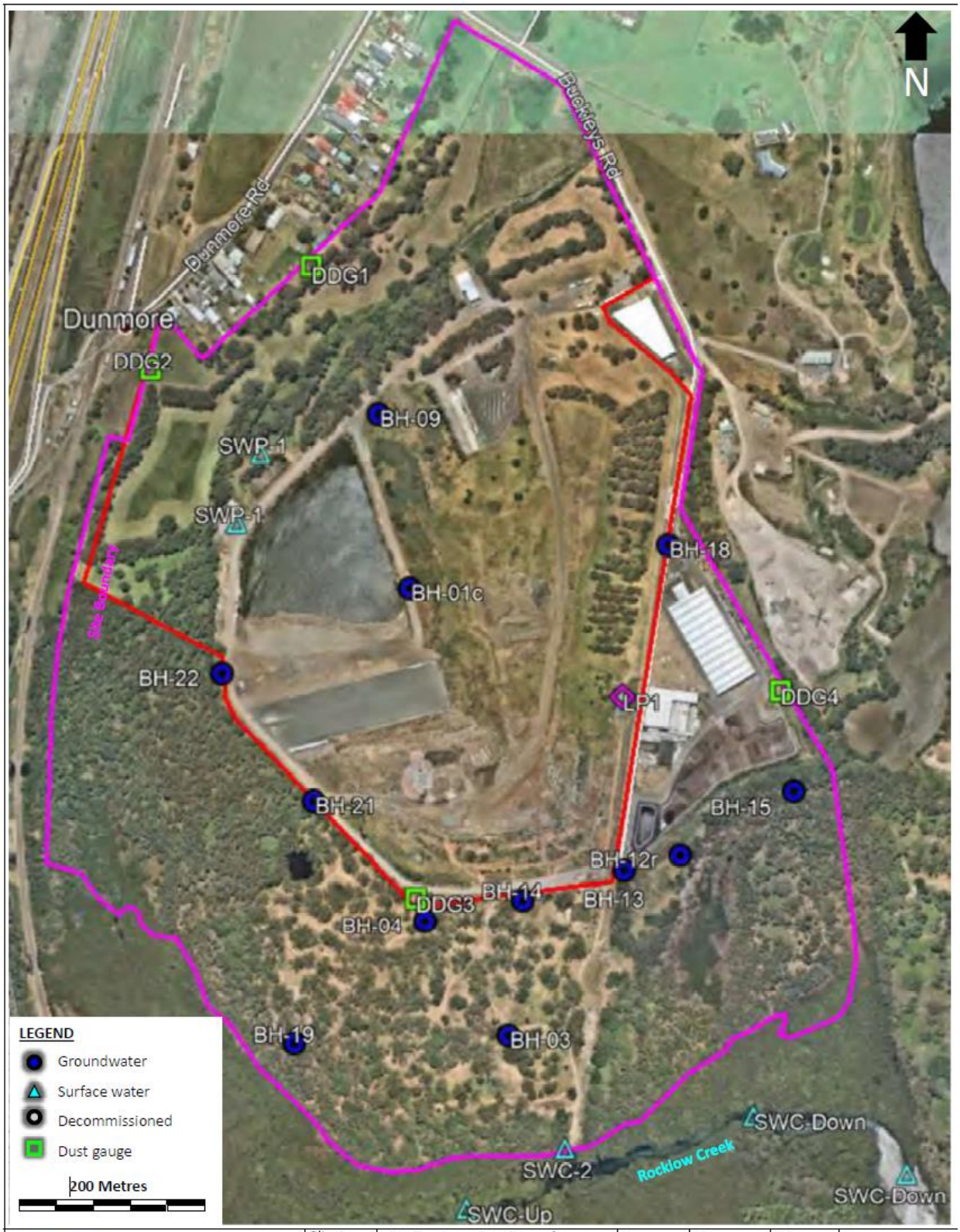
13.1 Site boundaries



13.2 Historical filling on site

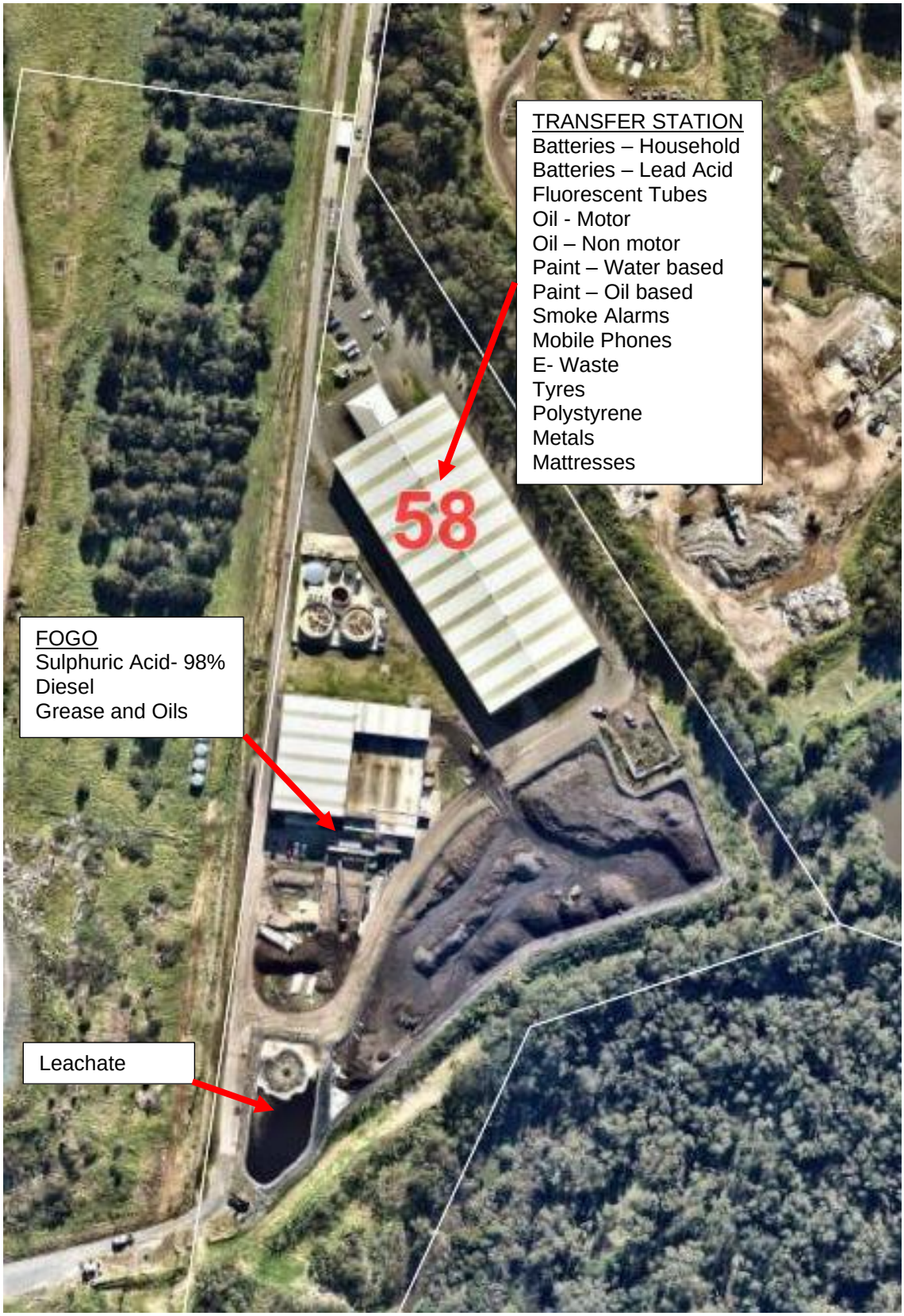


13.3 Groundwater, surface water and dust monitoring

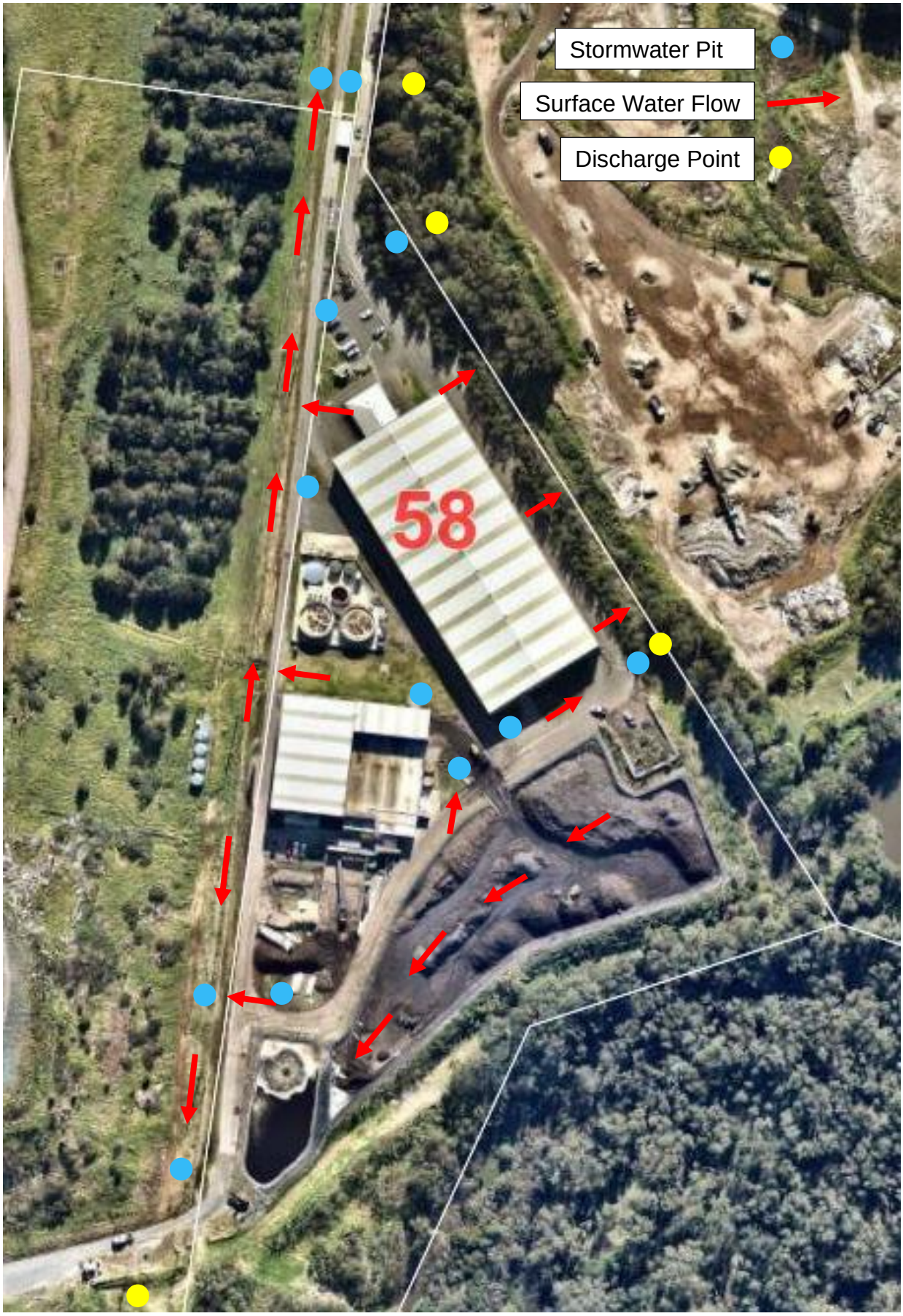


ENRS Environment & Natural Resource Solutions 108 Jerry Bailey Road, Shoalhaven Heads, NSW, 2535 Tel: 02 4448 5490 Fax: 02 90374708 projects@enrs.com.au www.enrs.com.au	Client:	**Shellharbour City Council**	Drawn:	**PL**	Figure:	**2**
	Project:	**ENRS0033**	Source:	**NearMaps**	Date:	**21/05/2021**
	Location:	Dunmore Recycling & Waste Depot 44 Buckleys Rd, Dunmore, NSW	Scale:	**NA**	Title:	**Site Plan**
			Status:	**Rev 2**		

13.4 Pollutants onsite



13.5 Drainage and surface water flow direction



13.6 Site map and evacuation assembly points

14 Appendices

14.1 Incident report form

Incident / Hazard Investigation Report

This form to be completed by the person(s) involved in the incident / hazard and the matter closed out by the Work Health & Safety Manager. Waste Management Officer to endorse prior to filing.	Office Use	
	Report No: (Allocated by Work Health & Safety Manager)	Date Received:

Incident / Hazard report details – To be completed by Incident Reporter

Name:		
Incident / hazard date & time:	Reported to:	Report Date & Time:
Location:		

☐ First Aid ☐ Medical treatment	☐ Work Related Illness ☐ Fatality	☐ Drill rig incident ☐ Property/Plant/Vehicle Damage	☐ Environmental Damage ☐ Hazard / Near Miss

Describe the incident or hazard:

Pollution incidents	
Chemical Name:	Volume of chemical:

Describe Action Taken:

Incident Mechanism:				
☐ Slip, Trip or Fall ☐ Contact with Infectious Agent	☐ Motor Vehicle Accident ☐ Manual Handling Task	☐ Contact Hazardous Substance ☐ Struck by Moving Object	☐ Struck by Falling Object ☐ Other	
Nature of Injury:				
☐ Sprain/Strain ☐ Dislocation	☐ Burn ☐ Fracture	☐ Bruising ☐ Concussion	☐ Injury to Nerve/Spinal Cord ☐ Internal Injury	☐ Cut ☐ Other.....
Body Location of Injury:				
☐ Eye ☐ Ear	☐ Face ☐ Head	☐ Back ☐ Trunk	☐ Shoulder/Arm ☐ Hand/Fingers	☐ Leg/Foot/Toes ☐ Internal Organ	☐ Other .....

Describe first aid or medical treatment:		
Who provided the treatment:	Phone no:	☐ MTI ☐ LTI
Staff member signature:	Date:	No. of days off work:

Incident / Hazard Investigation Report

If witness/witnesses present, please complete witness section.

Were there any Witness's present?	☐ YES	☐ NO
Witness Name:		Phone Number:
Witness comments:		

Work Health & Safety Manager (Root cause analysis, safety bulletin requirements, investigation details)

Detail all deviations from standard conditions, practices and management system failures:

Has this happened before?	☐ YES	☐ NO
Has a Risk Assessment been run for the Task/Hazard related to the incident? Specify the date the risk assessment is to be completed or review.	☐ YES	☐ NO
Was the incident a "Notifiable Incident" under NSW OH&S Law? If yes, attached details of notification?	☐ YES	☐ NO
Did the Incident Require other External Notification? If yes, give details?	☐ YES	☐ NO
Is a Safety Bulletin Required? If yes, what date was the Safety Incident Alert distributed?	☐ YES	☐ NO
Long term injury / follow-up required?	☐ YES	☐ NO

Work Health & Safety Manager endorsement:		
Name:	Signature:	Date:

Waste Management Officer		
Name:	Signature:	Date:

14.2 SafeWork NSW incident notification process

NSW GOVERNMENT | SafeWork NSW

Incident notification

If there is a serious injury or illness, a death or a dangerous incident, you must report it to us immediately on 13 10 50 as an urgent investigation might be needed.

Incidents can be notified 24 hours a day, 7 days a week by calling 13 10 50.

You must also:

- provide first aid and make sure the worker gets the right care
- take care not to disturb the incident site until an inspector arrives. You can help an injured person and ensure safety of the site.
- record it in the register of injuries
- notify your insurer within 48 hours

What incidents need to be notified?

A 'notifiable incident' under the work health and safety legislation relates to:

- the death of a person
- a serious injury or illness of a person
- a potentially dangerous incident

Examples of these incidents are available in Safe Work Australia's Incident notification information sheet.

There is a different process for COVID related notifications.

Use this online form to notify Safework if your workers have contracted COVID at work or were in the workplace while infectious.

If you're still unsure, call us on 13 10 50.

14.3 Toolbox meeting record

Shellharbour CITY COUNCIL

Dunmore Recycling & Waste Disposal Depot - Monthly Toolbox Meeting

7th September 2023, 7.00am - 7.30am

Attendees:

Apologies:

1. General Items

Item Raised	Comment from Management / Action

2. HR Items

Item Raised	Comment from Management / Action

3. Safety Items

Item Raised	Comment from Management / Action

STANDING SAFETY ITEMS

4.

COLLABORATION • ACCOUNTABILITY • INTEGRITY • RESPECT • SUSTAINABILITY

Page 1 of 2

14.4

14.5 Training register

Name of Trainee	Date of Course	Course Name	Description of Course

14.6 Testing of the plan

15.6 Testing of the Plan

Pollution Incident Simulation		
Name of Supervisor: KERRY PENFOLD		
Date & time: 30TH October 2024	Reported to: GLENN HOLDEN	Report Date & Time: 31 OCT 24
Location: TRANSFER STATION		

Names of Attendees
PETER DUDLEY (LOADER) RRA - CONTRACTOR (NATHAN)
KERRY PENFOLD - COORDINATING ACTIONS

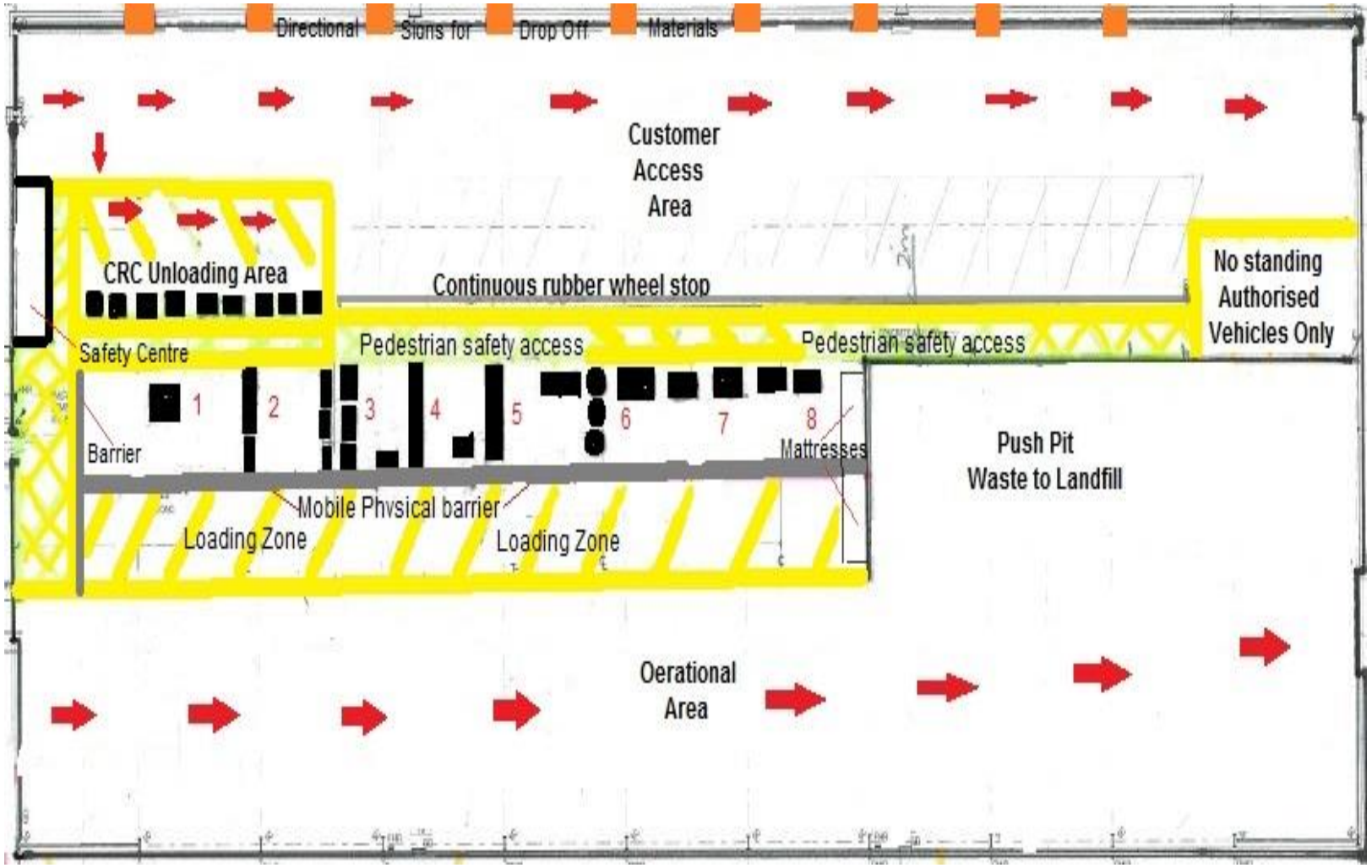
Describe the situation to be simulated	
Location: VERY SMALL FIRE.	Type of incident: HEAT SOURCE ONTO CARDBOARD.
Describe the scenario: VERY SMALL FIRE - SMOULDING IN TRANSFER PIT. NOTICED CARDBOARD ON FIRE, MOVED RUBBISH AWAY THEN HOSED OUT AREA	

Outcomes	
Did the PIRMP get executed in a timely manner?	YES - BEFORE IT SPREAD
Were all staff aware of their responsibilities?	YES
Was the incident handled in accordance with the PIRMP?	YES
Did all relevant authorities get considered?	NO - UNDER CONTROL BUT READY TO ESCALATE IF NEEDED
Was the handling and containment of the incident appropriate?	YES - HOSES & INTERNAL SPRINKLERS USED

Comments and areas for improvement
—
N.I — team reacted quickly to stop the incident

Waste Depot Supervisor		
Name: K PENFOLD	Signature: KP	Date: 31/10/24
Landfill Operations Manager		
Name: G. HOLDEN	Signature:	Date: 1/11/24

14.7 Transfer Station bay layout 1



14.8 Transfer Station bay layout 2

Layout for drop off bays in Shellharbour City Council Transfer Station

BAY	1	2	3	4	5	6	7	8	PUSHPIT	OUTSIDE
GROUP NAME	Community Recycling Centre – Solid (Problem Wastes)	Community Recycling Centre – Liquid & Dangerous DG Class 3	Community Recycling Centre & SCC Managed Problem Waste	Transfer Station Domestic Recyclables SCC Managed Problem Waste	Transfer Station Bulky, Hard,	Transfer Station Bulk to be managed Dangerous DG Class 8	Transfer Station Bulk to be managed by SCC	Transfer Station Bulk to be managed by SCC	Transfer Station	Hardstand area
INCLUDED	CD/DVDs Mobile phones Household batteries Smoke alarms X-Rays	Paint – Oil Paint –Water Oil-Motor Oil-Cooking Paint–spray cans	E-Waste Fluoro globes Textiles Tyres in racking	Paper Cardboard Comingled recyclables Polystyrene Soft plastic	Reuse items Electrical items	Metals (light) Copper Cords Brass Car batteries	Timber offcuts (small)	FOGO Bin Mattresses	Mixed waste - into back end - kerbside pickup material	Pull in bays for:- -Gas bottles -Fire Extinguishers -Garden waste -Self haul whitegoods -Heavy (wt) metal items Mixed Waste Green Waste
Potential Pollutant	Escape Leakage	Spillage By-catch(1) Chemical Reaction Fire	Breakage Fire Escape Fire By-catch(1)	Fire Escape	Fire Escape	Escape Leakage Acid Spillage	Escape Fire	Escape Fire	Escape	Explosion Fire Emissions

Note (1) By-catch are any items not defined as household problem waste usually of a toxic nature. (Source Pge 8 EPA Household Problem Waste Programs 2015/16 Summary Report)

14.9 CRC Risk Management Plan

Provision is to be made at CRCs for the safe storage of “by-catch”- the small volume of higher toxicity materials which may be received as orphan or illegally dumped dangerous or hazardous materials. Hazards for these materials are outlined below. Consideration of these hazards guides appropriate storage and handling of these materials.

Material	Hazard
Acids	Corrosive
Aerosols – CFC based / flammable	Flammable gas / gas under pressure
Aerosols – flammable, pesticide	Flammable gas / toxic
Alkalis	Corrosive
Arsenic based products	Toxic
Cyanide	Toxic
Engine coolants and glycols	Flammable / possibly reactive
Fire extinguishers – non-halon	Compressed gas / low oxygen atmosphere
Flammable liquids – hydrocarbons, fuels and solvents	Flammable
Flammable solids	Flammable
Flares	Explosive
General household chemical	Low level toxic / corrosive
Heavy metal compounds / mercury – elemental	Toxic
Organic peroxides	Reactive / flammable
Oxidising agents e.g. pool chlorine	Reactive
Paint – other, including isocyanates and amines	Flammable / toxic
Paint – metal based	Toxic
PCB materials	Toxic
Pesticides – non schedule X (non-organochlorine)	Toxic / flammable
Pesticides – schedule X (organochlorine)	Toxic / flammable / ecotoxic
Solvents – halogenated	Toxic

Properties of materials to be considered in hazard identification.

Physical state

Compressed gas
Gas dissolved under pressure
Liquefied gas
Cryogenic liquid
Mobile liquid
Viscous liquid
Volatile liquid
Liquid with solids in solution or suspension
Finely divided solid
Granular / flaked solid
Caked or undivided solid
Physical state as stored / handled if different from above

Flammability

Flashpoint
Sustains flame
Auto ignition temperature
Flammability range LEL – UEL
Evolves / produces hazardous combustion products
Explosion potential

Toxicity

Exposure limits
Toxicity
Irritant
Carcinogen (known / suspected)
Mutagen
Sensitiser
Biologically active

Reactivity

With air
With water
With other materials (details)
Self reactive

Corrosivity

Skin
Metals
Other materials

Physical properties

Solubility in water
Boiling point / range
Melting point / range
Odour
Electrical conductivity / resistance
Relative density
Pressure as packed
Vapour pressure
Polarity
pH as stored and handled
pH of 1% solution

Instability

Decomposition conditions
Hazardous decomposition effects
Hazardous decomposition products
Polymerisation potential
Hazardous polymerisation effects
Inhibitor required
Phlegmatiser required
Blanketing material required
Self accelerating decomposition
Temperature
Control temperature
Other special controls required

Ecotoxicity

Atmospheric pollutant
Ozone depleter
Odorous
Visual pollutant
Marine pollutant
Ground water pollutant
Soil pollutant
Relevant half life information
Special neutralising / absorbent material requirements

Sensitivity

To shock
To heat
To radiation
To moisture
To contamination with other materials

The below table outlines the hazards arising from materials that could be received at CRCs and possible risk control measures.

Hazard	Material	Hazard events	L / S / Risk	Possible controls
Corrosive	Acids Alkalis	Container failure	3 / 2 / Medium	Use intermediate containers / spill containment
		Container dropped	3 / 2 / Medium	Use intermediate container / procedures and training
		Vehicle collision	2 / 4 / Medium	Store away from traffic
		Shelving corrosion	2 / 2 / Low	Use intermediate containers
		Shelving collapse	2 / 4 / Medium	Do not overload shelves
		Mixing of incompatible substances	3 / 4 / High	Store acids and alkalis separately / procedures
Flammable	Engine coolants and glycols Flammable liquids – hydrocarbons, fuels and solvents Flammable solids	Container failure in store	3 / 2 / Medium	Use intermediate containers / spill containment
		Vehicle collision	2 / 4 / Medium	Store away from traffic
		Shelving collapse	2 / 3 / Medium	Ensure adequate shelving design
		Ignition of atmosphere	3 / 4 / High	Isolate from ignition / security / ventilate store
		Adjacent fire	1 / 4 / Medium	Separation / fire suppression / emergency response
Toxic	Arsenic based products Cyanide Heavy metal compounds / Mercury – elemental Paint – metal based PCB materials Solvents – halogenated	Container failure	3 / 3 / Medium	Use intermediate containers / spill containment
		Container dropped	2 / 3 / Medium	Use intermediate container
		Vehicle collision	2 / 4 / Medium	Store away from traffic
		Shelving collapse	2 / 3 / Medium	Ensure adequate shelving design
Compressed gas / Low oxygen atmosphere	Fire extinguishers – non-halon	Container failure	3 / 2 / Medium	Emergency response
		Container dropped	3 / 2/ Medium	Procedures and training
		Vehicle collision	2 / 4 / Medium	Separation from vehicles
		Shelving collapse	2 / 4 / Medium	Do not stack cylinders

……. Continued Hazards

Hazard	Material	Hazard events	L / S / Risk	Possible controls
Explosive	Flares	Explosion and fire	2 / 3 / Medium	Store in segregation device
Flammable / toxic	Paint – other, including isocyanates and amines	Container failure in store	3 / 2 / Medium	Use intermediate containers / spill containment
		Vehicle collision	2 / 5 / High	Store away from traffic
		Shelving collapse	2 / 3 / Medium	Ensure adequate shelving design
		Ignition of atmosphere	3 / 4 / High	Isolate from ignition / security / ventilate store
		Adjacent fire	1 / 4 / Medium	Separation / fire suppression / emergency response
Flammable gas	Aerosols – CFC based / flammable	Container failure	3 / 1 / Low	Emergency response
		Ignition of atmosphere	3 / 4 / High	Isolate from ignition / ventilate store
		Adjacent fire	1 / 4 / Medium	Separation / fire suppression / emergency response
Flammable gas / toxic	Aerosols – flammable, pesticide	Container failure	3 / 1 / Low	Emergency response
		Ignition of atmosphere	3 / 4 / High	Isolate from ignition / ventilate store
		Adjacent fire	1 / 4 / Medium	Separation / fire suppression / emergency response
Low level toxic / corrosive	General household chemical	Container failure	3 / 1 / Low	Use intermediate containers / spill containment
		Container dropped	3 / 1 / Low	Spill containment / emergency response
		Vehicle collision	2 / 2 / Low	Store away from traffic / environment
		Shelving collapse	2 / 1 / Very low	Ensure adequate shelving design
		Shelving corrosion	2 / 1 / Very low	Use intermediate containers
		Mixing of incompatible substances	2 / 2 / Low	Store acids and alkalis separately
Reactive	Oxidising agents e.g. pool chlorine	Container failure	3 / 3 / Medium	Use separate cabinet with internal bunding
		Container dropped	3 / 3 / Medium	Use separate cabinet with internal bunding
		Vehicle collision	2 / 4 / Medium	Separate store from traffic
		Mixing of incompatible substances	3 / 4 / High	Use separate cabinet / operating procedures

……. Continued Hazards

Hazard	Material	Hazard events	L / S / Risk	Possible controls
Reactive / flammable	Organic peroxides	Container failure	3 / 3 / Medium	Use separate cabinet with internal bunding
		Container dropped	3 / 3 / Medium	Use separate cabinet with internal bunding
		Vehicle collision	2 / 4 / Medium	Separate store from traffic
		Mixing of incompatible substances	3 / 4 / High	Use separate cabinet / operating procedures
		Ignition of materials	2 / 4 / Medium	Isolate from ignition
		Adjacent fire	1 / 4 / Medium	Separation / fire suppression / emergency response
Toxic / flammable	Pesticides – non schedule X (non-organochlorine)	Container failure	3 / 3 / Medium	Use intermediate containers / spill containment
		Container dropped	2 / 3 / Medium	Use intermediate container
		Vehicle collision	2 / 4 / Medium	Store away from traffic
		Shelving collapse	2 / 3 / Medium	Ensure adequate shelving design
		Ignition of atmosphere	2 / 4 / Medium	Isolate from ignition / ventilate store
		Adjacent fire	1 / 4 / Medium	Separation / fire suppression / emergency response
Toxic / flammable / ecotoxic	Pesticides – schedule X (organochlorine)	Container failure	3 / 3 / Medium	Use intermediate containers / spill containment
		Container dropped	2 / 3 / Medium	Use intermediate container
		Vehicle collision	2 / 4 / Medium	Store away from traffic / environment
		Shelving collapse	2 / 3 / Medium	Ensure adequate shelving design
		Ignition of atmosphere	2 / 4 / Medium	Isolate from ignition / ventilate store
		Adjacent fire	1 / 4 / Medium	Separation / fire suppression / emergency response

14.10 FOGO Facility Emergency Management Plan