POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN FOR BROU LANDFILL FACILITY (EPL 5881), BROU LAKE ROAD, DALMENY NSW 2546

September 2019

FLOW CHART

POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

IS THERE AN IMMEDIATE THREAT TO HUMAN HEALTH AND/OR THE ENVIRONMENT

NO → MANAGE INCIDENT ON SITE (APPENDIX A). CONTACT SITE SUPERVISOR (PH:)

YES ↓

PRIMARY PERSON AT INCIDENT:

1) ENSURE ALL PEOPLE, INCLUDING PUBLIC ARE REMOVED FROM THE DANGER AREA
2) CONTACT SITE SUPERVISOR

→ ALL PEOPLE TO PROCEED TO EMERGENCY ASSEMBLY POINT

SITE SUPERVISOR

1) HAVE **EMERGENCY SERVICES** BEEN CONTACTED (IF REQUIRED)? - 000 OR 112 FROM MOBILE.
2) NATURE OF INCIDENT?
3) CONTACT WASTE SERVICES - ESC
4) DOCUMENT INCIDENT (APPENDIX A)

→ **WASTE SERVICES – ESC**

CONTACT **APPROPRIATE AUTHORITIES** IN THE FOLLOWING ORDER (IF REQUIRED):

1) EPA (131 555
2) MINISTRY OF HEALTH: PUBLIC HEALTH OFFICER
3) WORKCOVER NSW (131 050)

ASSESS RISK AND SEVERITY BY SITE SUPERVISOR

SEVERITY ONE Pollution could affect only those in the immediate area	**SEVERITY TWO** Pollution could affect other within the site	**SEVERITY THREE** Pollution could affect surrounding neighbours
1) SITE SUPERVISOR to restrict access to area 2) WEIGHBRIDGE OPERATOR to inform people of restricted access to this area	1) Initiate EVACUATION PROCEDURE **EVACUATION PROCEDURE** a) SITE SUPERVISOR to broadcast over UHF 24 or mobile phones and inform weighbridge of evacuation procedure b) Staff to escort public and subcontractors to evacuation point c) SITE SUPERVISOR to ensure that everyone has left their work area and moved to evacuation point d) SITE SUPERVISOR to account for all staff at the evacuation point e) When EMERGENCY SERVICES have controlled the incident the SITE SUPERVISOR to assess the situation in consultation with WASTE OPERATIONS COORDINATOR and instruct other staff	
		2) SITE SUPERVISOR and/or Emergency Services to contact surrounding neighbours

CHECKLIST AFTER THE INCIDENT

Has Divisional Manager Waste Services been contacted?	Has the PIRMP been reviewed with 30 days of the incident?
Have the relevant authorities been contacted?	Does the document need to be updated?
Has an incident form been completed?	Has the incident been cleaned up properly?

Contents

1. INTRODUCTION

The *Protection of 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:

"Pollution incident means an incident or set of circumstances during or as a consequence of which there is or 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 does not include an incident or set of circumstances involving only the emission of any noise."

Before a pollution incident needs to be reported, it must threaten to cause, or cause material harm to the environment. According to section 147 of the PoEO Act 'material harm to the environment means:

Actual or potential harm to the health or safety of human being or to ecosystems that is not trivial, or

Actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding $10,000.

1.1 SCOPE AND OBJECTIVES

This pollution incident response management plan (PIRMP) for Brou Landfill Management Facility is a document set out to fulfil the requirement of Part 5.7A of the PoEO Act and contains the details required for pollution incident response management plans as set out within Part 3A of the *Protection of the Environment Operations (General) Regulation 2009*. The content of this plan includes:

- the procedures to be followed by the licence holder in notifying a pollution incident;
- a detailed description of the action to be taken immediately after a pollution incident to reduce or control pollution; and
- the procedures to be followed for coordinating, with the authorities or persons that have been notified, any action taken in combating the pollution caused by the incident and the person through whom all communications are to be made.

1.2 SITE DESCRIPTION AND OPERATIONS

The Brou Waste Management Facility is located on the South Coast of New South Wales, in the Eurobodalla Shire. The facility is located 3 km north of the township of Dalmeny and to the east of the Princes Highway, off Brou Lake Road. The facility covers an area of approximately 8.5 ha extending across Part Lot 197 DP52131 and Lot 197 DP 752131 which is leased from NSW State Forests.

The landfill began operation in 1979 and has been continuously operating since its development. Eurobodalla Shire Council commenced daily operation of the facility on 1 July 2008 when Council took over operational control from the former contractor run operation.

1.3 SURROUNDING LAND USE

The Brou Landfill Facility is surrounded by land zoned under the Eurobodalla Local Environment Plan as RU3 Forestry.

The closet land suitable for residential dwellings is land zoned RU1 Primary Production located approximately 0.75km north of the landfill.

2. DESCRIPTION AND LIKELIHOOD OF HAZARDS

2.1 DESCRIPTION OF THE LICENSED ACTIVITY AND ACTIVITY

This Pollution Incident Response Management Plan (PIRMP) addresses EPL licence 5881 and the scheduled activities of composting and waste disposal (application to land).

From these scheduled activities, the hazards to human health and the environment have been identified. These include:

- Water pollution;
- Air pollution; and
- Pollution as a result of an unexpected material deposited on site.

Based on these activities, the severity of any pollution incident should be ranked on the extent to which a pollution hazards poses to humans and the environment (Table 1).

Table 1: Ranking of Pollution Incident

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

Table 2 identifies a list of foreseeable hazards that could occur on this site as a result of regular operating procedures. Table 1 is used to score the risk associated with any particular hazard.

Table 2: Hazard Identification

Type of Pollution	Hazard	Likelihood of hazard occurring	Consequence	Severity Score
Water Pollution	Overflow of leachate pond into sediment pond	Possible	Moderate	1
	Overflow of leachate pond into receiving waters	Unlikely	Minor	1
	Overflow of sediment pond with high sediment load into receiving waters	Possible	Moderate	1
	Groundwater pollution by migrating leachate	Unlikely	Minor	1
	Runoff of surface water from disturbed parts of site carrying high sediment load	Possible	Moderate	1
	Runoff from fuel or oil spill entering receiving waters	Unlikely	Moderate	1

Soil Pollution	Soil or surface pollution as a result of fuel, chemical or oil spill in public areas	Unlikely	Moderate	2
Air Pollution	Landfill gas levels above recommended guidelines	Possible	Minor	1
	Accumulation of landfill gas in confined space/building causing an asphyxiation hazard	Unlikely	Moderate	2
	Ignition of accumulated landfill gas	Rare	Major	3
	Excessive impurities, pathogens, and/or toxins emitted to the air	Rare	Minor	3
	Excessive dust emitted to the air	Rare	Minor	2
	Landfill fire resulting in the production of non-hazardous smoke	Possible	Minor	2
	Landfill fire resulting in the production of hazardous smoke	Rare	Minor	3
Unexpected findings	Uncontained asbestos in waste stream	Possible	Major	1

2.2 SENSITIVE ENVIRONMENT CONSIDERATIONS

Brou landfill facility is located in close proximity to a number of sensitive environments including a SEPP 14 wetland, a marine park estuary and two endangered ecological communities. Distances to sensitive environments are: 590 metres to a Freshwater Wetland Endangered Ecological Community, 1.05 km to Coastal Saltmarsh Endangered Ecological Community, 1.25 km to Brou Lake Marine Park, 1.4 km to SEPP 14 wetland. Potential hazards include overflows from the sediment and leachate ponds entering these ecosystems via overland flow. The increased risk to these sensitive environments has been considered and deemed to be low due to the distance of overland flow. Water quality samples have been taken from previous overflows in the drainage line between the leachate pond and the freshwater wetland and analysis concluded that the quality of the overflow improves during the time it takes for the leachate to reach the sensitive water body.

3. PRE-EMPTIVE ACTIONS TO BE TAKEN

3.1 WATER POLLUTION MANAGEMENT

Water on the site has been classified into three categories:

Sediment laden water: runoff from disturbed areas, roads and operational areas which may require treatment for sediment only.

Clean stormwater: runoff from areas that have not been disturbed and considered clean.

Leachate: Any water that has come into contact with the active tip face, mixed waste, green waste and uncovered landfilled wastes.

Current practice to control surface water and sediment water includes diversion drains and a stormwater pond and sediment pond. Surface water is managed in the following ways:

- Surface water considered leachate drains to the leachate pond and is irrigated within the leachate irrigation area;
- Clean stormwater is diverted to the stormwater pond;
- Sediment laden stormwater is diverted away from active filling area and drains to the sediment pond.

3.2 AIR POLLUTION MANAGEMENT

Landfill gas is a by-product generated in the breakdown of waste in a landfill. The ELP licence for this site does not specify any requirements relating to the monitoring or management of landfill gas that may be generated on this site. The EPA Environmental Guidelines for Solid Waste Landfills recommend that landfill gas should be contained by a combination of the leachate barrier system, capping and revegetation, and covering of waste. Benchmark 17 of the Landfill Guidelines outline that surface gas migration monitoring should demonstrate that the cover material is covering the emission of landfill gas and the threshold concentration for closer investigation and potential action is 500 parts per million (v/v) of methane at any point on the landfill surface.

Pre-emptive actions to prevent fire at the facility include:

- Conducting regular litter control;
- Maintenance of fire breaks, boundary fences and lockable gates;
- Accepting only permitted waste;
- Maintaining machinery in good working order to prevent risk of sparks;
- Maintenance of fire fighting equipment;

3.3 MANAGEMENT OF MATERIAL TO LANDFILL

The licence specifies the type of material that is scheduled to be stored or processed onsite as well as the activity that is allowed to be undertaken for each waste stream.

Pre-emptive measures are in place to prevent a pollution incident as a result of unscheduled material being dumped on site. Initial screening occurs at the weighbridge and includes:

- Signage to indicate the types of waste allowed and those prohibited;
- Entry via weighbridge only;
- Customer declaration of waste;
- Waste screened at weighbridge;
- Screening and checking waste at disposal locations;

- Recording of all information and archived for at least four years;
- Special waste to be immediately notified to the site supervisor
- Regular training of staff

4. INVENTORY OF POLLUTANTS

Landfill gas is a pollutant associated with this environmental protection licence as it is generated as a result of historical land filling activities. Landfill gas is unable to be quantified in terms of volumes.

Leachate generated from the landfill areas is stored in a leachate holding pond. The leachate pond is fenced to prevent public accesses.

A green waste storage and processing area is located onsite. Green waste is mulched periodically and green waste compost is stockpiled onsite.

Additional goods with the potential to pollute that are stored onsite include:

- Petrol and diesel
- Hydraulic oil
- Herbicides
- Compost accelerator
- Empty gas cylinder storage
- Waste cooking oil
- White goods and metal storage
- Batteries
- E-waste
- Farm chemical container storage
- Tyres: non-commercial only
- Construction and demolition waste

5. SAFETY EQUIPMENT

5.1 PERSONAL PROTECTIVE EQUIPMENT

Staff members are issued with PPE that includes gloves, protective eyewear and steel toe foot ware. Additional safety equipment available for designated tasks are as follows:

- PVC chemical resistant gloves
- Coveralls
- Ear defenders
- Safety goggles
- Face masks
- Hard hats
- Gum boots

5.2 FIRE FIGHTING EQUIPMENT

Fire fighting equipment at Brou landfill is available to manage fire outbreaks at any part of the landfill. Fire extinguishers are to be used to extinguish minor fires and are located in the weighbridge, lunch room and machinery shed. Fire extinguishers are fully accessible, mounted, sign-posted and charged and /or sealed.

6. CONTACT DETAILS

Table 3 presents the list of contacts that may need to be contacted in the case of a pollution incident.

Table 3: Contact Details

Name/Organisation	Contact Number	Role	Person required to call
Site Supervisor	0419 260 573	Activating the plan and managing on site response	First person on scene
Emergency Services: Fire and Rescue NSW, Ambulance, Police, HAZMAT.	000 or 112 for mobile phones	First responders. They are responsible for controlling and containing incidents. Can be used to contact surrounding neighbours	Site Supervisor
Waste Operations Officer	0400 690 517	Managing the response	Site Supervisor
Waste Services – Eurobodalla Shire Council	4474 1024	Contact appropriate regulatory authorities, manage the response	Waste Operations Officer or site supervisor
ESC Public and Environmental Health Unit	0428 160 627	Managing the response and contacting all authorities	Coordinator
Environment Protection Agency	131 555	Regulatory authority under PoEO Act for this licenced site	Waste Operations Officer or ESC Public & Environmental Health Unit
Ministry of Health via Public Health Unit	1300 066 055	In the event there is an impact to the community and workers the Public Health Unit provides advice on the response	Waste Operations Officer
WHS Hotline	4474 74 74	In the event that there is an impact on staff health or safety	Waste Operations Officer
WorkCover NSW	13 10 50	To be contacted in case of a notifiable incident	WHS Officer

7. COMMUNICATING WITH NEIGHBOURS AND THE LOCAL COMMUNITY

When a pollution event occurs, the severity of the event will be established by the landfill supervisor. The following procedures for communications are as follows:

- **Severity 3 pollution event** – neighbours, surrounding businesses and staff notified;
- **Severity 2 pollution event** – internal staff notified as per protocol set out in section 10
- **Severity 1 pollution event** – internal staff notified as per protocols set out in section 10

The proximity of neighbours is outlined in Figure 1 and described in section 9.

Impacts on the community due to pollution incidents are variable and depend on type, location, volumes of spills and other factors. Communication methods will be used on a case by case basis

In the event that a pollution event occurs that would pose an immediate threat to the surrounding neighbours the following will be undertaken:

- NSW Fire and Rescue will be utilised to door knock the surrounding residences;
- In the event that NSW Fire and Rescue cannot inform the local residents, they will be door knocked by the landfill staff supervisor or a representative and informed of the incident;
- 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.

In the event of a substantial chemical or leachate spill into a waterway Council staff are to go to prominent public area of the affected waterway and erect signage to warn users to avoid swimming.

8. MINIMISING HARM TO PERSONS ON THE PREMISES

8.1 PERSONS LIKELY TO BE ON SITE

Persons likely to be on site are:

- Employees of the landfill
- Council employees
- Subcontractors
- Public

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

- 7am – 4.45pm Monday to Friday
- 8am – 3.45pm weekends and public holidays
- Closed Christmas Day, New Year's Day, Good Friday and Easter Sunday.

Subcontractors and other council employees are required to sign-in and out at the weighbridge. As part of signing on to the site, sub-contractors are required to have a safe work method statement for the work they are conducting and this should be sighted by the site supervisor as part of their induction to the site.

8.2 MEASURES USED TO MINIMISE HARM TO PERSONS ON THE PREMISES

Minimising harm to persons on the premises if conducted through:

- Training;
- Personal protective equipment;
- Administrative procedures; 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.

8.2.2 PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment has been detailed in Section 5.1 of this plan. Eurobodalla Shire Council requires a risk assessment to be undertaken for all tasks conducted. This assessment specifies the required PPE for the job.

Staff are required to have all specified PPE appropriate to the task they are undertaking. Additional PPE can be located in the machinery shed.

8.2.3 ADMINISTRATIVE PROCEDURES

Administrative procedures in place to minimise harm to persons on site are systems that are followed by staff at Brou Landfill Facility. These are located in the site supervisor's office and include:

- Inductions for all staff members;
- Risk assessments undertaken for work on site;

8.2.4 ENGINEERING SOLUTIONS

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

- The leachate pump and pond to manage leachate from the landfill;
- Drainage lines designed to divert stormwater away from the landfill;
- Sedimentation ponds to manage surface water sediment loads;
- Hazardous waste storage shed;
- Bunded waste oil storage area;
- Fire extinguishers located in weighbridge and lunchroom;
- Spill kits;
- Isolated caged area used chemical storage containers.

8.2.5 EVACUATION PROCEDURE

An evacuation procedure is in place in the event that the Site Supervisor needs to muster all staff and visitors offsite to control an incident that has the potential to cause harm to human health.

9. SITE PLAN

Figure 1: Map of Brou Landfill Facility Site Features

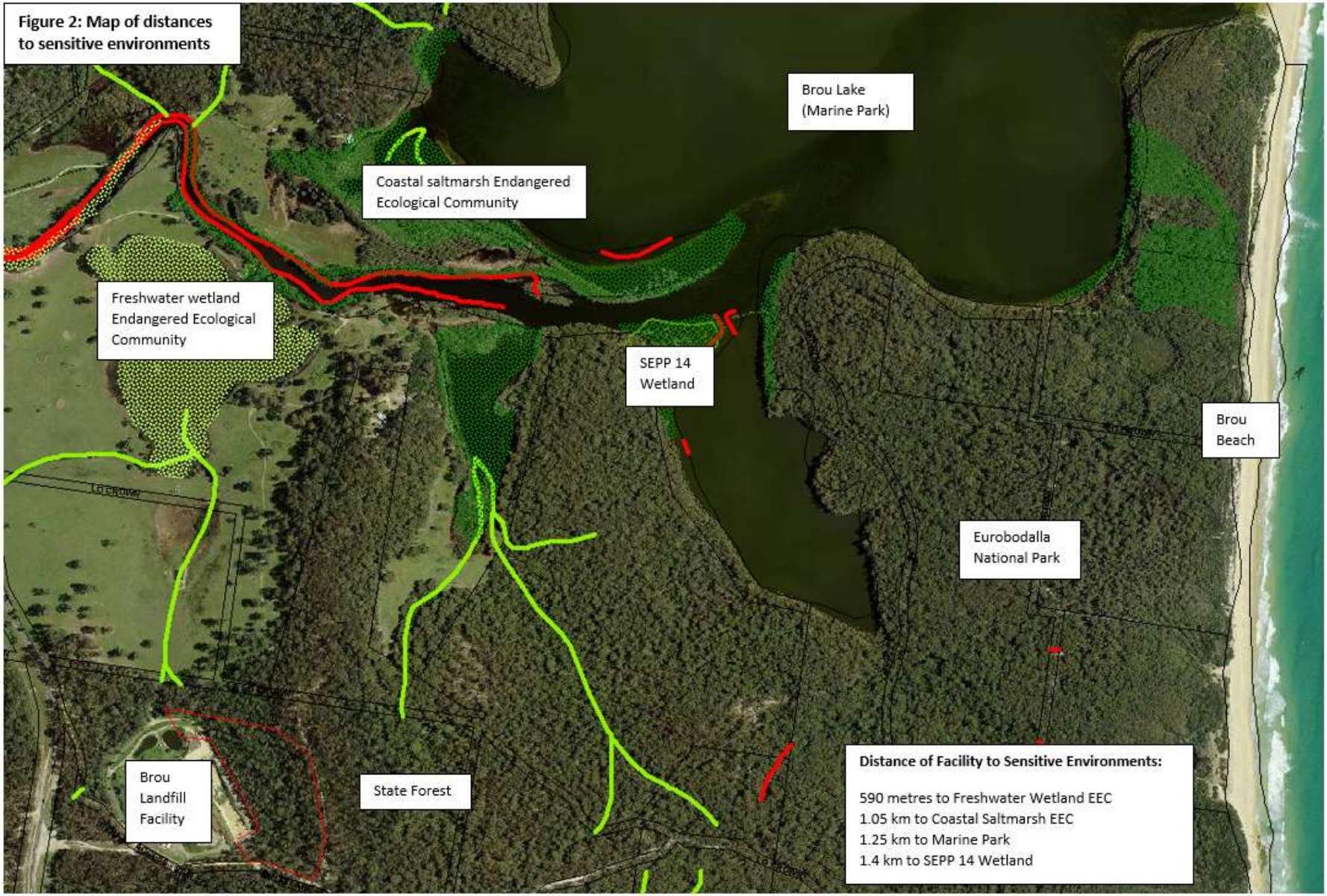


Figure 2: Map of distances to sensitive environments
Brou Lake (Marine Park)
Coastal saltmarsh Endangered Ecological Community
Freshwater wetland Endangered Ecological Community
SEPP 14 Wetland
Brou Beach
Eurobodalla National Park
Brou Landfill Facility
State Forest
Distance of Facility to Sensitive Environments:
590 metres to Freshwater Wetland EEC
1.05 km to Coastal Saltmarsh EEC
1.25 km to Marine Park
1.4 km to SEPP 14 Wetland

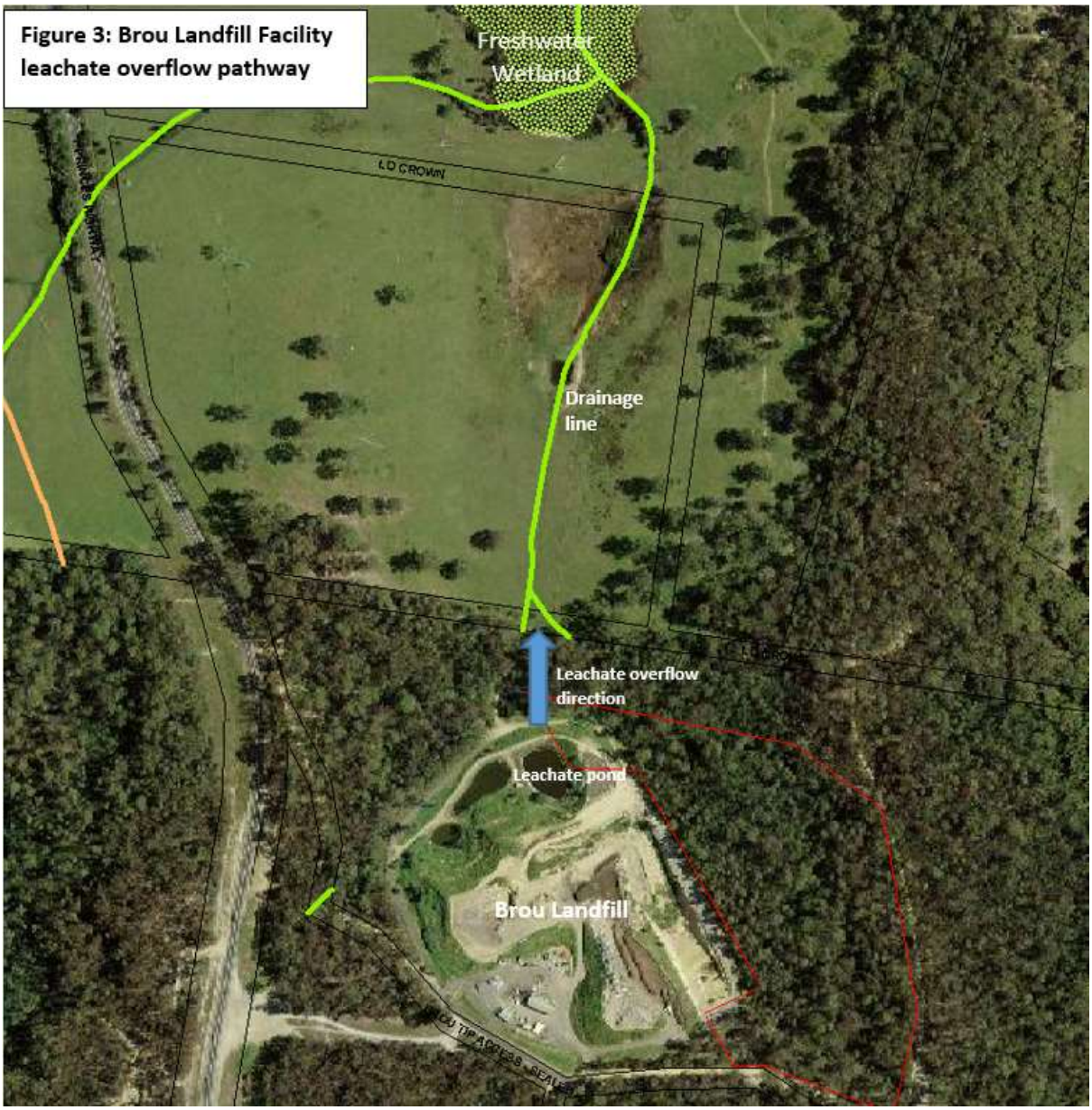


Figure 3: Brou Landfill Facility leachate overflow pathway
Freshwater Wetland
LD CROWN
Drainage line
Leachate overflow direction
Leachate pond
Brou Landfill

10. ACTIONS TO BE TAKEN DURING OR IMMEDIATELY AFTER A POLLUTION INCIDENT

The pollution events that are most likely to occur are those associated with spills and extraordinary weather events that could cause an overflow into the surrounding areas.

Another pollution event that may occur is a landfill fire that may produce offensive or hazardous fumes. A regular landfill fire is controlled by staff workers using a water truck stored on site until emergency services arrive. Where smoke or fumes are of unknown nature, the fire is to be controlled by NSW Fire and Rescue.

In the event that groundwater monitoring data reports results indicate groundwater pollution has occurred, this data will be reported and published on the council website.

Where landfill gas monitoring has exceeded its trigger values, the EPA is required to be notified within 24 hours.

Groundwater and landfill gas pollution events recorded as part of regular monitoring are not likely to be discrete pollution events and cannot be mitigated with one off control measures.

10.1 EARLY WARNINGS

In the event of a pollution incident those at the scene are to immediately contact the site supervisor by mobile phone.

The site supervisor is to assess the situation in correspondence with the Waste Operations Officer and inform the staff at the facility of instructions for staff and public. The weighbridge will be the direct point of contact with the public and will be briefed in the status of the situation and response to public and other staff members.

The primary means of warning will be mobile telephones.

Where a pollution event has the potential to have impact offsite, communication with surrounding neighbours will be undertaken. Section 7 details the procedure for interacting with surrounding community.

10.2 UPDATES

Updates to staff and the surrounding community will be required for all pollution incidents. Where monitoring values exceed guidelines, the monitoring data will be presented on the website of council.

Monitoring data is required to be presented to the EPA in the form of an annual return as set out in the Environmental Protection Licence.

PoEO Act requires that all monitoring data is to be published within 14 days of receiving the data. The data is published on the Waste Services section of council's website.

In the event a pollution incident occurs on site that requires immediate attention in the form of clean-up and containment and/or evacuation, the early response by the site supervisor 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 environments, updates are required to be made until the pollution incident has been rectified. On site updates will be made by the site supervisor and will include:

- Communication over mobile phone to workers on the site;
- 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 to the status of the landfill (closed or open); and
- Regular phone updates to the Waste Services Divisional Manager.

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

- The status of the area or site: open or restricted;
- The area where the incident has occurred;
- The hazard that is present;
- What is being done to amend the incident
- When the next update is to occur; and
- Any additional safety requirements required by staff working near or around the area.

10.3 ACTIONS DURING AND AFTER A POLLUTION INCIDENT

The following information details the action to be taken during and after a pollution incident. Following this, additional information has been included based on site specific hazards. A flowchart, summarising the pollution incident processes detailed below, to be followed during a pollution incident has been included in the executive summary of this document.

In the event of a pollution incident:

- The 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 incident area;
- 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 weighbridge;
- The primary person will contact the site supervisor to initiate the response. The site supervisor is responsible for managing the response on site;
- The site supervisor is responsible for documenting the incident. An incident reporting from (Appendix A) is required to be completed for each incident; and
- The nature of the incident should be established to whether it is a spill, fire or other;
- The site supervisor will call the emergency response authorities (Fire and Rescue, Ambulance, Police, HAZMAT) if required;
- The primary person at the site of the incident, where safe to do so, will initiate spill containment measures appropriate to the pollution at the instruction of the site supervisor.
- 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 site supervisor advises otherwise;
- The site supervisor will call the Waste Operations Officer;
- The Waste Operations Officer will contact the appropriate authorities, dependent on the nature of the incident, as specified on Table 4;

Low Risk Incident

Examples of low risk incidents: Overflow from leachate pond, soil pollution incident, uncontained asbestos in waste stream, Landfill gas levels above guidelines

- If the severity score is 1, it is a localised low risk incident. The site supervisor 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;

Medium Risk Incident

Examples of medium risk incidents: Accumulation of landfill gas in confined spaces, excessive dust emitted to the air, landfill fire resulting in non-hazardous smoke, fuel, chemical or oil spill in public areas

- If the severity score is 2, the incident requires site evacuation. The site supervisor is to announce over mobile phones that an evacuation procedure is in place and to assemble at the emergency assembly point:
    - All staff on site must follow the evacuation procedure and direct the public to the muster point;
    - The site supervisor is to ensure that no one is left on site;
    - The landfill is to be closed and signage placed to restrict public entry to the facility;
    - Where safe to do so the site supervisor may direct the weighbridge operator to return to the weighbridge to restrict entry to the site by the public and to provide information to any queries.

High Risk Incident

Examples of high risk incidents include: ignition of accumulated landfill gas, excessive impurities, pathogens, and/or toxins emitted to the air, landfill fire resulting in the production of hazardous smoke

- Where the severity score is 3, the incident requires site evacuation and surrounding community consultation:
    - The site supervisor is to initiate the evacuation procedure on site;
    - All staff on site must follow the evacuation procedure and direct the public to the emergency assembly point;
    - Once at the emergency assembly point, on directions of the site supervisor, a staff member or emergency services will be directed to door knock all residences with the potential to be exposed to the pollution incident; and
    - Where safe to do so the site supervisor may direct the weighbridge operator to return to the weighbridge to restrict entry to the site by the public and to provide information to any queries.
- Once emergency services have the incident under control, access to the site will be at the direction of the Waste Services Divisional Manager and Site Supervisor.

10.3.1 CHEMICAL SPILLS

There is the potential for a chemical spill to occur on site. The following points should be undertaken in conjunction with the actions to be taken by any pollution event listed above. These points should only be conducted if the area is safe to do so:

- Identify the type of incident and chemical involved. This is a visual inspection. Only approach if safe to do so. The chemical may be detailed on the dangerous goods register on site;
- Wear PPE: the spill may not only be liquid but emit a gas or powder;
- 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 MSDS for the spill clean-up information;
- Where safe to do so isolate spilled material with spill kit, place material into hazardous waste storage bags using a square mouth shovel and clean all equipment used;
- For larger spills, where safe to do so, utilise on site machinery to clean up spill and place sand to prevent liquid migration into drains;
- If the spill occurs on an unsealed surface, the initial response will be to stop the leak. The MSDS should be read for safe handling of the chemical and no open sources of ignition should be in the area:
    - Use machinery to move 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 ground and the soil stockpiled on this. All stockpiles will be covered with MDPE; and

- Send soil samples to laboratory for testing to determine if the material is suitable for disposal on site or at another site; and
- A hazardous waste contractor may be called to dispose of the chemical waste.

- Complete incident report.

Where the spill is too dangerous to contain:

- Potential hazards include fire, explosion, toxic fumes, contact with hazardous chemicals;
- Evacuation and incident procedures detailed in Section 10.3.should be followed;
- Emergency services should be contacted where there is any risk to the health and safety of workers;
- Keep all staff and public away from spill.

Where toxic fumes from spill are drifting over neighbouring properties:

- Evacuation and incident procedures detailed in Section 10.3.should be followed;
- Emergency services should be contacted where there is any risk to the health and safety of workers;
- All staff on site must follow the evacuation procedure and direct the public to the muster point;
- Once at the muster point, on directions of the site supervisor, a staff member will be directed to door knock all residences with the potential to be exposed to the pollution incident.

10.3.2 OIL SPILLAGE

- Determine the nature, amount and location of the oil spill;
- Determine if the oil spill can be safely contained by staff on site and that it will not enter any drains;
- Arrange and install traffic control if required;
- Where safe to do so isolate spilled oil with spill kit, place material into hazardous waste storage bags using a square mouth shovel and clean all equipment used;
- For larger spills, where safe to do so, utilise on site machinery to place sand to prevent liquid migration into drains and to clean up spilled oil.

10.3.3 DUST

- Non-compliant air quality should be reported promptly and corrective action taken to mitigate any impacts;
- Dust emissions can be controlled by:
  - Vehicle speed restrictions
  - Water spray on unsealed areas
  - Wetting down of uncovered stockpiles
  - Wetting down of raw material before crushing and screening

Dust control measures to be implemented will depend on the activities occurring onsite at the time and will involve:

- Increasing the frequency of watering exposed areas and stockpiles
- Increasing the frequency of watering paved and unpaved roads
- Modifying site activities such as ceasing all open air processing
- Immediately clean spills of dusty materials

Results of ongoing monitoring are to be reported to key personnel so that dust control and operational procedures can be reviewed and modified, if required.

10.3.4 FIRES

Landfill fires can cause significant impact on local air quality through odour and smoke. They can also spread outside the landfill, triggering a grass or bush fire.

Fire prevention is as important as the development of efficient means of fighting it. Refer to section 3.2 for pre-emptive actions to prevent fire.

Accidentally ignited landfill fires normally start for one of three reasons:

- Spontaneous combustion: where a buried heat source, resulting from biological decomposition or chemical oxidation, produces a rise in temperature if the waste mass cannot dissipate the heat faster than it is being produced - a process known as 'thermal runaway'. The life cycle of a landfill includes two periods of significant temperature rise which unfortunately coincide with elevated oxygen levels and, during the first period, maximum settlement when the landfill mass is prone to collapse and further ingress of oxygen;
- Legacy heat: the inadvertent burial of a heat source;
- Piloted ignition: from a point heat source, happens when ignited waste is buried in the landfill.

Surface fires

The most commonly used tactic to extinguish landfill fires can be described as "soak, separate and soak again". Water is applied to contain and reduce the intensity of the surface fire so that machinery can then be used to pull apart and overturn waste.

One often successful response to a surface fire is the rapid placement of a layer of fine granular material on the fire, which is spread out and compacted with a landfill compactor before significant heat has built-up. This reduces exposure to oxygen and, crucially, closes the voids within the burning waste reducing the surface area of the waste particles exposed to heat. Top soil works better than sand and clay.

Underground fires

If conditions are right, landfill fires can burn underground. Underground fires are extremely difficult to combat and can burn for days or even weeks. The heat from the fire can cause chemicals to volatilise or break down and enter the environment. Chemicals that may be released in smoke from a landfill fire include paints, solvents, cleaners, consumer based pesticides and chemical additives.

It is not usually possible to extinguish deep-seated fires using water except where the operator has sufficient equipment and water to extinguish all burning waste. Where extinguishment is not possible, adding water to the landfill exacerbates the fire because the water adds oxygen to the fire.

Attempts to dig out deep seated fires with inappropriate plant may exacerbate the situation by admitting air. To combat deep-seated fires, key elements are to minimise oxygen ingress to the fire by capping off the area and surcharging the area with clay like material.

Tyre stockpile fires

Landfill fires that contain a high proportion of tyres can become uncontrollable in a few minutes, burn with an intense radiant heat and are very difficult to extinguish. Burning tyres can generate toxic smoke and lead to health risks through the inhalation of particles.

Tyre fires are very difficult to extinguish and frequently burn on the inside even if they are extinguished on the outside.

Tyre fires may take several days to extinguish and cool down. Large tyre pile fires are best extinguished by separating the burning tyres with excavation equipment and extinguishing manageable amounts through submergence in water or burial with soil, reducing the supply of oxygen.

Pasteurised garden organics stockpile fires
Spontaneous combustion in large stockpiles of garden organics can be caused by relatively dry materials or dry pockets, large well insulated piles, limited air flow, long time for temperatures to build up and biological activity.

Biological activity generates heat within organic matter, a goal for composting. However, the temperature is controlled by heat loss through evaporation of moisture, aeration and sometimes mechanical turning. The moisture content of the windrow may become too low, reducing the effectiveness of the material to cool through evaporation.

In large windrows with limited oxygen, a smouldering fire starts when materials reach their ignition temperature. This type of fire produces gases, smoke and heat, but no light. When more oxygen is present, a glowing fire can occur, producing smoke, more heat and higher temperatures. With abundant oxygen, a flaming fire with very high temperatures can occur.

Surface fires on garden organics windrows can be extinguished by applying water or chemicals.

Fires caused by spontaneous combustion should be extinguished by removing material from the pile using earth moving equipment until the burning sections are isolated. The coolest material from the edge of the pile should be removed first. The burning section should then be extinguished using water.

Recycling bay fires
Small fires within the waste/recycling bay are to be extinguished using the fire extinguisher in the first instance or water cart to saturate site;

Reporting of fire incidents

Condition O4.1 of EPL 5881 requires that the licensee must extinguish fires at the premises as soon as possible. Condition L2.2 requires that the licensee must ensure that measures are taken to prevent stockpiles of tyres from catching fire.

The fire shall be documented in accordance with section R4.1 of EPL licence 5881.

A fire is considered an incident and will need to be reported to the EPA.

Action to be taken in the event of a landfill fire
In the event of a fire at the landfill, the safety of persons in the area is of primary importance and should be assessed prior to combating the incident. Emergency services should be contacted where there is any risk to the health and safety of workers. Evacuation and incident procedures detailed in Section 10.3.should be followed.

- The site supervisor will immediately contact the Emergency Services and local fire brigade;
- Fire fighting shall be undertaken in association with the NSW Fire Brigade;
- **Telephone: Emergency 000 and ask for NSW Rural Fire Brigade or Eurobodalla Fire Control Centre (02) 44742855**
- Secure the area involved in the fire;
- The source of the fire should be determined. Check the surrounding area for hazards such as fuel or other flammable substances. Where safe to do so, remove these away from the area;

- Treat smoke as toxic. Monitor the smoke plume and weather/wind changes;
- The fire should always be approached from the upwind side to prevent exposure to smoke and potentially hazardous fumes;
- Fires in the stockpile areas are to be smothered by covering with soil;
- Larger fires will be controlled using water and soil as appropriate. Regularly saturate area to ensure that fire does not flare up;
- Monitor area for two day to ensure fire does not re-establish

10.3.5 LANDFILL GAS

Methane is a simple asphyxiant, high fire hazard, high explosion hazard, and is lighter than air.

In the event that monitoring detects landfill gas exceedance, table 4 (below) should be followed to manage this pollution incident.

Table 4: Landfill Gas

CH4 concentration	Location	Action to be taken by person undertaking monitoring	Action to be taken by Waste Services Divisional Manager	Action to be taken by site supervisor
500 PPM (1% LEL)	At the site surface of the landfill	Inform waste services	Review monitoring frequency and prepare for additional monitoring measures. Inform relevant stakeholders	No action
	In on-site buildings	Inform waste services	Review monitoring frequency and prepare for additional monitoring measures. Inform relevant stakeholders	No action
12,500 PPM or greater (25% LEL)	At the site surface of the landfill	Inform waste services	Review monitoring frequency and prepare for additional monitoring measures. Inform relevant stakeholders. Where positive flow detected inform EPA.	No action
	In on-site buildings	Inform waste services. Receive instruction to inform site occupants and follow evacuation procedure	Inform EPA and other relevant stakeholders of gas concentration and that evacuation procedure has been implemented.	Initiate evacuation procedure of building

10.3.6 LEACHATE OVERFLOW

Landfill leachate is generated by excess rainwater percolating through the waste layers in a landfill. A combination of physical, chemical, and microbial processes transfer pollutants from the waste material into the percolating water. The biodegradability of the organic content of the waste and the compaction of the waste layers make the landfill an anaerobic environment, giving many similarities to the composition of leachates among different landfills.

Leachate from the most common type of landfill may be characterised as a water-based solution of four groups of pollutants: dissolved organic matter, inorganic macro components, heavy metals, and xenobiotic organic compounds.

The major potential environmental impacts related to landfill leachate are pollution of groundwater and surface water.

Surface water pollution caused by leachate includes oxygen depletion, changes in stream fauna and flora and ammonia toxicity.

Procedure

All runoff from the landfill area is treated as leachate. A spillage of leachate may arise due to the overtopping of the leachate storage dam due to heavy rain, escape of leachate from the leachate irrigation area, or broken leachate drains or pipes.

Leachate collection system failure

In the event of a leachate collection system failure, the system concerned is to be isolated, the leachate collected and removed, and the collection system emptied and repaired to eliminate the problem.

Leachate pond overflow

In the event of the release of leachate from the leachate storage pond the following actions shall be taken during or after identifying the pollution incident:

- Isolate the area and ensure there is no access.
- Notify EPA immediately as required by EPL
- Undertake water quality sampling in accordance with EPL requirements
- Arrange for additional tanker loads of leachate to be taken to sewage treatment plant. Liaise with councils Liquid Trade Waste Officer for approval.

Spills due to vehicle accidents

Spills of leachate could potentially occur as a result of an incident involving a truck en-route to the sewage treatment plant or at the leachate pond during extraction.

The resultant environmental risk is limited to where spills could enter a sensitive environment such as a waterway. The effects on surface water resources would depend on the quantities released but could potentially be significant.

In the event of a vehicle accident in which leachate is spilled on the road, Emergency Services are to be contacted using 000 telephone number.

All incidents of pollution will be reported to the EPA in accordance with section R2 of the EPL, notification of environmental harm.

10.3.7 GROUNDWATER CONTAMINATION

In the event of any identified contamination of groundwater the following steps will be taken:

- The EPA will be informed within 24 hours of receipt of result of exceedance;
- Resample from all groundwater bores on site within 14 days and forward results to EPA;
- Review results to determine if an adverse trend is developing, or whether the initial exeedance was an isolated incident;
- If a trend has been established which indicates deteriorating groundwater quality then a suitable groundwater remediation action plan will be developed.

10.4 SPILL CONTAINMENT EQUIPMENT

Plant equipment is made available to manage and contain the foreseeable pollution spills on site. In the event of a spill, on site plant equipment will be used to move soil to bund and prevent the pollution moving into the drains or waterways.

The sedimentation ponds will collect sediment from surface drainage from within the site. If required sediment from the sedimentation ponds can be removed and disposed of in the landfill.

A spill kit is kept near the weighbridge to manage small chemical spills that may occur.

10.5 SHUTDOWN OF PROCESSES/EQUIPMENT

Plant and machinery is to be operated by suitably trained personnel. In the event that staff are required 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. Follow directions of the site supervisor;
- Follow the shutdown procedures appropriate for the equipment; and
- If the machinery is going to increase the risk associated with the incident then the site supervisor is to be contacted to nominate an alternative area for shut down.

10.6 CLEANUP PROCEDURES

When a pollution incident has been stabilised and any immediate threat to human health and the environment has been mitigated, clean-up of the polluting material will be required. The MSDS for each chemical stored on site provides clean-up instructions.

The environmental protection licence for the site specifies the waste that is allowed to be accepted. If the polluting material is not allowed to be accepted on site it is to be disposed of by an appropriate contractor licensed to handle the material.

If the waste is suitable to be disposed of on-site standard waste disposal practices will need to be maintained.

10.7 DISPOSAL OF LIQUID WASTE TO LANDFILL PROCEDURE

11. STAFF TRAINING

The objective of the provision of training to accompany this plan is to ensure that all staff members on site are aware of the hazards in the workplace and the content of the PIRMP such that they know their responsibilities in the event of a pollution incident.

11.1 SIMULATED EXERCISES

A simulated test of this PIRMP is undertaken annually. The objective of this exercise is to test the effectiveness of the plan and provide an interactive training for staff.

Waste Services is responsible for ensuring these exercises are undertaken. The planning of this exercise is to be taken by the Waste 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 will be present.

Requirements of the simulation exercise is to:

- At the toolbox talk in the morning of the simulation, the site supervisor 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 the site, volume or size of the pollutant and the staff involved;
- Activate the evacuation procedure and muster all staff to the assembly point;
- Allocate an officer for auditing/supervising this simulation (this should be an officer who is not responsible for the activation of the plan).

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 completed and the relevant authorities contacted (only call internal staff and indicate this is part of a simulation. Do not call external authorities);
- 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.

12. TESTING OF THE PLAN

12.1 MANNER IN WHICH THE PLAN IS TO BE TESTED AND MAINTAINED

The testing of this plan will be based on an annual review of the plan in relation to simulated testing, incident reporting for the past year and any changes in procedures and processes that occur on site.

A simulation and evacuation drill will be used to test the practical effectiveness of the plan and define areas for improvement. Reporting of incidents will be used to highlight areas of improvement in the plan. Annual reviews will be used to implement any changes that have occurred in the process of running the landfill or regulations of operating under this licence.

Incident reporting and incident simulation is required to be documented. A reporting sheet can be found in Appendix B.

12.2 REVIEW OF THE PLAN

The objective of this PIRMP is to provide a description of the hazards and operations associated with the Environmental Protection Licence on site and the procedures and actions in place to mitigate any pollution event that may arise. This PIRMP is a working document that is designed to ensure that any changes that could affect response to a pollution incident are captured.

Appendix C is the register of review identification of the current version of the PIRMP. This will include the document name, the person responsible for the review, the date of the change and the changes that were made.

11. REFERENCES

Protection of the Environment Operations Act 1997

Protection of the Environment Operations (General) Regulation 2009

Environmental Protection Authority NSW, *Environmental Guidelines: Solid Waste Landfills*, 1996.

Protection of the Environment Operations (Waste) Regulation 2005.

Appendix A: Incident Reporting Form

HAZARD INCIDENT REPORT FORM - SAFESTART

Reference No.				
Reported by *(name & position)*			**Date**	___/___/___
Reported to *(name & position)*				
Department				
Division		**Section**		
Location				
Type	☐ **Incident** – see SafeStart section *(i.e. something has happened that needs to be reported)*		☐ **Near Hit / Miss** - see SafeStart section *i.e. no injury or damage but something almost happened that could have resulted in an injury or damage to property*	
	☐ **Workplace Hazard** *(i.e. the environment – physical & psychological)*		☐ **Hazardous Work Practice** *(i.e. the way work is done)*	
Description of Hazard/Incident (what is it that can harm people or damage property? What happened?)				
SafeStart	Where type is an incident or near hit / miss - Please tick the most appropriate response below			
– was it?	☐ You	☐ The other guy	☐ Equipment failure	☐ Other
State	☐ Rushing	☐ Frustration	☐ Complacency	☐ Fatigue
Critical Error	☐ Mind not on task	☐ Eyes not on task	☐ Line of fire	☐ Loss of balance / grip
What do you think needs to be done to eliminate or control the hazard?				
Signature			**Date**	___/___/___

Supervisor *(name)*			
Supervisor's Action/Comments	☐Hazard Eliminated	☐Risk Assessment Required	☐Workplace Assessment Required
	Signed		Date ___/___/___

OH&S Rep (name)			
OH&S Reps Comments			
	Signed		Date ___/___/___

Manager (name)			
Manager's Comments			
	Signed		Date ___/___/___

Appendix B: Testing of the Brou Landfill Facility PIRMP

Pollution Incident Simulation

Name of Supervisor of Simulation:

Date & Time	Reported to:	Report Date & Time:
Location:		

Names of Attendees

Describe the situation to be simulated	
Location:	Type of incident:
Describe the scenario:	

Outcomes	Yes/No
Did the PIRMP get executed in a timely manner?	
Where all staff aware of their responsibilities?	
Was the incident handled in accordance with the PIRMP?	
Did all relevant authorities get considered?	
Was the handling and containment of the incident appropriate?	

Comments and areas for improvement

Site Supervisor		
Name:	Signature:	Date:
Waste Operations Coordinator		
Name:	Signature:	Date:

Pollution Incident Simulation

Name of Supervisor of Simulation: Meg Edmonds

Date: 18/03/2015	Reported to: Amanda Jones	Report Date & Time:
Location: Brou Landfill Facility		

Names of Attendees
Wayne Healy
Noel Hand

Describe the situation to be simulated	
Location: Brou Landfill Facility	Type of incident: Chemical Spill
Describe the scenario:	
A drum containing an unknown substance has fallen off the back of a truck on the weighbridge and has spilt on	
ground.	

Outcomes	Yes/No
Did the PIRMP get executed in a timely manner?	yes
Where all staff aware of their responsibilities?	yes
Was the incident handled in accordance with the PIRMP?	yes
Did all relevant authorities get considered?	yes
Was the handling and containment of the incident appropriate?	yes

Comments and areas for improvement
Summary document for weighbridge office
Include incident response form in Appendix
Condense contact details to one table
Number pages
Increase information on different fires

Site Supervisor		
Name: Wayne Healy	Signature:	Date:
Waste Operations Coordinator		
Name: Noel Hand	Signature:	Date:

Pollution Incident Simulation

Name of Supervisor of Simulation: Tim Neenan

Date: 28/06/2016	Reported to: Amanda Jones	
Location: Brou Landfill Facility		

Names of Attendees
Wayne Healy
Tim Neenan

Describe the situation to be simulated	
Location: Brou Landfill at tip face	Type of incident: Medium severity fire
Describe the scenario:	
Arrived on site at start of day to find the tip face on fire. Fire consisted of high flames, but minimal smoke.	

Outcomes	Yes/No
Did the PIRMP get executed in a timely manner?	yes
Where all staff aware of their responsibilities?	yes
Was the incident handled in accordance with the PIRMP?	yes
Did all relevant authorities get considered?	yes
Was the handling and containment of the incident appropriate?	yes

Comments and areas for improvement
Ensure most updated version of PIRMP is available on site
Recent version

Site Supervisor		
Name: Wayne Healy	Signature:	Date: 28/06/16
Waste Operations Coordinator		
Name: Noel Hand	Signature:	Date:

Pollution Incident Simulation

Name of Supervisor of Simulation: Tim Neenan

Date: 02/03/17 Time: 14:30	Reported to: Amanda Jones
Location: Brou Landfill Facility	

Names of Attendees
Wayne Healy
Tim Neenan

Describe the situation to be simulated	
Location: Brou Landfill Facility leachate pond	Type of incident: Leachate overflow
Describe the scenario:	
Uncontrolled leachate pond overflow following wet weather event	

Outcomes	Yes/No
Did the PIRMP get executed in a timely manner?	yes
Where all staff aware of their responsibilities?	yes
Was the incident handled in accordance with the PIRMP?	yes
Did all relevant authorities get considered?	yes
Was the handling and containment of the incident appropriate?	yes

Comments and areas for improvement
Other site staff should be included in PIRMP testing in the event that the site supervisor is not on premise at time of incident.
ESC Public and Environmental Health Unit contact updated in Section 6: Contacts Details
ESC Water Quality Officer informed of potential for leachate overflow prior to event to prepare for sampling
Addition of SWMS, site procedures and site safety rules to Section 8.2.3 Administrative Procedures for documents kept on site

Site Supervisor		
Name: Wayne Healy	Signature:	Date: 02/03/17
Waste Operations Coordinator		
Name: Noel Hand	Signature:	Date:

Pollution Incident Simulation

Name of Supervisor of Simulation: Tim Neenan

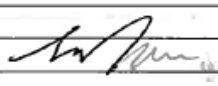
Date: 07/03/18 Time: 10:30	Reported to: Amanda Jones
Location: Brou Landfill Facility	

Names of Attendees
Wayne Healy
Tim Neenan

Describe the situation to be simulated	
Location: Gas flowlines	Type of incident: Gas leak
Describe the scenario:	
Potential gas leak from a flow line or well head of the gas extraction and flaring system	

Outcomes	Yes/No
Did the PIRMP get executed in a timely manner?	yes
Were all staff aware of their responsibilities?	yes
Was the incident handled in accordance with the PIRMP?	yes
Did all relevant authorities get considered?	yes
Was the handling and containment of the incident appropriate?	yes

Comments and areas for improvement
PIRMP needs to be updated in section *10.3.5 Landfill Gas* to include a potential gas leak from the gas extraction and flaring system, or a section dedicated to this system. The limited requirements in section *10.3.5 Landfill Gas* was met by the site supervisor.
Without specific procedures set out in the PIRMP, Wayne approached the incident logically – immediately restricting access to the area in question, notifying flaring operator, emergency shutdown if communications wasn't possible, notifying Waste Services Manager, and conducting gas testing at the site.

Simulation Supervisor		
Name: Tim Neenan	Signature: 	Date: 07/03/18

Pollution Incident Simulation

Name of Supervisor of Simulation: Tim Neenan		
Date: 07/06/19	Time: 11:00	Reported to: Adam Patyus
Location: Brou Landfill Facility		

Names of Attendees
Tim Neenan
Craig Potter

Describe the situation to be simulated	
Location: Brou Landfill Tip-face	Type of incident: Heavy vehicle roll-over
Describe the scenario: Tana rolled over at tip face working the batter, fuel observed around Tana.	

Outcomes	Yes/No
Did the PIRMP get executed in a timely manner?	Yes
Where all staff aware of their responsibilities?	Yes
Was the incident handled in accordance with the PIRMP?	Yes
Did all relevant authorities get considered?	Yes
Was the handling and containment of the incident appropriate?	Yes

Comments and areas for improvement
Craig immediately stopped public access to the tip-face, conducted 1st aid on the Tana operator and acted to contain fuel with chemical spill kit. Waste services manager contacted to notify of incident and report to EPA and WorkCover. Incident report completed immediately
On review of the PIRMP (10.3.1 Chemical Spill and 10.3.2 Oil Spill) – machinery would be required to clean up a larger spill and sand placed to prevent any further migration. Contaminated soil would need to be isolated, tested and disposed of accordingly.
There is no specific procedure for Heavy Vehicle roll-over – however this would generally be considered an OH&S issue rather than a Pollution Incident, and PIRMP is only activated for the fuel spill.

Simulation Supervisor		
Name: Tim Neenan	Signature: 	Date: 07/06/19

Appendix C: Table of Revisions

Document Title	Date Issued	Author/Reviewer	Organisation	Details
Brou Landfill PIRMP	22 June 2015	Meg Edmonds	ESC	Updated contact details table, fires section and incident response form
Brou Landfill PIRMP	9 July 2015	Meg Edmonds	ESC	Updated stormwater drains on location map. Created location map of distances to sensitive environments and section on considerations of hazards to sensitive environments. Includes date and details of testing of PIRMP
Brou Landfill PIRMP	29 June 2016	Tim Neenan	ESC	Inclusion of page numbers and June 2016 PIRMP test from
Brou Landfill PIRMP	16 March 2017	Tim Neenan	ESC	Updated contact number for ESC Public Health and Environment Unit, and inclusion of March 2017 PIRMP test form
Brou Landfill PIRMP	19 July 2018	Tim Neenan	ESC	Inclusion of March 2018 PIRMP test form
Brou Landfill PIRMP	11 July 2019	Tim Neenan	ESC	Inclusion of June 2019 PIRMP test form
Brou Landfill PIRMP	05 August 2019	Tim Neenan	ESC	Inclusion of Disposal of Liquid Waste to Landfill Procedure