

# POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN



GLEN INNES WASTE MANAGEMENT DEPOT (Glen Innes Landfill)

**MARCH 2013 – INITIAL RELEASE (REVISION 0)** 

# **REVISION HISTORY**

REVISION	DATE	AUTHOR / REVIEWER	DETAILS
DRAFT 1	4/12/12	LOGICUS Environmental Management	Provided to GISC for comment
FINAL	22/03/13	LOGICUS Environmental Management	Updated with comments from GISC

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# 1. ADMINISTRATION

### 1.1 PURPOSE

Industry is now required to report pollution incidents immediately to the EPA, NSW Health, Fire & Rescue NSW, WorkCover NSW and the local council.

This Pollution Incident Response Management Plan (PIRMP) has been prepared to comply with the new requirements introduced by the *Protection of the Environment Legislation Amendment Act 2011* (POELA Act) that requires the preparation and implementation of a PIRMP.

The purpose of this PIRMP is to assist employees and management of the **Glen Innes Waste Management Depot (Glen Innes Landfill),** to identify the potential risk of a pollution incident occurring, introduce measures to mitigate that risk AND to give direction in making quality decisions should a pollution incident occur. This PIRMP contains guidance in determining the appropriate pre-emptive actions needed to 'prevent material harm' to the environment.

### 1.2 OBJECTIVE & SCOPE

It is **Glen Innes Severn Council's** intent to prevent all foreseeable pollution incidents that might impact on the environment and the safety of employees, facility users & neighbours, through the implementation of standard operational procedures, undertaking routine site activity inspections, regular training of personnel in the implementation of operational procedures and through emphasising & supporting proactive incident prevention reporting.

However, it is recognised that pollution incidents are not totally preventable. Therefore this PIRMP has been developed to achieve the following objectives:

- reduce the likelihood of a pollution incident occurring at the facility through identification of risks and the development of planned actions to minimize and manage those risks.
- ensure comprehensive and timely communication about a pollution incident to all staff at the
  premises, the Environment Protection Authority (EPA), other relevant authorities specified in the
  Act (such as NSW Ministry of Health, WorkCover NSW, and Fire & Rescue NSW) and people
  outside the facility who may be affected by the impacts of the pollution incident.
- ensure that the PIRMP is properly implemented by trained staff, identifying persons responsible
  for implementation and ensuring that the PIRMP is regularly tested for accuracy, currency and
  suitability.

 provide guidance on how to respond to an environmental pollution incident and how to record and report such an event.

This PIRMP contains guidance in determining the appropriate actions to take to prevent a pollution incident, injury or property damage and how to respond should a pollution incident occur. The PIRMP also includes provisions for record keeping, testing, reporting and document revision.

### 1.3 LEGISLATIVE CONTEXT

The specific requirements for PIRMPs are set out in Part 5.7A of the POEO Act and the Protection of the Environment Operations (General) Regulation 2009 (POEO (G) Regulation 2). 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 98B).
- 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 98E).
- If a pollution incident occurs in the course of an activity so that material harm to the environment is caused or threatened, licensees must immediately implement the Plan (section 153F, POEO Act).

### 1.4 KEY TERMS & MEANINGS

An understanding and appreciation of the following key terms is considered integral to the successful implementation of this PIRMP.

### 1.4.1 Pollution Incident

The definition of a pollution incident is:

'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'.

#### 1.4.2 Material Harm to the Environment

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'.

### 1.4.3 Immediate Reporting Requirement

Industry is now required to report pollution incidents 'immediately' to the EPA, NSW Health, Fire & Rescue NSW, WorkCover NSW and the local council.

'Immediately' has its ordinary dictionary meaning of promptly and without delay.

### 1.5 FACILITY COVERED BY THIS PIRMP

The **Glen Innes Waste Management Depot** is covered by this PIRMP which incorporates activities of a **Solid Waste (Putrescible) Landfill** and ancillary waste management related activities along with some minor unrelated storage arrangements for community groups.

### 1.6 PIRMP DISTRIBUTION

A copy of this PIRMP is to be kept at the premises to which the relevant Environmental Protection Licences (EPLs) relate, or where the relevant activity takes place, so that it is readily available to those responsible for its implementation and to any Authorised Officer on request.

A copy of this PIRMP is also to be retained by the Manager - Technical Services (GISC).

The master copy of this PIRMP is to be maintained by the **Assets Coordinator (GISC)** who will be responsible for revisions of the PIRMP and for the distribution of revised copies to the above mentioned persons and location.

### 1.7 PIRMP REVIEW

The PIRMP is to be reviewed annually by the **Assets Coordinator (GISC)** in conjunction with relevant Council staff including the **Manager - Technical Services (GISC)**.

When revisions are made to the PIRMP, the revised document will be re-distributed and redundant copies collected and discarded. The date of issue and revision number is to be recorded on the title page of the document for future reference.

As part of the revision process, a Notification of Change Form, (**Appendix 1**), will be provided which must be signed by each responsible party indicating that the party has received a copy of the changes and that the copy of the PIRMP assigned to that party has been updated. This form is to then be retained on file by the **Assets Coordinator (GISC).** 

### 1.8 PIRMP TRAINING

To ensure that this PIRMP is properly followed in the event of a pollution incident, training programs shall be provided to relevant **Council Employees**. The objectives of the training program shall be as follows:

- a) To ensure that **Council Employees** are knowledgeable of their roles and responsibilities concerning this PIRMP.
- b) To ensure that **Council Employees** are knowledgeable of the PIRMP's procedures to affect a safe and appropriate response to pollution incidents.

**Council Employees** will receive training in the PIRMP appropriate to the level of their expected involvement. The following is the general training program which is to be implemented in support of this PIRMP:

### 1.8.1 Training Frequency

**Council Employees** working at the facility will receive training during initial employment orientation / induction and refresher training at least annually.

Additional training will also be provided to employees whenever the PIRMP is changed.

### 1.8.2 Training Level

All **Council Employees** will receive training in the general PIRMP procedures and Standard Operating Procedures related to the PIRMP.

Training shall cover routine pre-emptive inspections, incident discovery and management, (standard operating procedures), notifications, incident response and best practice facility management.

### 1.8.3 Supervisor Training

The **Assets Coordinator (GISC)** will receive additional training, beyond that received by Council employees or other site personnel, dealing with actions that are necessary to provide for the safety of employees, facility users and ancillary site operators, the protection of facility assets and the management of pollution incidents.

### 1.8.4 Training Competencies

Details of the training competencies achieved by **Council Employees** relevant to this PIRMP are provided in **Appendix 2** 

### 1.9 PIRMP DRILLS & EXERCISES

To ensure that this PIRMP will meet current conditions and that all involved individuals will respond appropriately, the PIRMP will be tested on an annual basis. The testing will include at least the following:

- a) Reaction and accountability of facility personnel; and
- b) Adherence to PIRMP procedures.

All drills and exercises of the PIRMP will be documented, indicating the results of the exercise and any problems that were encountered, along with recommendations for PIRMP modifications.

The **Assets Coordinator (GISC)** will complete a Pollution Incident Exercise Evaluation Form **(Appendix 3)** and maintain copies for review.

### 1.10 FORM OF PIRMP

As the purpose of this PIRMP is to mitigate the likelihood and to improve the management of pollution incidents and facilitate better coordination with the relevant response agencies, this PIRMP must be provided in written form, be available at the subject premises, be able to be provided to an authorised EPA officer on request and available to any person who is responsible for implementing the PIRMP.

### 1.11 RELATIONSHIP WITH OTHER EMERGENCY & INCIDENT RESPONSE PLANS

This PIRMP can function as a standalone document, the implementation of which is required to be undertaken to mitigate risk of a pollution incident but also to respond to a likely pollution incident where there is a potential of 'material harm to the environment'.

If other plans, procedures and protocols provide for enhanced, ancillary or complementary actions, then they may and should be implemented concurrently.

# 2. FACILITY DETAILS

2.1 LOCATION

NAME OF THE FACILITY: GLEN INNES WASTE MANAGEMENT DEPOT

(Glen Innes Landfill)

ADDRESS: 88 RODGERS ROAD, GLEN INNES, NSW 2370 ; OR

49 BLUE HILLS ROAD, GLEN INNES NSW 2370

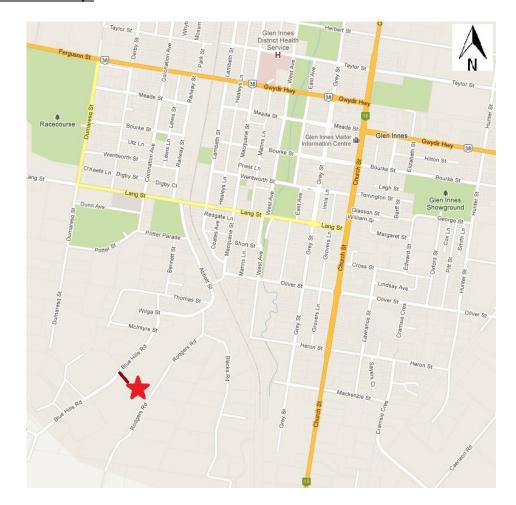
PROPERTY DESCRIPTION: PART CROWN RESERVE R87449 (1969). THE PART CROWN RESERVE

R87449 APPLYING TO THIS PREMISES IS DEFINED BY THE DASHED AREA WITHIN R87449 ON FIGURE TITLED "GLEN INNES WASTE

**MANAGEMENT DEPOT, NOV 2002"** 

**OWNER:** GLEN INNES SEVERN COUNCIL

### Figure 1 – Location Map:

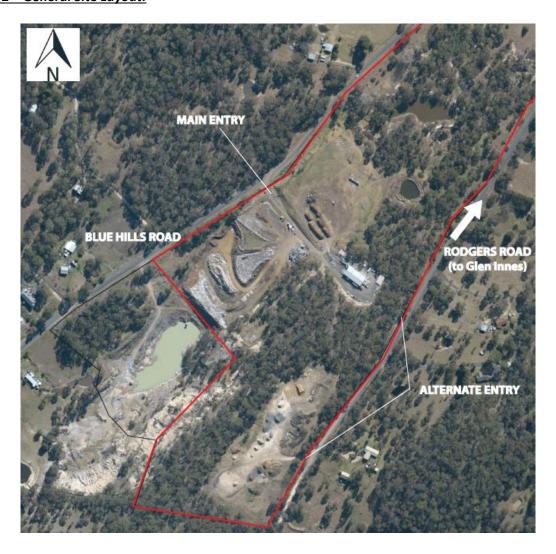


SITE ACCESS: Is via Blue Hills Road (south of Glen Innes) before turning east through the

Main Entry Gate. Alternate accesses are available from Rodgers Road.

These are shown on the Site Services & Infrastructure maps (Appendix 31) and as 'Main Entry' and 'Alternate Entry' on Figure 2 - General Site Layout

Figure 2 – General Site Layout:



**VEGETATION:** 

The vegetation surrounding the facility is primarily scattered remnant woodland dispersed by cleared grassy pasture (from rural residential development).

A semi continuous strip of woodland exists within the facility which stretches from north eastern to the south western boundary of the facility. These are native species (eucalypts, acacias, melaleucas etc).

**TOPOGRAPHY:** 

The original topography of the site has been disrupted by the landfill operation. The site drains from the high point in the south, to the north, through former flowpaths of an ephemeral creek. There is also a quarry directly upgradient of the facility resulting in a natural water flowpath restriction resulting in a dam. The content of the upgradient dam is routinely pumped to the surface water drainage along Blue Hills Road at the western edge of the facility (i.e. around the elevated landfill area).

### 2.2 FACILITY DESCRIPTION

### 2.2.1 Site Activities

The **Glen Innes Waste Management Depot** operates under an Environmental Protection Licence (EPL) being **L5939**, issued by the NSW EPA, which relates to a General Solid Waste (Putrescible) Landfill.

Staff are on site during operational hours when the facility is also open to the public. These hours are seasonal being:

SUMMER (1 October – 30 April): 8:30am to 5:00pm Monday – Friday

10:30 to 4:30pm Weekends & Public Holidays.

WINTER (1 May – 30 September): 8:30am to 4:30pm Monday – Friday

11:00 to 4:00pm Weekends & Public Holidays.

Site Closures are also in place on Christmas Day, Boxing Day & New Years Day & Good Friday along with a lunch break period generally being 12:20 – 1pm on operating days.

The site is fully fenced, gated and secured and the the principle features / activities occurring on the facility include:

- 1. **Gatehouse:** is the control point for the site with all vehicles entering and exiting the facility. Incoming vehicles are inspected to ensure only approved waste types are accepted. A diesel storage tank exists adjacent to the gatehouse.
- 2. Landfill Area (Active): operates for burial of up to 4000 tonnes per annum (per site licence) of waste material including Municipal Solid Waste, Commercial & Industrial Waste, Construction & Demolition Waste & Asbestos (as examples).

Previous landfilling has also occurred in other areas of the site upon which waste management related activities now occur. These are shown on the Site Services & Infrastructure maps (**Appendix 31**)

3. Leachate Ponds / Drains: A leachate (contaminated water) capture and extraction system exists in the Landfill Area where liquid is pumped from within the buried waste and into the leachate pond system from Leachate Pumpwells / Sumps. Surface leachate / stormwater is also directed to this system in favour of direct offsite discharge. The system includes 3 ponds with an estimated 4ML system capacity. In the event of an overflow, the ponds discharge into the ephemeral creek / drainage adjacent to Blue Hills Road before moving offsite. This leachate would be considered as highly diluted having mixed with significant volumes of stormwater to cause such an overflow.

- 4. **Leachate Irrigation Area:** The content of the leachate ponds system is pumped to irrigation / recirculation on the previously filled area of the landfill.
- 5. **Resource Recovery Area 1:** recoverable materials, such as concrete, brick & greenwaste, are separated and stockpiled awaiting reprocessing. Service contracts ensure these materials are processed routinely to ensure stockpiles are maintained at minimum sizes.

Up to **5,000** tonnes per annum of organic material is managed within this part of the site comprising garden materials & timber (as examples). The materials are shredded before the end product is used on site for cover / landscaping / sediment control / revegetation.

Waste concrete and brick is stockpiled before being crushed and subsequently re-used on the landfill for hardstand and internal road construction. Dust controls are integral parts of the service contract for crushing and screening works due to the inherent nature of works and the potential for asbestos to be present / hidden in the stockpiles.

Leachate that drains from this area flows into the leachate pond & drain system. Site management protocols also require litter controls to be in place for this area and it is surrounded by hardstand which serves as a fire break.

Note: This area may also be used for <u>temporary</u> storage / treatment of up to 1,000m³ of hydrocarbon contaminated soil. Storage area will have impervious clay base and be bunded to minimise the possible leaching and transport of contaminates by surface stormwater. Special approval will be obtained from EPA for this activity.

- 6. **Resource Recovery Area 2:** recoverable materials, such as tyres, metal waste and refrigerant containing items are stockpiled awaiting collection / reprocessing. Service contracts ensure these materials are removed routinely to ensure stockpiles are maintained at minimum sizes.
  - Site management protocols also require dust and litter controls to be in place for these areas. A buffer zone is kept around each stockpile for both site maintenance and as separation zone in the event of a fire. Leachate that drains from this area flows inward to Landfill Area.

A self bunded, purpose built used motor oil storage tank / shed is located directly adjacent to this area.

7. **Vehicle Washdown Area:** A simple gravel wash area where garbage collection vehicles / plant items are hosed down. Wash water from the open wash bay flows into the leachate pond system.

8. Small Vehicle Transfer Station (SVTS) is to be developed (in the future) which will incorporate a series of waste transfer bins / bunkers being placed for general and recoverable wastes. Resource recovery drop offs for used gas cylinders, motor oils, batteries, paints, used tyres, fluorescent tubes (as examples) are likely to be made available. Tyres, metals etc will be taken to larger stockpiles in the Resource Recovery Areas of the site and waste materials to the Landfill Area

There is also an **Ancillary Site Operation** which is entirely independent of the Glen Innes Waste Management Depot (and not directly run by GISC), as well as a separately purposed activity managed by GISC. Both operations have their own safety, environment & emergency management processes which sit separate to this PIRMP.

The ancillary operator is required to immediately notify GISC should an incident occur on their facility which will or has the potential to create an impact outside of their 'boundaries' at which time the matter would be dealt with under the general response processes defined in this PIRMP.

Likewise, internal communication protocols exist between GISC divisions to ensure incidents which have the potential to impact 'the other' GISC operation on the site are relayed effectively.

The ancillary site operation is further explained as:

1. Materials Recovery Facility: processes materials for recycling using mechanised / manual sorting arrangements. Like materials (cardboard, paper, metal, plastics etc) are baled and stored awaiting offsite re-sale / re-use. Large volumes of materials can be present inside and outside of the building. Vehicles access this site from Rodgers Road.

Triple rinsed (empty) agricultural chemical containers are stored in a fenced compound portion of their site (DrumMuster Yard) prior to collection and processing offsite.

It is likely that the SVTS planned for the site may be located in this area at a point in the future.

The separate GISC site operation is further explained as:

2. Roadworks Stockpile Area: This area is a storage area for large stockpiles of roadbase, sands, gravels, fill materials, pipes and headwalls etc. Heavy plant (loaders, trucks etc) frequent the site to carry out loading / material deposition. There are no permanent infrastructure (lunchrooms, toilets, fuel tanks etc)

NOTE: This PIRMP does not attempt to specifically address risks or hazards directly emanating from within the ancillary and separately managed operation nor the GISC Stockpile area. The PIRMP instead includes communication with the operators in the event of a pollution incident / evacuation from the Glen Innes Waste Management Depot.

### 2.2.2 Site Plan

The Site Services and Infrastructure Plan shows the overall site arrangement, activity areas, the locations of first response equipment in the event of a pollution incident together with identification of the sources of potential pollutants.

The detailed Site Services and Infrastructure Plan can be located in **Appendix 30** of this document.

# 3. POLLUTION INCIDENT PREVENTION & PREPAREDNESS

### 3.1 Prevention as an Incident Response

**GISC** is committed to minimising the circumstances under which pollution incidents may occur. Through the use of regularly scheduled meetings, employee and contractor's orientations, training programs, routine inspections of activity areas and the application of standard operational procedures, Council Employees and contractor's personnel will be able to identify and respond to conditions that might lead to a pollution incident.

Council Employees are instructed, as part of their site inductions and ongoing training, in the steps to report and respond to facility conditions or issues that might give rise to pollution incidents where these conditions/issues are found to exist.

Pre-emptive actions to be taken to minimise or prevent any risk of harm to human health or the environment arising from the activities undertaken at the facility in the context of the potential pollution hazards above are provided as follows:

Table 1 – Summary of Pre-emptive Actions:

POTENTIAL HAZARD	PRE-EMPTIVE ACTION
Leachate storage overflow caused by excessive inflow storm water	
Leachate pump, line, dam or tank failure	
Leachate spring eruption	
Ground water contamination	
Fire at tip face or exposed waste stockpile	Undertaking routine
Fire in incoming load or transfer bin	inspections in accordance with the Environmental
<ul> <li>Fire in green waste, mulch, tyre or other material stockpile / shed</li> </ul>	Checklists
Chemical spill	(Appendix 29)
Oil / fuel spills.	Responding in
<ul> <li>Failure of hazardous material containment tanks / bund / storage</li> </ul>	accordance with Standard Operating Procedures
Windblown litter	(SOPs)
• Odour	(Appendices 6 to 27)
<ul> <li>Dust (including Asbestos) and sedimentation</li> </ul>	
<ul> <li>Explosion of gas cylinders</li> </ul>	
Landfill Gas	
Ozone depleting gas release (from refrigeration item wastes)	

### 3.2 REGISTER OF POTENTIAL POLLUTANTS

Potential pollutants kept on the premises or used in carrying out activities at the premises, including the maximum quantity of any potential pollutant that is likely to be stored or held at the premises together storage locations are summarized as follows:

Table 2 - Summary of Potential Pollutants

POLLUTANT TYPE / SUBSTANCE	SOLID, LIQUID, GAS or POWDER	QUANTITY	<b>LOCATION</b> (see Site Plan)	TYPE OF CONTAINMENT	MSDS
Leachate	Liquid	4,000,000 litres	Leachate Ponds & Drains / Leachate Irrigation Area	Earth formed dams, pumpwells, sumps & pipes	NA
Used Tyres	Solid	50 tonnes max	Resource Recovery Area 2	Hardstand	NA
Green waste / mulch	Solid	2,000 cubic metres (shredded) 5,000 cubic meters (unprocessed)	Resource Recovery Area 1	Hardstand	NA
Used Motor Oil	Liquid	Up to 8000 litres	Used Motor Oil Tank	Self bunded oil storage	
Diesel	Liquid	Up to 2000 litres	Diesel Tank	Storage Tank	Chemwatch
Oil / Water based paint	Liquid	Up to 10 litres	Gatehouse	Domestic Packaging	Chemwatch
Herbicides / Pesticides	Liquid & Solids	Up to 4 litres	Gatehouse	Domestic Packaging	Chemwatch
LPG	Gas	30kg Cylinder	Gatehouse	Cylinder	Chemwatch
Household cleaners	Liquid or Powder	< 5 Litres	Gatehouse	Domestic packaging	Chemwatch
Lead Acid Batteries	Solid	Up to 100 units	Waste Transfer Facility	Self bunded pallets	NA
General Wastes (exposed)	Solid	500 tonnes	Landfill Area + Stockpiles in Resource Recovery Areas 1 & 2	Landfill Cell Stockpile	N/A
Ozone depleting refrigerant	Gas	Up to 20 waste fridge / freezer units stored before degassing	Resource Recovery Area 2	Stored 'in vessel' as delivered	NA
Asbestos*	Solid	Incidental amounts	Disposal in Landfill Area (buried daily)	N/A	N/A
		Incidental amounts	Around Site	N/A	N/A
Landfill Gas*	Gas	Not quantified	Landfilling area	Uncontained	N/A

<sup>\*</sup>Note: Asbestos is sometimes identified in areas where it is not permitted to be disposed (i.e. co-mingled with other materials) and landfill gas passively vents from the landfilled areas —locations not shown on maps.

The Site Services & Infrastructure Plan provided in Appendix 30 shows key pollutant locations

#### 3.3 Nature and Likelihood of Pollution Incidents

Notwithstanding **GISC's** commitment to preventing conditions/issues which might give rise to a pollution incident, it is not possible to negate all situations which might give rise to an incident.

Possible pollution incidents associated with the operation of the Facility are:

- Fire within facility activity areas
- Explosion of gas bottles / landfill gas emissions
- Spill of chemical, fuels, oils or other hazardous materials
- Leachate discharge off site into surface / groundwater
- Litter, odour, dust or sedimentation

Having regard to the nature of the operations of the **Glen Innes Waste Management Depot**, the level of risk posed by the possible pollution incidents to the environment and the need and priority for management action is qualified for the facility using the following methodology.

Inherent risk will be assessed by combining the *likelihood* and *consequence* of the identified potential risk. In determining the assessment of the likelihood and consequence, the following rating processes has been utilised.

### 3.3.1 Likelihood

Determination of the probability or likelihood of environmental harm, damage or loss occurring as a result of a pollution incident using the ranking risk factors by probability methodology contained in the following table.

<u>Table 3 – Incident Likelihood Descriptions</u>

RATING	MEASURE	DESCRIPTION
1	Rare	May occur only in exceptional circumstances.
2	Unlikely	Could occur at some time.
3	Possible	Might occur at some time.
4	Likely	Will probably occur in most circumstances.
5	Almost certain	Is expected to occur in most circumstances.

# 3.3.2 Consequence

Determination of the consequence of the potential environmental harm, damage or loss using the ranking risk factors by consequence methodology contained in the following table.

<u>Table 4 – Incident Consequence Descriptions:</u>

RATING	MEASURE	DESCRIPTION
1	Insignificant	Environmental impact is undetectable
2	Minor	Environmental impact is virtually undetectable.
3	Moderate	Minor (usually reversible) some potential for low level environmental impacts which can be easily managed
4	Major	Major environmental impact which is reversible
5	Severe	Major environmental impact which may be irreversible

### 3.3.3 Risk Evaluation

Individual evaluation of the management priority for each potential pollution incident using the risk priority matrix presented in the following figure.

Figure 3 – Risk Evaluation Matrix:

			-						
	Consequences								
Likelihood	Insignificant	Minor	Moderate	Major	Severe				
Almost certain	М	н	н	E	E				
Likely	м	М	н	н	E				
Possible	L	м	М	н	E				
Unlikely	L	М	м	М	н				
Rare L		L	М	М	н				

RATING	DEFINITION
LOW	Review consequence and likelihood and manage through routine procedures
MOD	Ensure management system controls risk and managerial responsibility is defined.
нібн	Ensure system and process controls are such that the risk is as low as is reasonably practicable and that due diligence systems are established so that appropriate management processes can be demonstrated to be in operation.
EXTREME	Risk must be reduced or eliminated. If the risk cannot be reduced from "Extreme", then management must provide continuing assurance that due diligence systems are in place so that appropriate management can be demonstrated.

For the purposes of this PIRMP:

- EXTREME risks and HIGH risks will be eliminated or managed.
- MODERATE risks will be monitored.
- LOW risks will be accepted.

The Residual risk has been shown by measuring the inherent risk against the assessed effectiveness of the controls.

The outcomes of the risk assessment together with the relevant incident control/management action are summarised in **Table 5** following:

<u>Table 5 – Risk Identification & Management Plan</u>

POLLUTION HAZARD / HAZARD (OTHER)	RISK FACTORS	ОИТСОМЕ	LIKELIHOOD / CONSEQUENCE (RATING)	PRE-EMPTIVE ACTIONS	REFERENCE	LIKELIHOOD / CONSEQUENCE POST CONTROL (RATING)	INCIDENT RESPONSE ACTIONS	REFERENCE
1. ENVIRONMENTAL (a) Leachate Discharge (Off Site)	Leachate dam / containment overflow	Leachate contamination of adjacent land and / or waterways	Possible/ Major (HIGH)	Routine inspections  Surface water monitoring of down gradient points	Environmental Inspection Checklist as provided in Appendix 29 of the PIRMP	Rare/ Major (MODERATE)	SOP Appendix 6	SOP within the PIRMP
	Leachate pump breakdown or pipeline failure	Leachate contamination of adjacent land and / or waterways	Possible/ Major (HIGH)	Routine inspections.  Scheduled maintenance servicing of pump and pump connections  Standby pump and service parts available  Surface water monitoring	Environmental Inspection Checklist as provided in Appendix 29 of the PIRMP	Rare/ Major (MODERATE)	SOP Appendix 7	SOP within the PIRMP Report in EPL Annual Return
	Leachate contamination of the surface water management system.	Leachate contamination of adjacent land and / or waterways	Possible/ Major (HIGH)	Routine inspection to ensure suitable management procedures, including bund separation at active tipping area	Environmental Inspection Checklist as provided in Appendix 29 of the PIRMP	Rare/ Major (MODERATE)	SOP Appendix 8 SOP Appendix 9	SOP within the PIRMP
	Leachate dams, holding tank / structure rupture	Leachate contamination of adjacent land and / or waterways	Possible/ Major (HIGH)	Routine inspections	Environmental Inspection Checklist as provided in Appendix 29 of the PIRMP	Rare/ Major (MODERATE)	SOP Appendix 10	SOP within the PIRMP

POLLUTION HAZARD / HAZARD (OTHER)	RISK FACTORS	ОИТСОМЕ	LIKELIHOOD / CONSEQUENCE (RATING)	PRE-EMPTIVE ACTIONS	REFERENCE	LIKELIHOOD / CONSEQUENCE POST CONTROL (RATING)	INCIDENT RESPONSE ACTIONS	REFERENCE
	Leachate seepage from landfill operations into water table	Leachate migration and possible contamination of water table	Possible/ Major (HIGH)	Monitoring of ground bores to detect leachate migration	Environmental Inspection Checklist as provided in Appendix 29 of the PIRMP	Rare/ Major (MODERATE)	SOP Appendix 11	SOP within the PIRMP Report in EPL Annual Return
	Uncontrolled or undetected leachate springs	Leachate contamination of the surface water management system, adjacent land and / or waterways	Possible/ Major (HIGH)	Routine inspections	Environmental Inspection Checklist as provided in Appendix 29 of the PIRMP	Rare/ Moderate (MODERATE)	SOP Appendix 10	SOP within the PIRMP
(b) Combustion	Stockpile of used tyres ignites	Combustion creates smoke and oil residues	Possible/ Moderate (MODERATE)	Maintain buffer zones  Limit quantity of tyres held on site  Routine inspections	Environmental Inspection Checklist as provided in Appendix 29 of the PIRMP	Rare/ Moderate (MODERATE)	SOP Appendix 12	SOP within the PIRMP
	Green waste stockpile ignites	Combustion creates smoke and fire hazard	Possible/ Moderate (MODERATE)	Routine inspections to ensure stockpile size and temperature management with maintenance of buffer zones	Environmental Inspection Checklist as provided in Appendix 29 of the PIRMP	Rare/ Moderate (MODERATE)	SOP Appendix 13	SOP within the PIRMP

POLLUTION HAZARD / HAZARD (OTHER)	RISK FACTORS	ОИТСОМЕ	LIKELIHOOD / CONSEQUENCE (RATING)	PRE-EMPTIVE ACTIONS	REFERENCE	LIKELIHOOD / CONSEQUENCE POST CONTROL (RATING)	INCIDENT RESPONSE ACTIONS	REFERENCE
	Fire in waste transfer bins	Combustion creates smoke and fire hazard	Possible/ Moderate (MODERATE)	Inspection of all incoming loads	Environmental Inspection Checklist as provided in Appendix 29 of the PIRMP	Rare/ Moderate (MODERATE)	SOP Appendix 14	SOP within the PIRMP
	Fire at landfill active tipping area	Combustion creates smoke and fire hazard. Deep seated fire difficult to extinguish.	Possible/ Moderate (MODERATE)	Inspection of all incoming loads Site secured at close of day	Environmental Inspection Checklist as provided in Appendix 29 of the PIRMP	Rare/ Moderate (MODERATE)	SOP Appendix 15	SOP within the PIRMP
	Fire in vehicle loads of incoming wastes	Combustion creates smoke and fire hazard. Property damage.	Possible/ Moderate (MODERATE)	Inspection of all incoming loads and tipping area supervision	Environmental Inspection Checklist as provided in Appendix 29 of the PIRMP	Rare/ Moderate (MODERATE)	SOP Appendix 16	SOP within the PIRMP
(c) Chemical Spills	Chemical spill from ruptured or leaking storage containers	Soil contamination Creation of volatile fumes Explosion/fire Contamination of adjacent land and / or waterways	Possible/ Major (HIGH)	Retain minimum quantities on site  Separation areas between stored chemicals  Creation of bunded storage areas  Use approved chemical stores	Environmental Inspection Checklist as provided in Appendix 29 of the PIRMP	Rare/ Moderate (MODERATE)	SOP Appendix 17	SOP within the PIRMP

POLLUTION HAZARD / HAZARD (OTHER)	RISK FACTORS	ОИТСОМЕ	LIKELIHOOD / CONSEQUENCE (RATING)	PRE-EMPTIVE ACTIONS	REFERENCE	LIKELIHOOD / CONSEQUENCE POST CONTROL (RATING)	INCIDENT RESPONSE ACTIONS	REFERENCE
	Incompatible or incorrect chemical storage	Explosion / fire	Possible/ Major (HIGH)	Retain minimum quantities on site  Separation areas between stored chemicals  Creation of bunded storage areas  Use approved chemical safes for storage	Environmental Inspection Checklist as provided in Appendix 29 of the PIRMP	Rare/ Moderate (MODERATE)	SOP Appendix 18	SOP within the PIRMP
	Leakage from incoming loads	Soil contamination Explosion/fire Contamination of adjacent land and/or waterways	Possible/ Major (HIGH)	Inspection of all incoming loads	Environmental Inspection Checklist as provided in Appendix 29 of the PIRMP	Rare/ Moderate (MODERATE)	SOP Appendix 19	SOP within the PIRMP
(d) Oil / Fuel Spills	Failure of fuel containers or storage tanks	Soil contamination Explosion/fire Contamination of adjacent land and / or waterways Creation of volatile fumes	Possible/ Major (HIGH)	Retain minimum quantities on site  Creation of bunded storage areas	Environmental Inspection Checklist as provided in Appendix 29 of the PIRMP	Rare/ Moderate (MODERATE)	SOP Appendix 20	SOP within the PIRMP

POLLUTION HAZARD / HAZARD (OTHER)	RISK FACTORS	ОИТСОМЕ	LIKELIHOOD / CONSEQUENCE (RATING)	PRE-EMPTIVE ACTIONS	REFERENCE	LIKELIHOOD / CONSEQUENCE POST CONTROL (RATING)	INCIDENT RESPONSE ACTIONS	REFERENCE
	Failure of mobile plant hydraulic lines	Soil contamination Fire  Contamination of adjacent land and/or waterways	Possible/ Major (HIGH)	Staff or contractor training in waste placement and compaction techniques. Routine plant inspection and servicing.	Staff or Contractor training and recording	Rare / Moderate (MODERATE)	SOP Appendix 20	SOP within the PIRMP
(e) Dust / Sediment (Soils & Wastes)	Dust / sediment migrating off site	Complaints to EPA / WorkCover	Possible/ Moderate (MODERATE)	Wet down unsealed trafficable areas  Use shredded green waste on exposed areas of cover material  Revegetation of completed areas and sedimentation structures in place.  Asbestos waste policy and education + tipping handling area	Environmental Inspection Checklist as provided in Appendix 29 of the PIRMP	Rare/ Minor (LOW)	SOP Appendix 22 SOP Appendix 26	SOP within the PIRMP
(f) Odour	Offensive odour	Complaints to EPA	Possible/ Moderate (MODERATE)	Provide daily cover to active tipping area	Environmental Inspection Checklist as provided in Appendix 29 of the PIRMP	Rare / Minor (LOW)	SOP Appendix 23	SOP within the PIRMP

POLLUTION HAZARD / HAZARD (OTHER)	RISK FACTORS	ОИТСОМЕ	LIKELIHOOD / CONSEQUENCE (RATING)	CONSEQUENCE PRE-EMPTIVE ACTIONS		LIKELIHOOD / CONSEQUENCE POST CONTROL (RATING)	INCIDENT RESPONSE ACTIONS	REFERENCE
(g) Landfill Gas	Contributor to Global warming	Increase in tCO <sub>2</sub> -e emissions / explosion / fire	Likely/Major (HIGH)	Waste diversion strategies and community education Resource recovery enhancements or increases Implement Final capping design approved by EPA	Landfill Environmental Management Plan	Rare/ Moderate (MODERATE)	Pre- emptive actions focus	LEMP
(h) Litter	Litter migrating off site	Complaints to EPA	Likely/ Moderate (HIGH)	Provide daily or intermediate cover to waste  Erect semi permanent litter fences  Provide mobile litter fence units & relocate to match conditions Litter collection activities	Environmental Inspection Checklist as provided in Appendix 29 of the PIRMP	Rare/ Moderate (MODERATE)	SOP Appendix 21 & 24	SOP within the PIRMP
(i) Ozone depleting gas release	Contributor to Global warming	EPA regulatory breach	Likely/Major (HIGH)	Degassing process for fridges implemented	Environmental Inspection Checklist as provided in Appendix 29 of the PIRMP	Rare / Minor (LOW)	SOP Appendix 27	SOP within the PIRMP
(2) COMPLIANCE (a) Incident Reporting	Non-compliance with statutory reporting	Cautionary Notice Penalty Infringement Notice	Unlikely/ Moderate (MODERATE)	Prepare reports as required	Reporting protocols included in Environmental Checklist in Appendix 29.	Rare/ Moderate (MODERATE)	Follow up Action	PIRMP / LICENCE

POLLUTION HAZARD / HAZARD (OTHER)	RISK FACTORS	OUTCOME	LIKELIHOOD / CONSEQUENCE (RATING)	PRE-EMPTIVE ACTIONS	REFERENCE	LIKELIHOOD / CONSEQUENCE POST CONTROL (RATING)	INCIDENT RESPONSE ACTIONS	REFERENCE
(3) WORK HEALTH & SAFETY	Personal injury to staff, contractors, general public attending the facility	Trauma Lost time Rehabilitation Compensation	Likely/major (HIGH)	Regular tool box meetings with staff and contractors  Safe Work Method Statements prepared and implemented  Risk assessments undertaken Safety plans developed for major works  Staff training  Job and site specific orientation for new staff, visitors and contractors  Independent audit of all systems of work  Emergency and evacuation plans prepared and tested	Established tool box meeting protocols Council's corporate Work Health, Safety & Environment Plan	Unlikely/ Moderate (MODERATE)	SOP Appendix 2 SOP Appendix 25	PIRMP / LICENCE

### **3.4** INCIDENT PREPAREDNESS

### 3.4.1 Response Equipment and Features

The **Glen Innes Waste Management Depot** has a number of active and passive pollution control / safety devices as well as response equipment that can be used during a pollution incident.

Relevant details of pollution incident equipment and features are provided as follows:

Table 6 – Response Equipment Inventory

EQUIPMENT	LOCATION/S	QUANTITY	MAINTENANCE REQUIREMENTS / STANDARDS
Asbestos Kit	Gatehouse	1	
	Gatehouse	1	
Fire Extinguisher	GISC Vehicle / Plant Item	1 in each vehicle	Refer to site Checklists
Fire Blanket	Gatehouse	1	(Appendix 29)
First Aid Kit	Gatehouse GISC Vehicle / Plant Item	1 1	
Heavy Plant	Compactor with loader bucket	1	

Equipment such as portable fire extinguishers should only be used by persons who are suitably trained and it is safe to do so. The maintenance of the systems and equipment is to be undertaken in accordance with the standards nominated in the Table above.

Additionally, site plant items (loader, truck etc) are available for use to construct diversion / containments etc if required. These items will only be permitted to be operated by Council staff or operators approved by the **Assets Coordinator (GISC)** or more senior Council Officer.

### 3.4.2 Communication System

No telephone communication system is presently installed within the **Glen Innes Waste Management Depot**. Mobile telephones (supplied to site staff) are the principle communication (internal / external) means, which is supported by the GISC two-way system which is installed in site vehicles.

In a pollution incident, the mobile telephone can be used as a means of notifying those individuals / organisations responsible for activating this PIRMP and managing the incident response.

Communication mechanisms for neighbouring properties, issuing media releases and providing information on Council's web site are detailed in the Summary of Community Notification & Communication provided in **Table 9** of **Section 4.3.2** 

### 3.4.3 Security

Access to the **Glen Innes Waste Management Depot** by unauthorised persons and unauthorised activities occurring on the site is controlled at the **Gatehouse** by Council personnel.

### 3.4.4 First Aid Equipment

A suitable fully stocked and easily accessible first aid kit is located at the **Gatehouse** and its location clearly labelled. Other first aid kits are available within Council vehicles and heavy plant items

### 3.4.5 Signs & Labels

Suitable signage indicating the location of incident response equipment and features and the first aid kit will be provided and maintained within the facility.

A list of emergency phone numbers will be clearly displayed at a location within the facility that can be seen by Council Employees, contractor staff or facility users.

### 3.4.6 Funding Arrangements and Support

The cost of any clean up that is undertaken by emergency response agencies and the EPA will generally be recovered from a company (Council) or individual responsible for the pollution incident.

Having regard to the above the following pollution incident funding arrangements are in place:

- Funds within Council's Waste Reserve and Operating Budget
- Public liability insurance policies

# 4. POLLUTION INCIDENT CONTROL & RESPONSE

# 4.1 KEY FACILITY INCIDENT MANAGEMENT CONTACT DETAILS

The following is a list of incident response individuals who are responsible for activating the PIRMP together with their notification and communication responsibilities:

*Table 7 – PIRMP Contact Personnel:* 

NAME	POSITION	CONTACT DETAILS (24 Hours)	NOTIFICATION RESPONSIBILITIES	COMMUNICATION RESPONSIBILITIES
ALEX GADEN	Assets Coordinator (GISC)	0428 692 105	Emergency Services, EPA, Ministry of Health, WorkCover & Council inc. Manager - Technical Services (GISC)	Emergency Services GISC site personnel On-site Contractors Neighbouring property owners
IAN TROW	Trainee Environmental Officer (GISC)	0427 064 368	NIL	As required to support Assets Coordinator (GISC) or Manager - Technical Services (GISC)
CATHERINE McBride	Communications and Media Officer (GISC)	6730 2314	NIL	Updating website and arranging media notices
MALCOLM DONNELLY	Manager - Technical Services (GISC)	6730 2362 0408 669 991	Director - Infrastructure Services (GISC)	EPA & Lead Agencies
VANESSA MENZIE	Director -Infrastructure Services (GISC)	0409 664 922	General Manager / Directors / Councillors	EPA, Media & Ministries within delegations
KEITH APPLEBY	Manager - Integrated Water & Sustainability Services (GISC)	0408 144 251	NIL	As required to support Assets Coordinator (GISC) or Manager - Technical Services (GISC)
GRAHAM PRICE	Director - Development & Regulatory Services (GISC)	0418 440 978	NIL	As required to support Director - Infrastructure Services (GISC)
ANCILLARY CONT	ACTS: (Independent Operatio	ns located on the	Facility – contact when	operating on site)
DAVID DADLEY	Roadworks Stockpile Area, Manager - Infrastructure Delivery (GISC)	6730 2482 0418 415 313		Assets Coordinator (GISC)
GLEN LEE EVAN JILLET	Roadworks Stockpile Area, Co-ordinators (GISC)	0408 669 879 0429 079 260	Organisation's / Operations staff /	Assets Coordinator (GISC)
MARK WILLIAMS	Supervisor - Glen Industries Materials Recovery Facility		Management	Assets Coordinator (GISC)
KYLIE HAWKINS	Manager - Glen Industries	02 6732 1648		Assets Coordinator (GISC)

The above details are to be verified annually and updated whenever a change in personnel or responsibility has occurred.

# 4.2 KEY INCIDENT CONTACT DETAILS

The following is a list of incident response individuals and organizations that may be needed during a pollution incident.

<u>Table 8 – PIRMP Emergency Agency Contacts:</u>

ORGANISATION	CONTACT NAME	CONTACT DETAILS
Fire & Rescue NSW	Duty Officer	000 1300 729 579
NSW Police Force	Duty Officer	000 02 6732 9799
Ambulance Service of NSW	Duty Officer	000 131 233
Glen Innes District Hospital	Reception	02 6739 0200
Facility and Danks at in Authority (FDA)	EPA Environment Line	131 555
Environment Protection Authority (EPA)	Armidale Office	6773 7000
Office of Environment & Heritage (NP&WS)	Parks & Wildlife Regional Office	(02) 6738 9100 (Armidale) 02 9873 8500
WorkCover Authority	Duty Officer	131 050
Department of Primary Industries (NSW Fisheries)	Reception	1300 550 474
POISONS Information	Duty Officer	131 126
NSW Ministry of Health	Reception	02 6764 8000 (Tamworth) 02 9391 9000
Department of Families & Community Services	Reception	1800 079 098
State Emergency Service (SES)	Duty Officer	132 500
Roads & Traffic Authority	Reception	132 213
Bureau of Meteorology	General Information	1300 659 218

This list is to be verified at least annually and updated whenever an organization advises that a change has occurred.

### 4.3 INCIDENT NOTIFICATION AND COMMUNICATION

### 4.3.1 Incident Notification

In order to provide for the safety of employees & subcontractors, facility users, ancillary operations personnel and the wider community, along with ensuring appropriate pollution incident response, it is essential that early warning and notification of pollution incidents are made so that incident response procedures can be implemented and incident response organisations notified of the situation.

The prompt notification of an incident can often greatly assist in ensuring that the risk of injury, death, damage or environmental harm is minimized. In this regard the following incident notification procedures are to be implemented:

### 4.3.1.1 Small Area / Minor Incidents

Incidents such as small chemical spills or individual medical emergencies will generally not require the notification of incident response agencies. It will be the general practice that **ALL** incidents will be notified immediately to the **Assets Coordinator (GISC)** so that an assessment of the level of response required can be made.

The mobile telephone contact will be the preferred means of reporting such incidents.

In addition to the immediate notification of any minor incident or event, an incident report notification form, included as **Appendix 4**, is to be completed and forwarded to the **Assets Coordinator (GISC)**.

### 4.3.1.2 Major Incident

A major incident is where material harm to the environment is caused or threatened.

Fire & Rescue NSW (if not called for initial emergency response)

Where a major incident occurs, the **Assets Coordinator (GISC)** is to **immediately** implement the pollution notification protocol included as **Appendix 5**.

Importantly **Appendix 5** requires the immediate notification of:

•	Council (Environmental Services)	6730 2350
•	WorkCover	13 10 50
•	Ministry of Health via the local Public Health Unit	02 6764 8000
•	EPA	131 555

1300 729 579

In addition to the immediate notification of any major pollution incident, an incident report notification form, refer to **Appendix 4**, is to be completed and forwarded to the **Manager - Technical Services (GISC)**.

### 4.3.2 Community Notification and Communication

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

In this regard the following notification and communication action plan will be applicable to a major pollution incident at the **Glen Innes Waste Management Depot**.

The following action plan has been based upon the pollution incident risk assessment included in **Section 3.3** of this PIRMP.

GISC observes the legislative definition of a 'pollution incident' and notification protocols but may choose to implement parts of the Communication Action Plan (for neighbours and agencies) for lesser level incidents if there is merit in doing so (general courtesy, commitments to specific neighbours / complainants etc). There is no obligation to notify and the decision will be made by the **Manager - Technical Services (GISC)** on a case by case basis.

# <u>Table 9 – PIRMP Community Notification & Communications Plan:</u>

NATURE OF INCIDENT	IMPACT ON COMMUNITY	NOTIFICATION REQUIREMENTS	RESPONSIBILITY	NOTIFICATION MECHANISM / TOOLS	KEY MESSAGE
Leachate discharge (off site)	Local impact, ranging from MINOR to SEVERE depending on the severity of discharge	EPA  (if pollution incident defined in PIRMP – apply notification protocol in Appendix 5)	Assets Coordinator (GISC)	Phone call to EPA Environment Line followed by a written report	Assessment of severity  Type & quantity of material involved  Explanation of containment status  Date and time of incident  Response actions taken
		Occupiers of neighbouring downstream properties (see <b>Appendix 28</b> for Communication Recipients Schedule)	As above	Phone call / door knock to occupiers of impacted neighbouring properties	Refrain from contact / use of water
		Local Community / Media	Manager - Technical Services (GISC)	Information displayed on Council's web site	Strategy for prevention of recurrence

NATURE OF INCIDENT	IMPACT ON COMMUNITY	NOTIFICATION REQUIREMENTS	RESPONSIBILITY	NOTIFICATION MECHANISM / TOOLS	KEY MESSAGE
Fire	Local impact, likely to be MINOR, depending on the severity of the fire	EPA Occupiers of neighbouring properties (see <b>Appendix 28</b> for Communications Recipients Schedule)	Assets Coordinator (GISC)	Phone call to EPA Environment Line followed by a written report  Phone call / door knock to occupiers of impacted neighbouring properties	Date and time of incident Response actions taken Type of fire Agency responding Close windows / doors
		Local Community / Media	Manager - Technical Services (GISC)	Information displayed on Council's web site	Strategy for prevention of recurrence
Chemical / Hazardous materials spill (off site discharge)	Local impact, likely to be MINOR	Communications Recipients  Communications Recipients  Communications Recipients  Communications Recipients  Communications Recipients	Assets Coordinator (GISC)	Phone call to EPA Environment Line followed by a written report  Phone call / door knock to occupiers of impacted neighbouring properties	Date and time of incident  Response actions taken  Type of Spill  Agency responding  Refrain from contact with soil / water
		Local Community / Media	Manager - Technical Services (GISC)	Media release / Information displayed on Council's web site	Strategy for prevention of recurrence

NATURE OF INCIDENT	IMPACT ON COMMUNITY	NOTIFICATION REQUIREMENTS	RESPONSIBILITY	NOTIFICATION MECHANISM / TOOLS	KEY MESSAGE
Oil / fuel spill (off site discharge)	Local impact, likely to be MINOR	EPA Occupiers of neighbouring properties (if impacted) (see Appendix 28 for Communications Recipients Schedule) Local Community / Media	Assets Coordinator (GISC)  Manager - Technical Services	Phone call to EPA Environment Line followed by a written report  Phone call / door knock to occupiers of impacted neighbouring properties  Media release / Information displayed on Council's web site	Date and time of incident Response actions taken Type of Spill Agency responding Refrain from contact with soil / water Strategy for prevention of recurrence
Explosion	Local impact, likely to be MINOR (not a pollution incident if noise only)	If off site impacts above noise only:  EPA  Occupiers of neighbouring properties  (see Appendix 28 for Communications Recipients Schedule)  Local Community / Media	(GISC)  Assets Coordinator (GISC)  Manager - Technical Services (GISC)	Phone call to EPA Environment Line followed by a written report  Phone call / door knock to occupiers of impacted neighbouring properties  Media release / Information displayed on Council's web site	Assessment of severity Agency responding Date and time of incident Damage report  Strategy for prevention of recurrence

## 4.4 FACILITY EVACUATION

## 4.4.1 General Requirements

Most MINOR pollution incidents will not require the evacuation of all or in most instances even part of the facility. However, it is acknowledged that any MAJOR incident may require the facility to be evacuated.

In the event of a MAJOR incident evacuation of Council Employees, any contractor's & staff, facility users and ancillary co-located operations is of the utmost importance.

In order to achieve a safe and timely evacuation, it is critical that an early warning of the pollution situation be communicated and action implemented to remove Council Employees contractor's staff and facility users from the hazard area.

In this regard the standard operating procedures applicable to Facility Evacuation, refer to **Appendix 25**, must be implemented once a decision is made to evacuate the facility.

Whilst the need for evacuation will be dependent upon the nature and scale of an incident it is of primary importance that personnel or public health is not put at risk at anytime during a pollution incident.

The decision to evacuate (in part of full) is to be made by the **Chief Warden** (generally this would be the **Assets Coordinator (GISC)** or other **most senior staff member at the site**), and supported by facility personnel OR as directed by a responding Emergency Service.

## 4.4.2 Stages of Evacuation

There are 2 stages of evacuation that are applicable to the facility being;

- Stage One: Immediate Area The evacuation of persons in immediate danger.
- Stage Two: Total Facility A complete evacuation of the Facility by all people.

In the event of a Total Facility Evacuation, the Facility is not to be re-entered unless instructed to do so by the **Chief Warden** OR as directed by a responding Emergency Service

## 4.4.3 Priority of Evacuation

The **Chief Warden** is responsible for prioritising the order in which people are evacuated from the site of the incident. Generally the following priorities apply:

- Ambulatory
- Semi-ambulant (people requiring some physical assistance)
- Non-ambulant (people who need to be physically moved or carried)
- Aggressive, violent or resistive people.

The above priority for evacuation is for guidance only, the emergency may dictate otherwise.

Where a person refuses to comply with a direction given by the **Chief Warden** the following action is to be initiated:

- Ensure that the person has been clearly advised that they are required to evacuate the facility because of an emergency situation that maybe life threatening.
- Notify the Officer-in-Charge of the attending Emergency Service.

## 4.4.4 Mobility Impaired Persons

A register is to be maintained of site personnel who may have a permanent or temporary disability that would impeded their ability to self evacuate if required.

A staff member who works with a person with a disability shall be appointed as that person's carer during an emergency. The procedures for assisting mobility-impaired persons should be discreetly discussed with the individual concerned.

All staff should be trained in methods of assisting mobility-impaired persons during an emergency.

## 4.4.5 Evacuation Assembly Areas

The facility has a designated **primary** and a **secondary** evacuation assembly point.

In the event of an incident requiring the evacuation of the facility, all Council Employees, any contractor's / staff and facility users are to immediately leave the facility by the designated route and report to the designated primary evacuation point.

Should the primary evacuation point be in a hazardous area or is unsuitable due to the nature of the threat, employees and facility users will then be directed to proceed to the designated secondary evacuation point.

On arrival at the designated evacuation assembly point all persons will remain until the **Chief Warden** has determined the status of all personnel and;

- accounted for all, or
- prepared a list of names and / or numbers of missing personnel or facility users and the location
   last seen

For the purposes of this PIRMP the following evacuation assembly points are applicable;

**Primary Evacuation Point** is at the main entry to the **Glen Innes Waste Management Depot** where the **"Evacuation Muster Point 1"** sign is located.

The Secondary Assembly Point is where the "Evacuation Muster Point 2" sign is located at the Alternate Site Entry to the MRF on Rodgers Road.

The Site Services and Infrastructure Plan in **Appendix 30** shows the locations of the Primary and Secondary assembly points.

## 4.4.6 Post Evacuation Assembly Point

Once the facility has been evacuated to the Primary or Secondary Evacuation Assembly Point and the presence of personnel and facility users confirmed, arrangements will be made by the **Chief Warden** for Council Employees and contractor's staff to be transported / moved to a Post Evacuation Assembly Point which may, depending on time of day etc, be the **Council Offices in Church Street, Glen Innes**.

Incident debriefing and incident investigation will be undertaken at the Post Evacuation Assembly Point. Further management instructions will also be provided.

## **5. POLLUTION INCIDENT RESPONSE PROCEDURES**

**Appendices No 6 to 27** of this PIRMP contain instructions, (Standard Operating Procedures – SOP's), for facility employees, contractor's staff and facility users about actions to be taken for personal safety, and the procedures that are to be implemented to help guide management efforts during a pollution incident such as:

- Leachate discharge (off-site)
- Fire
- Chemical spill
- Oil / fuel spill
- Explosion
- Facility Evacuation

## 6. POST POLLUTION INCIDENT ACTIVITIES

This section of the Pollution Incident Response Plan identifies those activities necessary to support Council staff and contractor's staff during and following a pollution incident and those activities necessary to restore operations at the **Glen Innes Waste Management Depot.** 

## **6.1 Recovery Operations**

The recovery of facility operations and services will depend on the extent of damage suffered by the facility.

The **Assets Coordinator (GISC)**, in collaboration with the **Manager - Technical Services (GISC)** will need to prioritise activities that can be accomplished with available staff and resources.

Immediately following the emergency phase of an incident, the **Manager - Technical Services (GISC)** will develop an operational recovery plan.

## 6.2 Incident Investigation (After Action Review)

A pollution incident must be investigated as soon as possible following its occurrence. The investigation is designed to determine why the incident occurred and what precautions can be taken to prevent a recurrence.

The **Manager - Technical Services (GISC)** is responsible for ensuring that an incident investigation is conducted following all pollution incidents that occur at the facility.

## 6.2.1 Small Incidents

For small incidents, the Assets Coordinator (GISC) will normally conduct the investigation.

## 6.2.2 Major Incidents

For major pollution incidents where material harm to the environment is caused or threatened statutory authorities and emergency response agencies will generally be involved in conducting the investigation.

The Assets Coordinator (GISC) and Manager - Technical Services (GISC) will assist the authorities as needed.

## **6.3** DOCUMENTATION

Documentation of response activities is of critical importance following a pollution incident. All records and forms used during the incident to document activities along with testing and amendments to the PRIMP will be retained for future reference in the organisations corporate records Management System (DataWorks, subject Waste Management : Reporting)

Following a pollution incident or emergency situation, the **Assets Coordinator (GISC)** will have the responsibility for collecting all records and forms used during the incident. These will be used for several purposes, such as incident investigation, insurance claims and potential legal actions.

The **Assets Coordinator (GISC)** must prepare a report documenting activities that took place during a major pollution incident.

The report of the **Assets Coordinator (GISC)** and all related documentation will be submitted to the **Manager - Technical Services (GISC)** for review and necessary follow-up actions.

The Manager - Technical Services (GISC) will make any necessary follow up reports to the EPA or other Agencies

## **6.4** INCIDENT IMPACT ASSESSMENT

Following an incident, an assessment of impact that has occurred to the facility, the environment and equipment must be conducted.

The major goal of this assessment will be to determine the extent of damage to facilities and/or the environment resulting from the incident, and identify repairs or restoration that must be initiated to minimise further damage and restore the facility for operational use or to rehabilitate the environment.

The **Manager - Technical Services (GISC)** will have the primary responsibility for conducting the damage assessment following an incident.

Assistance will be obtained as needed from facility employees and outside organizations, such as ecologists, engineers and clean up contractors.

## 6.5 INCIDENT DEBRIEFING

The purpose of incident debriefing is to inform employees about any hazards that may still remain on the facility property following the incident and to identify unsafe conditions that may still exist.

## 6.6 AFTER ACTION REVIEW & PIRMP UPDATE / AMENDMENT

This will occur within 30 days of any pollution incident.

The AAR will analyse the actions that took place during the pollution incident (both good and bad) and will seek to identify opportunities to improve the effectiveness of the PIRMP, through Prevention, Preparation, Response and Recovery procedures in place for the facility.

The AAR findings will produce Actions to amend, modify or may determine no change requirements are necessary for the PIRMP.

## **ENDS**

APPENDIX	(1: PIRMP AMENDMENT	NOTIFICATION FORM
Following a r	eview of the Pollution Incident R	esponse Management Plan that was conducted on:
(Date):		the following amendments to the plan have been
made. Accor	dingly these changes are to be in	corporated into the PIRMP document which is held by you.
DISTRIBUTIO	ON	DATE SENT / ISSUED:
• Mas	ter copy	DATE SERVI / 1550ED.
• Site	сору	
• Man	ager - Technical Services (GISC)	
сору	,	
PAGE NUMBER	PIRMP SECTION	DESCRIPTION OF CHANGE
MANAGEN DATED:	IENT AUTHORISATION:	
l acknowle		nents to this PIRMP and have incorporated these t for which I am responsible.
SIGNED:		DATED:
NAME:		

## **APPENDIX 2: STAFF & CONTRACTOR TRAINING**

## **Standard Operating Procedure (SOP)**

## **PURPOSE AND SCOPE:**

To ensure the safe and effective management at the **Glen Innes Waste Management Depot**, it is essential that all relevant staff receive training appropriate to their position, duties and level of responsibility.

The purpose of this procedure is to outline the minimum training requirements which are applicable to staff involved in the operations of the waste management facility and in the provision of waste management services.

Primary Environmental Goal – Adequate staffing and training & Benchmark Technique 39.

## PROCEDURE/STANDARD:

Staffing and training requirements shall be adequate to enable proper management and service delivery

Staff will undergo a variety of training to ensure an adequate level of skill and education is possessed to enable all tasks and activities to be carried out successfully. Training will be conducted in house, on the job or by external providers.

The guidance for specific training programs that are integral to the operation of Council's facilities is described below.

## PROGRAM A - SITE ENVIRONMENT INDUCTION:

Key points to be covered in this program may include:

- environmental impacts of the landfill
- pollution incident response
- waste identification and rejection procedures
- hours of operation and traffic management
- environmental mitigation measures and controls
- record keeping and reporting
- waste placement, compaction and covering
- evacuation procedures

This training would generally be provided by the **Assets Coordinator (GISC)** when new staff / contractors commence at the site. Ongoing "on the job" training will also be necessary.

## **PROGRAM B – FIRE FIGHTING**

Key points to be covered in this program may include:

- Types of fires (e.g. oil, electrical)
- Determining responsibilities in the event of a fire (staff/fire brigade)
- Procedures for extinguishing fires
- Types/location and maintenance of fire fighting equipment
- Prevention of fires
- Procedures for communication in the event of fire

This training would be undertaken in the form of a toolbox talk and may include practical demonstrations. The training would be prepared and delivered by suitably qualified personnel (internal or external). Input may also be provided by officers of the local NSW Fire & Rescue Brigade or NSW Rural Fire Service

## PROGRAM C – HAZARDOUS SUBSTANCES & DANGEROUS GOODS HANDLING

Key points to be covered in this program may include:

- Use and interpretation of Material Safety Data Sheets
- Identification of hazardous materials
- Handling of hazardous materials
- Labelling of containers
- Storage and transport of hazardous substances and dangerous goods
- Spill management and basic first aid procedures
- Compatibility of materials.

This training would be provided by suitable service provider/s. Where required, additional input may be required from external WorkCover accredited WH&S consultants.

## TRAINING RECORDS

A record of all training undertaken will be maintained at the **Council's Offices** and will be made available for inspection by authorised personnel.

#### **BENEFIT OF COMPLIANCE TO PROCEDURE:**

- Impacts on the natural environment are minimised
- Operational issues identified
- Demonstrated operational competency
- Employees safety protected
- Health and safety of public / facility users / neighbours protected
- Meeting environmental goal

- Violations and/or fines from Regulatory Agencies
- Pollution of the environment
- Unresolved operational issues
- Injury/Death to employee
- Injury/Death to public / facility users

REVIEWED BY:	APPROVED BY:
DATE:	DATE:

## POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN TRAINING / COMPETENCY SUMMARY

OPERATIONAL STAFF	TRAINING / COMPETENCY STREAM		
	PROGRAM A	PROGRAM B	PROGRAM C
	Environmental & General Safety Induction for Facility	Fire Fighting & Emergency Incident response.	Hazardous Substance & Dangerous Goods Management
NAME & POSITION	DATE	OF TRAINING COM	PLETION
REVIEWED BY:	APPROVED BY:		
DATE:	DATE:		

APPENDIX 3: PIRMP EXERCISE RECORD & EVA	LUATION FORM	
FACILITY: GLEN INNES WASTE MANAGEMENT DEPO	Г	
DATE:		
EMERGENCY SEQUENCE:	TIME	
Matters:	Hours	Minutes
Incident uncovered		
Assessment of significance		
Initiation of incident response/notification of incident		
Evacuation alarm sounded (if necessary)		
Incident control/remediation action commenced		
Evacuation commenced (if necessary)		
Warden checks for personnel present		
Evacuation completed (if necessary)		
Pollution contained		
Clean up commenced		
Clean up completed		
All clear given		
Pollution Incident Report Form completed		
Exercise terminated		
COMMENTS:		
Compliance with Standard Operating Procedures (S	OP's)	
2. Competency of Employees assessment		
3. Time frames for response		
4. General Comments/Recommendations for action		
OBSERVER		
SIGNED:		
DATE:		

## APPENDIX 4: POLLUTION INCIDENT REPORTING & RECORDING Standard Operating Procedure (SOP)

## **PURPOSE AND SCOPE**

The purpose of this procedure is to define the pollution incident reporting requirements which are applicable to the operation of the **Glen Innes Waste Management Depot.** A pollution incident is defined as 'material harm to the environment' as described in section 147 of the Act. Material harm includes on-site harm, as well as harm to the environment beyond the premises where the pollution incident occurred. A 'pollution incident' includes a leak, spill or escape of a substance, or circumstances in which material harm is likely to occur.

#### Note

There is a duty to report pollution incidents under section 148 of the <u>Protection of the Environment Operations Act 1997 (POEO Act)</u> in addition to EPL condition R2 which reads "The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act. Notifications must be made by telephoning the Environment Line on 131 555.

## Note

Use Attachment A for general pollution incident reporting

Use Attachment B for leachate discharge/overflow reporting

Primary Environmental Goal – Preventing degradation of local amenity & Benchmark Technique 39.

## PROCEDURE/STANDARD

- 1. If a pollution incident occurs, all necessary action should be taken to minimise the size and any adverse effects of the release as a first response, (sand bagging, application of spill kit, shutting off the source, construction of temporary bunds/dam etc). Guidance can be found by referring to the SOP within the facility PIRMP.
- 2. If the incident presents an immediate threat to human health or property, Fire & Rescue NSW, the NSW Police and the NSW Ambulance Service should be contacted for emergency assistance phone 000.
- 3. At an appropriate time, during an incident, a staff member shall record the following;
  - Type and nature of the incident (what happened)
  - Notification source and details
  - Details of the conversations that may ensue with staff, emergency services and authorities
  - Time events
  - Actions taken to mitigate the incident
  - Details of other actions during the course of the incident management
- 4. As soon as possible during an incident staff will notify the **Assets Coordinator (GISC)** of the incident and provide an update of the action initiated.
- 5. **Assets Coordinator (GISC)** to notify the EPA and other agencies in accordance with the protocols in this PIRMP

 The Assets Coordinator (GISC) is to record the details of the incident on a Pollution Incident Notification Form within 24 hours of the incident commencing and advise the Manager -Technical Services (GISC)

## 7. Post Incident

Documentation of incident activities is of critical importance following the incident. All records and forms used during the incident to document activities must be retained for future reference.

Following an incident, the **Assets Coordinator (GISC)** will have the responsibility for collecting all records and forms used during the incident. These will be used for several purposes, such as incident investigation, insurance claims and potential legal actions.

The **Assets Coordinator (GISC)** must, within 24 hours of being notified of a pollution incident, prepare a report documenting activities that took place during the incident.

The report and all related documentation, will be submitted to Council's **Manager - Technical Services (GISC)**, for review and necessary follow up actions.

Where there is potential for litigation in relation to the incident the **Manager - Technical Services** (GISC) shall prepare a written report for referral to the Council's legal representative

## **ATTACHMENTS / ADDITIONAL FORMS**

- A. Pollution Incident Report Form
- B. Leachate discharge/overflow Reporting Form

#### **BENEFIT OF COMPLIANCE TO PROCEDURE:**

- Details of incident are readily available including information regarding incident response activities
- Demonstrated operational competency
- Meeting environmental goal

## **CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:**

• Violations and/or fines from Regulatory Agencies

REVIEWED BY:	APPROVED BY:
DATE:	DATE

POLLUTION INCIDENT REPORT FORM (A)			
DATE OF INCIDENT:		TIME OF INCIDENT:	
NAME OF REPORTING PERSON			
LOCATION OF INCIDENT Where did it occur?			
TYPE and QUANTITY of MATERIAL INVOLVED			
Outline <b>ACTIONS</b> initiated <b>IN RESPONSE TO INCIDENT</b>			
Was it necessary to initiate the MAJOR INCIDENT NOTIFICATION PROTOCOL?			
Was the COMMUNITY NOTIFICATION & COMMUNICATION PLAN activated?			
Was <b>ACTION IN ACCORDANCE WITH SOPS</b> ?  If not - why?			
Is there a <b>NEED TO REVIEW SOP</b> in response?			
<b>DATE</b> and <b>TIME</b> of details provided to:			
Assets Coordinator (GISC)			
OTHER MATTERS			
MANAGEMENT ACKNOWLEDGE DATED:	EMENT:		

## POLLUTION INCIDENT REPORT FORM (B) **Leachate Discharge/Overflow** TIME OF INCIDENT: **DATE OF INCIDENT:** NAME OF REPORTING **PERSON: DETAILS** of **PERSON** WITNESSING THE LEACHATE **DISCHARGE** or overflow **LOCATION** of incident Where did it occur? **DATE** and **TIME** of **COMMENCEMENT OF the DISCHARGE** Assessed **VOLUME OF DISCHARGE** or overflow **PERIOD OF** time the **DISCHARGE** or overflow occurred (Start / finish) WEATHER CONDITIONS at the time of the discharge or overflow. DAILY RAINFALL (mm) on the DAY OF THE DISCHARGE. RAINFALL (mm each day) for the WEEK PRIOR TO THE DISCHARGE **SAMPLING OCCURRED?** (Yes / No)? Attach analytical results Most recent MONITORING **RESULTS** of the chemical composition of the **LEACHATE**. Explanation WHY & HOW the **DISCHARGE OCCURRED PLAN OF ACTION** to **PREVENT** a similar **DISCHARGE OTHER MATTERS** MANAGEMENT ACKNOWLEDGEMENT: **DATED:**

## APPENDIX 5: POLLUTION INCIDENT NOTIFICATION PROTOCOL Standard Operating Procedure (SOP)

# CALL '000' IF THE INCIDENT PRESENTS AN IMMEDIATE THREAT TO HUMAN HEALTH OR PROPERTY...

Fire & Rescue NSW, the NSW Police and the NSW Ambulance Service are the first responders, as they are responsible for controlling and containing incidents.

## THEN...

If the incident *does not* require an initial combat agency, or once the 000 call has been made, notify the relevant authorities in the following order. The 24-hour hotline for each authority is given when available:

•	EPA – phone Environment Line on	131 555
•	the Ministry of Health via the local Public Health Unit on	02 6764 8000
•	the WorkCover Authority – phone	13 10 50
•	Council (Environmental Services) on	02 6730 2350
•	Fire & Rescue NSW (if not called initially)	1300 729 579

Complying with these notification requirements does not remove the need to comply with any other obligations for incident notification, for example, those that apply under other environment protection legislation or legislation administered by WorkCover.

## APPENDIX 6: LEACHATE DISCHARGE EMERGENCY RESPONSE Standard Operating Procedure (SOP)

## **PURPOSE AND SCOPE**

The purpose of this procedure is to define an incident response in the event of a leachate discharge being detected or reported from a leachate dam/s overflowing at **Glen Innes Waste Management Depot**.

Primary Environmental Goal – Preventing pollution of water by leachate & Benchmark technique 8

## PROCEDURE/STANDARD

Leachate or leachate contaminated surface water discharge to adjacent waterways

Actions required in response to such events may vary and it will be the role of Council staff to determine and initiate appropriate actions.

The following notes will form the basis of that decision making together with emergency exercises and desktop trials:

- Confine the source of the discharge and/or sources of inflows to limit the spread of its effects without endangering personnel. Check leachate pump/s are working.
- Construct sand bag barriers or earth berms to contain or divert the flow and/or excavate temporary retention dams to withhold discharges.
- Secure the affected area(s) by using barricades and bunting if necessary.
- Advise the Assets Coordinator (GISC) of all actions taken or proposed.
- Source a tanker truck / pump to pump out the retained leachate or return to system when holding capacity is available
- Notify neighbours who may be affected by the incident.
- A copy of the Pollution Incident Report Form is to be referred to Manager Technical Services
   (GISC)

It is considered essential that all operators using the site are aware and understand the specific emergency and incident response requirements.

## **BENEFIT OF COMPLIANCE TO PROCEDURE:**

- Limit environmental damage
- Health and safety of public/facility user protected

## **CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:**

• Violations and/or fines from Regulatory Agencies

REVIEWED BY:	APPROVED BY:
DATE:	DATE

## APPENDIX 7: LEACHATE SYSTEM MANAGEMENT & MAINTENANCE Standard Operating Procedure (SOP)

## **PURPOSE AND SCOPE:**

To ensure that the leachate control system is operating effectively with its design objectives to prevent leachate escaping from the landfill into groundwater, surface water and subsoil.

Primary Environmental Goal – Preventing pollution of water by leachate. Benchmark technique 8

## PROCEDURE/STANDARD

- 1. It is the responsibility of **Assets Coordinator (GISC)** to ensure prescribed inspections of, report upon and record the following leachate control measures is undertaken by site staff:
  - Inspect leachate pump and pump lines to ensure they are operating correctly.
  - Examine the level of leachate within collection wells, sumps & dams. Where leachate levels appear excessive immediately determine appropriate method to reduce volume retained.
  - Inspect pump discharge lines and discharge points to ensure their effective operation. Where
    failures are detected, consideration must be given to deactivating the system so as to
    determine the scope of repair works.

Note: In considering the deactivation of the system it will be necessary to ensure that sufficient leachate storage capacity is available to cover the period of deactivation. This should involve an assessment of the likelihood of and extent of rain.

- Inspect the site for emergence of leachate springs.
- 2. Where system operational defects are detected immediately contact the **Manager Technical Services (GISC)** to discuss and arrange rectification/maintenance works.
- 3. Details of system inspection & findings / actions are to be recorded on the Site Inspection checklist.

- Violations and/or fines from Regulatory Agencies
- Pollution of the environment

REVIEWED BY:	APPROVED BY:
DATE:	DATE

## APPENDIX 8: SURFACE WATER QUALITY MONITORING Standard Operating Procedure (SOP)

## **PURPOSE AND SCOPE**

Prevention of contamination entering the stormwater management system should be the first priority and the Environmental Checklist in **Appendix 29** of the PIRMP provides for this. The purpose and scope of the surface water quality monitoring program should effectively monitor and report current surface water character and ensure early detection and reporting of possible pollution of surface water quality. Quarterly sampling is an EPL requirement when surface water is present / discharge is occurring. Sampling locations are identified in the EPL.

Primary Environmental Goal – Detecting water pollution & EPA Benchmark Technique 7

## PROCEDURE/STANDARD

All surface water monitoring at the site occurs in accordance with the requirements of EPL 5939.

GISC engages a NATA accredited third party laboratory to sample, analyse and report findings to comply with specific EPL requisites and wider EPA public reporting requirements.

## **REPORTING**

All results received shall be reviewed by the **Manager - Technical Services (GISC)** and reported to the NSW Environment Protection Authority (EPA) on an annual basis with the EPA annual landfill licence return.

If any particularly high contaminant levels are received they shall be reported to the EPA within 14 days from receipt of results from the Laboratory.

Results must be **published to the Council Web page** within 14 days following receipt of results from the Laboratory.

## **BENEFITS OF COMPLIANCE TO PROCEDURE:**

- Impacts on the natural environment minimised
- Operational issues identified
- Demonstrated operational competency

- Violations and/or fines from Regulatory Agencies
- Pollution of the environment
- Unresolved operational issues

REVIEWED BY:	APPROVED BY:
DATE:	DATE

## APPENDIX 9: OPERATION & MAINTENANCE OF SEDIMENT CONTROL SYSTEMS

Standard Operating Procedure (SOP)

## **PURPOSE AND SCOPE**

To ensure that the surface water control system, including any stormwater retention dam, is operating effectively within its design objectives to control erosion and sediment deposition.

To define the procedure for the operation and maintenance of the water quality control structures.

**Definition:** 

"Water quality control structures" are dams / basins designed to intercept sediment laden runoff and retain a significant portion of the sediment thereby protecting downstream waterways from pollution and excessive sedimentation. This retention of sediment is generally achieved by the settling of the suspended sediment from the stormwater flow. Locations of large sediment control basins /detention dams are found the Site Services & Infrastructure Plan.

Primary Environmental Goal - Preventing Degradation of Local Amenity & EPA Benchmark Technique 7

## PROCEDURE/STANDARD

Non vegetated and unsealed areas, new waste disposal stages, recently completed filling areas, stockpile areas and roads have a high potential to release sediments into stormwater, and significant sedimentation and erosion controls have to be constructed to minimise this risk.

Surface water management can be achieved by:

- Control site clearing to minimise exposed areas
- Applying mulch to erodible surfaces
- Revegetation of degraded areas and slopes
- Revegetation of final capping
- Establishing silt barriers to catch drains
- De-silting sedimentation basins and ensuring detention of stormwater inflows
- Limit access to non landfill areas to protect existing vegetation
- Visual inspection of surface water control systems after rain events
- Drainage control by using perimeter banks, bunds, diversion channels and drains to divert silt laden flows into controlled dams and basins

#### 1. INSPECTION AND MAINTENANCE OF STRUCTURES

- Routine inspections are to be carried out to assess the need for maintenance and are primarily
  concerned with checking the functionality of the stormwater drainage and treatment facilities;
  items such as drains, drainage pits, box culverts, detention basins and retention systems.
   Maintenance of these items is most important for the ongoing drainage and treatment of
  stormwater.
- Water quality basins (retention dams) should be inspected following each storm event and after discharge of stormwater to ensure adequate capacity is maintained in the basin at all times.
- Should the inspection reveal that maintenance of any item is required this is to be reported to the **Assets Coordinator (GISC)** for action.
- Items that are to be subject to Routine Inspections for Maintenance may comprise, but not be limited to, those listed in the attached inspection sheet. The inspection sheet is to be read in conjunction with the overall Environmental Checklist for the facility.
- Marker pegs are to be used to indicate the capacity of sediment control basins. If sediment has
  accumulated to a point above the marker pegs, removal of accumulated sediment must occur to
  return capacity of the sediment basin. Relocate the sediment to an area away from the drainage
  paths.
- Personnel completing the routine inspections for maintenance should be generally observant of items such as equipment failures, leaking water, scouring and/or signs of blockages of water flow. If such items are observed an immediate inspection for engineering maintenance should be organised.
- Where routine maintenance is repeatedly carried out in one location, the problem should be investigated further during an engineering inspection for maintenance.

## 2. FREQUENCY OF INSPECTION

- Routine inspections for maintenance shall be carried out over the life of the facility.
- Event heavy rain inspections should be carried out as soon as practicable following an intense period of rainfall (i.e. greater than >25mm event over 48 hours).

## 3. RECORDS

- Records detailing each of the routine inspections for maintenance should be completed during the inspection and describe in detail any required maintenance.
- The inspection records are to be provided as part of the facility inspection and audit program for the facility.
- Records of any maintenance carried out as a result of the inspection should be completed immediately after the works have been finalised and filed appropriately.

## 4. PERSONNEL

Routine inspections for maintenance are required to establish the need for basic maintenance.
 On this basis such inspections do not require professional engineering knowledge and may be carried out by any responsible person, including site staff and the Assets Coordinator (GISC).

## 5. ATTACHMENTS / ADDITIONAL FORMS REQUIRED

A) Water Quality Structure Inspection Requirements

## **BENEFIT OF COMPLIANCE TO PROCEDURE:**

- Impacts on the natural environment minimised
- Operational issues identified
- Demonstrated operational competency
- Meeting environmental goal

- Violations and/or fines from Regulatory Agencies
- Pollution of the environment
- Unresolved operational issues

REVIEWED BY:	APPROVED BY:
DATE:	DATE

# ATTACHMENT A WATER QUALITY STRUCTURE INSPECTION REQUIREMENTS

ITEM / AREA	ROUTINE INSPECTIONS FOR MAINTENANCE	FREQUENCY
Drains/pipes/pits	Inspect surface access points to underground culverts, pipes as well as surface in the area of the access points. Particular attention should be paid to damage or blockage	Monthly
	Inspect lining of open drains to determine any scour or damage requiring repair. In particular the connection points into batter drainages outlets to stormwater channels need to be investigated for evidence of scour.	Monthly
	To be visually inspected after heavy rainfall events to ensure they are free of debris and litter.	As required
Batter drains	Inspect batter drains for evidence of deterioration and scour. This inspection is required for both lined and unlined batter drains, including where the drain crosses benches.	Monthly
	Inspect batter drains for debris and overgrown vegetation	Monthly
	To be visually inspected after heavy rainfall events to ensure they are free of debris and litter	As required
Retention Dams	Inspect dam lining for damage and general condition	Monthly
	Inspect retention dams for damage or debris collection	Monthly
	Trash screens (if installed) to be visually inspected after heavy rainfall events to ensure they are free of debris and litter	Monthly
Inlet / Outlets & Gabions	Inspect for signs of deterioration (scouring / undercutting), blockage or damage	Monthly
	Trash screens (if installed) to be visually inspected after heavy rainfall events to ensure they are free of debris and litter	As required
Overflow Weirs / Baffles & Shutters	Inspect for signs of deterioration or damage	Monthly

Inspections of structures / drains etc should also be undertaken after a heavy rainfall event

## APPENDIX 10: LEACHATE DISCHARGE (DAM / SUMP / TANK FAILURE) Standard Operating Procedure (SOP)

## **Purpose and Scope**

The purpose of this procedure is to define an incident response in the event of a leachate discharge being detected or reported from a leachate dam / sump / tank rupturing or suffering a significant leak at the **Glen Innes Waste Management Depot**.

## Procedure/Standard

Leachate or contaminated surface water discharge to adjacent waterways

Actions required in response to such events may vary and it will be the role of **Assets Coordinator (GISC)** to determine and initiate appropriate actions.

The following notes will form the basis of that decision making.

- Confine the source of the discharge to limit the spread of its effects without endangering personnel.
- Place sand bag barriers at the point of failure if safe to do so or engage suitable plant to replace earth in repairing the defective dam wall.
- Secure the affected area(s) by using barricades and bunting if necessary.
- Advise the Manager Technical Services (GISC) of all actions taken or proposed.
- Notify neighbours who may be affected by the incident.
- Engage a suitably qualified expert to evaluate the damage and to design the remedial work.
- A copy of the Pollution Incident Report Form is to be referred to Manager Technical Services
   (GISC)

It is considered essential that all operators using the site are aware and understand the specific emergency and incident response requirements.

## **Benefit of Compliance to Procedure:**

- Limit environmental damage
- Health and Safety of public/facility users, contractors, staff and neighbours is protected

## **Consequence of Non-Compliance to Instruction:**

• Violations and/or fines from Regulatory Agencies

REVIEWED BY:	APPROVED BY:
DATE:	DATE

## **APPENDIX 11: GROUNDWATER MONITORING**

## **Standard Operating Procedure (SOP)**

## **PURPOSE AND SCOPE**

The purpose and scope of the groundwater monitoring program should be to effectively monitor and report current groundwater character and ensure early detection and reporting of possible pollution of groundwater at the **Glen Innes Waste Management Depot**.

Primary Environmental Goal – Detecting water pollution & EPA Benchmark Technique 6

## PROCEDURE/STANDARD

All ground water monitoring wells and leachate monitoring points at the landfill are sampled in accordance with the requirements of **EPL 5939**.

GISC engages a NATA accredited third party laboratory to sample, analyse and report findings to comply with specific EPL requisites and wider EPA public reporting requirements.

## **REPORTING**

All results received shall be reviewed by the **Manager - Technical Services (GISC)** and reported to the NSW Environment Protection Authority (EPA) on an annual basis with the EPA annual licence return.

If any particularly high contaminant levels are received they shall be reported to the EPA within 14 days from receipt of results from the Laboratory.

Monitoring Results must also be **published to the Organisation's Web page** within **14 days** following receipt of results from the Laboratory.

## **BENEFIT OF COMPLIANCE TO PROCEDURE:**

- Meeting environmental goal
- Impacts on the natural environment are minimised
- Operational issues identified
- Demonstrated operational competency

- Violations and/or fines from Regulatory Agencies
- Pollution of the environment
- Unresolved operational issues

REVIEWED BY:	APPROVED BY:
DATE:	DATE

## APPENDIX 12: TYRE STOCKPILE MANAGEMENT & MAINTENANCE Standard Operating Procedure (SOP)

## **PURPOSE AND SCOPE**

To define the procedure for management of used tyres which have been stockpiled and are awaiting removal offsite for recycling or disposal so as to minimise the risk of fire.

The EPA Environmental Protection Licence requires stockpiles of tyres not to exceed 50 tonnes.

Primary Environmental Goal – Adequate Fire Fighting Capacity & EPA Benchmark Technique 38

## PROCEDURE/STANDARD

- Tyres are to be placed on a hardstand area compacted of a depth of at least 500 mm if located above previously placed general waste and are to be removed from site on a routine basis to ensure the stockpile is kept to a minimum.
- A safety exclusion area is to be maintained around the stockpile as a retained buffer zone to
  prevent the spread of fire and to allow fire suppression activities to be undertaken in the event
  of fire.
- Fire prevention measures are to be undertaken including signage, servicing of fire fighting equipment and training of personnel in fire fighting techniques.

## In the event of a fire:

- Attempt to extinguish a small, controlled fire with equipment on site without endangering
  facility personnel and equipment. This equipment includes a suitable fire extinguisher,
  hand tools or plant items available on site.
- Report any potentially dangerous fire to "000" and request the fire brigade, providing all information they require (i.e. your name, fire location, type, size, etc)
- As soon as possible notify the **Assets Coordinator (GISC)** of the incident and provide an update of the action initiated to date.
- Keep all unauthorised people away from the area on fire whilst protecting personal safety.
- Provide any requested assistance to Emergency Services IF SAFE TO DO SO.
- Report the details of the fire on an Incident Notification Report and refer to Manager -Technical Services (GISC)

## **BENEFIT OF COMPLIANCE TO PROCEDURE:**

• Impacts on the natural environment minimised

- Violations and/or fines from Regulatory Agencies
- Pollution of the environment

REVIEWED BY:	APPROVED BY:
DATE:	DATE

## APPENDIX 13: MULCH / GREENWASTE STOCKPILE MANAGEMENT Standard Operating Procedure (SOP)

## **PURPOSE AND SCOPE**

To define the procedure for the management of green waste which has been stockpiled and is awaiting shredding or has been shredded and is composting or awaiting transporting offsite so as to minimise the risk of fire and/or odour generation.

Primary Environmental Goal - Adequate Fire Fighting Capacity & EPA Benchmark Technique 38

## PROCEDURE/STANDARD

- A safety exclusion area is to be maintained around stockpiles as a retained buffer zone to
  prevent the spread of fire and to allow fire suppression activities to be undertaken in the event
  of fire.
- Fire prevention measures are to be undertaken including signage, servicing of fire fighting equipment and training of personnel in fire fighting techniques.
- Stockpiles and windrows of <u>shredded</u> green waste are to be limited to between 2.5 and 3.0m in height and 5-6m in width.
- Stockpiles and windrows of shredded green waste are to be visually inspected weekly and an assessment of the temperature, odour and moisture conditions within the stockpile made.
- If heating in a stockpile is suspected a temperature probe should be inserted into the stockpile and allowed to remain undisturbed until the temperature reading remains static.
- Stockpiles and windrows of mulch are to be turned when temperatures exceed 55°C (standard process) but must be turned (for safety) whenever temperatures within the stockpile exceed 70°C.

## **BENEFIT OF COMPLIANCE TO PROCEDURE:**

Impacts on the natural environment minimised

- Violations and/or fines from Regulatory Agencies
- Pollution of the environment

REVIEWED BY:	APPROVED BY:
DATE:	DATE

## **APPENDIX 14: FIRE IN WASTE TRANSFER BIN**

## **Standard Operating Procedure (SOP)**

## **PURPOSE AND SCOPE**

To define a procedure for responding to a fire that is detected in a waste transfer bin.

Primary Environmental Goal – Adequate Fire Fighting Capacity & EPA Benchmark Technique 38

## PROCEDURE/STANDARD

## Fire Response:

• Attempt to extinguish a small, controlled fire with equipment on site without endangering facility personnel and equipment. This equipment includes a fire hose, water cart, or suitable fire extinguisher or soil. Do not attempt to remove a transfer bin containing the fire.

## Note: Be sure to use the proper extinguisher for the fire

- Report any potentially dangerous fire to "000" and request the fire service, providing all
  information they require (i.e. your name, fire location, type, size, etc)
- As soon as possible notify the **Assets Coordinator (GISC)** of the incident and provide an update of the action initiated to date.
- Keep all unauthorised people away from the area on fire whilst protecting personal safety.
- Provide any requested assistance to Emergency Services IF SAFE TO DO SO.
- Commence notification of Neighbours where offsite smoke / fire impact is possible.
- Report the details of the fire on an Incident Notification Report and refer to Manager -Technical Services (GISC)

## **BENEFIT OF COMPLIANCE TO PROCEDURE:**

- Meeting environmental goal.
- Employee's safety protected
- Health and safety of public/facility user protected
- Minimise damage to public property

- Injury/death to employee
- Injury/death to public/facility user
- Damage to public property
- Violations and/or fines from Regulatory Agencies

REVIEWED BY:	APPROVED BY:
DATE:	DATE

## APPENDIX 15: FIRE AT THE WASTE TIPPING FACE

## **Standard Operating Procedure (SOP)**

## **PURPOSE AND SCOPE**

To define a procedure for responding to a fire that is detected at the tipping face or elsewhere on the landfill at the **Glen Innes Waste Management Depot**.

Primary Environmental Goal – Adequate Fire Fighting Capacity & EPA Benchmark Technique 38

## PROCEDURE/STANDARD

#### **Fire**

1. Attempt to extinguish a small, controlled fire with equipment on site without endangering facility personnel and equipment. This may include the use of a fire hose reel, water cart or isolating the source of the fire and covering with soil by using on-site plant.

Note: If using a fire extinguisher, be sure to use the correct extinguisher for the fire type.

- 2. If in any doubt, evacuate area and immediately call '000' and request the presence of Fire & Rescue NSW / Rural Fire Service. Provide all information required (i.e. your name, fire location, type, size etc).
- 3. As soon as possible notify the **Assets Coordinator (GISC)** of the incident and provide an update of the action initiated to date.
- 4. Keep all unauthorised people away from the area where the fire is burning.
- 5. Provide any requested assistance to Emergency Services IF SAFE TO DO SO.
- 6. Commence notification of Neighbours where offsite smoke / fire impact is possible.
- 7. Report the details of the fire on an Incident Notification Report and refer to **Manager Technical Services (GISC)**

## **BENEFIT OF COMPLIANCE TO PROCEDURE:**

- Meeting environmental goal.
- Employee's safety protected
- Health and safety of public / facility user protected
- Minimise damage to public property

- Injury/death to employee
- Injury/death to public/facility user
- Damage to public property
- Violations and/or fines from Regulatory Agencies

REVIEWED BY:	APPROVED BY:
DATE:	DATE

## **APPENDIX 16: FIRE IN WASTE LOAD**

## **Standard Operating Procedure (SOP)**

## **PURPOSE AND SCOPE**

To define a procedure for responding to a fire which is detected in a load of material brought to the **Glen Innes Waste Management Depot** for disposal.

Primary Environmental Goal - Adequate Fire Fighting Capacity & EPA Benchmark Technique 38

## PROCEDURE/STANDARD

Fire in load refers to a vehicle load of waste that is either on fire and/or smouldering or smoking prior to discharge at the tip face or to a waste transfer receptacle. All employees are expected to be familiar with the following procedures for handling such loads:

- 1. Where suspected hazardous wastes are involved contact the Fire Brigade by telephoning "000" and request HAZMAT attendance. Provide all information they require (i.e. your name, fire location, type, size, etc).
- 2. The driver is to dump the material in a clear area that is away from any building, vegetation and/or debris preferably on a thick hardstand area or on virgin ground
- 3. Should it not be possible to move the vehicle to a clear space, isolate the vehicle and evacuate the area
- 4. If unable to contain, notify the Fire Brigade by telephoning "000" providing all information they require (i.e. your name, fire location, type, size, etc)
- 5. As soon as possible notify the **Assets Coordinator (GISC)** of the incident and provide an update of the action initiated to date.
- 6. Contain the fire, and if possible spread out the load and extinguish the fire with water or soil being mindful of where runoff fire water may be travelling. Contain if practical.
- 7. Once fire is determined to be completely out, assess the content of the waste to determine if any hazardous wastes are present place the load into an empty waste receptacle for transport to the landfill. No other waste is to be incorporated into the waste receptacle.
- 8. Provide any requested assistance to Emergency Services IF SAFE TO DO SO.
- 9. Commence notification of Neighbours where offsite smoke / fire impact is possible.
- 10. Report the details of the fire on an Incident Notification Report and refer to **Manager Technical Services (GISC)**

## **BENEFIT OF COMPLIANCE TO PROCEDURE:**

- Meeting environmental goal.
- Employee's safety protected
- Health and safety of public/facility user protected
- Minimise damage to public property

- Injury/death to employee
- Injury/death to public/facility user
- Damage to public property
- Violations and/or fines from Regulatory Agencies

REVIEWED BY:	APPROVED BY:
DATE:	DATE

## APPENDIX 17: CHEMICAL SPILL RESPONSE

## **Standard Operating Procedure (SOP)**

## **PURPOSE AND SCOPE**

The purpose of this procedure is to define an incident response in the event of a chemical spill from containers at the **Glen Innes Waste Management Depot**.

Primary Environmental Goal – Preventing Degradation of Local Amenity & EPA Benchmark Technique 39

## PROCEDURE/STANDARD

## Chemical spillage

Actions required in response to such an event may vary and it will be the role of the **Assets Coordinator** (GISC) to determine and initiate appropriate actions. The following notes will form the basis of that decision making process.

- Depending on the scale of the spillage, it may be necessary to make first contact with emergency services by dialling 000 and advise of the type of emergency and the assistance needed (Fire Brigade – HAZMAT).
- Secure the affected area(s) by using suitable means such as barricades and bunting. Engage measures to restrict vehicles entering the site.
- If necessary, initiate evacuation of staff and others that may be on site, including contractors.
- Where possible, confine the incident and prevent the spread of its effects without endangering personnel. This may include building sand bag bunds, rotating the container or plugging the leak.
- For small spills, use the spill kit kept on site, cover drains and/or place temporary bunding.
- Advise the Assets Coordinator (GISC) of all actions taken or proposed.
- Provide any requested assistance to Emergency Services IF SAFE TO DO SO.
- Notify neighbours who may be affected by the incident.
- Report the details of the spill on an Incident Notification Report and refer to Manager Technical Services (GISC)

## **BENEFIT OF COMPLIANCE TO PROCEDURE:**

- Limit environmental damage
- Health and safety of public/facility user protected

- Extended environmental damage
- Injury/death to employee
- Injury/death to public/facility user
- Violations and/or fines from Regulatory Agencies

REVIEWED BY:	APPROVED BY:
DATE:	DATE

## APPENDIX 18: STORAGE & HANDLING OF CHEMICAL / HAZARDOUS SUBSTANCES Standard Operating Procedure (SOP)

## **PURPOSE AND SCOPE**

The use of chemicals and hazardous substances at the **Glen Innes Waste Management Depot** is generally limited to paints, solvents for maintenance of site equipment /plant and herbicides/pesticides for controlling pests.

The aim of this procedure is to assist in the identification, handling, storage and disposal of hazardous substances. It includes the use of labels and Material Safety Data Sheets (MSDS), provision of information and training to personnel as well as storage and disposal requirements for use of hazardous substances.

The procedure also addresses the management of hazardous substances imported to the site by users of the waste management facility. These substances include paints, household chemicals, herbicides, pesticides & gas bottles etc.

Primary Environmental Goal – Preventing Degradation of Local Amenity & EPA Benchmark Technique 39

## **PROCEDURE / STANDARD**

#### 1. Purchase of Materials

When a hazardous substance is purchased the supplier must provide sufficient information to ensure that the substance can be handled, stored, transported, used, processed and disposed of safely. Full safety data in the form of a current approved MSDS must be provided by the supplier on the first occasion that a hazardous substance is supplied. The manufacturer shall review and revise the MSDS every five years as a minimum. Suppliers are required to provide MSDS on request.

Whenever possible a non hazardous alternative shall be selected. However where no such alternative is available the most suitable, but least harmful or dangerous, shall be considered.

## 2. Labelling of Hazardous Substances

Suppliers shall ensure that all containers of hazardous substances for use are appropriately labelled. Where a hazardous substance is decanted and not used or further processed immediately, the container into which the substance is decanted is labelled with the product name and risk and safety information (this does not apply to substances which are decanted and used immediately). Hazardous substance containers shall remain appropriately labelled until they are cleaned and no longer contain any hazardous substance. All containers shall be in suitable condition. Damaged, leaking or corroded containers must not be accepted.

## 3. Material Safety Data Sheets

Material Safety Data Sheets should contain the following information as a minimum:

- State if the product is classified as a hazardous substance
- Safety Equipment to be worn by the operator when using the substance
- Storage requirements including compatibility with other substances
- Requirements for transport and disposal
- Procedures for cleanup and disposal of spilt product and waste containers
- First aid procedures if the substance contacts skin, eyes, is swallowed or ingested

A register of MSDSs shall be maintained at the facility and made available for use by all employees at site. All MSDS shall be readily accessible to all employees with potential exposure to those substances.

#### 4. Storage

Flammable goods need to be stored away from sources of ignition and spillage containment is required. Dangerous goods legislation requires segregation of different classes of dangerous goods and licensing is required when certain quantities are exceeded.

## 5. Handling Hazardous Substances and Dangerous Goods

- Hazardous substances bought to the facility shall be segregated and taken to the designated storage areas located within the facility. These substances need to be adequately segregated to prevent fires or other dangerous occurrences.
- Examples of these wastes include paints, household chemicals, herbicides, pesticides & gas bottles.
- These materials and substances will be collected on regular basis under contract and transferred for disposal at an appropriate facility. These substances are not to be disposed of at Council's Landfill.

## **BENEFIT OF COMPLIANCE TO PROCEDURE:**

- Employee's safety protected
- Health and safety of public/facility user protected
- Impacts on the natural environment are minimised

- Injury/Death to employee
- Injury/Death to public/facility user
- Violations and/or fines from Regulatory Agencies

REVIEWED BY:	APPROVED BY:
DATE:	DATE

## APPENDIX 19: INSPECTION OF INCOMING LOADS

## **Standard Operating Procedure (SOP)**

## **PURPOSE AND SCOPE**

To ensure that only Permitted Waste is accepted at the **Glen Innes Waste Management Depot** through the adoption and implementation of appropriate vehicle inspection procedures.

Primary Environmental Goal – Assuring quality of incoming waste & EPA Benchmark Technique 21.

## PROCEDURE/STANDARD

The **Gatehouse Attendant** shall conduct a vehicle inspection and waste assessment to ensure that only Permitted Wastes are accepted at the facility. The minimum requirements of the inspection are:

- 1. Exhibit prominent signage at the entrance to the facility defining the types of wastes that will be accepted and those that are excluded.
- 2. In-coming vehicles are to have the loads uncovered at the designated area prior to entering the control point / weighbridge. All loads shall be subject to a visual inspection to ensure no excluded wastes are contained within the loads.
- 3. The **Gatehouse Attendant** shall also enquire to the customer whether hazardous materials, such as lead acid batteries, gas bottles, solvents, paints, asbestos etc, are contained within the load.
- 4. Empty chemical containers should be checked for triple rinsing before accepting for disposal.
- 5. Any vehicles suspected of containing excluded wastes shall be refused entry until verified otherwise.
- 6. The **Gatehouse Attendant** shall require and collect appropriate evidence from the driver of the incoming vehicle, as necessary, to substantiate that the waste is not an excluded waste e.g. provision of a test certificate.
- 7. Where wastes are contained in enclosed vehicles, e.g. private waste collection vehicles, the **Gatehouse Attendant** shall identify the source and nature of the waste by inquiry.
- 8. At the waste transfer station/tipping face of the waste disposal areas, the discharge of wastes from enclosed vehicles is to be inspected by **site staff.**
- 9. No sealed containers shall be deposited without substantiation that the contents are acceptable for disposal.
- 10. All private waste collection and disposal companies servicing commercial and industrial premises and using the facility shall be required to enter into an agreement with the customer regarding disposal of collected wastes. This agreement shall include the identification of excluded wastes and undertakings by the customer not to deposit such wastes in the collection receptacle.

#### **BENEFIT OF COMPLIANCE TO PROCEDURE:**

- Meeting environmental goal
- Employee's safety protected
- Health and safety of public/facility user protected
- Impacts on the natural environment minimised

- Injury/Death to employee
- Injury/Death to public/facility user
- Violations and/or fines from Regulatory Agencies

REVIEWED BY:	APPROVED BY:
DATE:	DATE

#### APPENDIX 20: CLEAN UP OF FUEL OR OIL SPILLS

#### **Standard Operating Procedure (SOP)**

#### **PURPOSE AND SCOPE**

To define the procedure for the containment, management and cleanup of minor fuel / oil spills at the **Glen Innes Waste Management Depot**.

Primary Environmental Goal – Preventing Degradation of Local Amenity & EPA Benchmark Technique 39

#### PROCEDURE/STANDARD

#### **Definitions**

Fuel / oil spills refers to discharges of petroleum compounds, including petrol, diesel, lubricating oils, hydraulic oils, greases etc. Spillage of oils and fuels may arise from leaking machinery (e.g. burst hydraulic hoses) and spillage of liquids from containers deposited or stored at the site.

It is important to take prompt action to clean up any spilt oil or fuel to minimise the risk of accidents occurring and to prevent contamination of local waterways should the spilt fuel / oil enter the site drainage system.

Equipment available to clean up oil spills include oil absorbent pads, "kitty litter", oil absorbent booms and drain blocking pads. Additional materials may be obtained by contacting the Council's Store or Suppliers. This equipment or "spill kit" should be stored close to point of use or in a readily transportable form e.g. on a trailer or in a wheeled bin.

#### The steps in this procedure shall be as follows:

- 1. For mechanical equipment, shut down the item of plant and plug the leak or crimp the hydraulic hose if possible and quickly. For leaking containers, address the source of the leak, but at all times, avoid contact with the material.
- 2. Isolate adjacent drainage points.
- 3. Dam and contain the spill using the contents of the spill kit.
- 4. Recover and absorb.

Once the source of the leak is established, undertake all efforts to prevent further flow, e.g. if leak is from an oil drum, roll drum so that leak areas is uppermost. If leak is from pipe from oil truck, close valves etc. All attempts should be made to plug the leak.

Stop all human and vehicular traffic through the spill area. Isolate sources of ignition and advise fire authorities (and licensing authorities). Mobilise fire extinguishers, if suitable.

#### Contain the spill as follows:

- Protect drains by forming barriers and sealing drainage grates (e.g. using strong plastic bags
  partially filled with sand or water). The absorbent socks and pillows can be used to block off
  drains allowing water to go through but trapping the oil. Absorbent material has limited capacity
  and needs to be replaced regularly.
- If possible stop the spill from spreading by deflecting the oil into another container.
- Form barriers using absorbent material and place on the edge of the spill. (or use any other suitable and available materials, e.g. soil, sand).
- All used absorbent material is to be collected for disposal at a suitable landfill.

- If sufficient product exists, hand pumps should be used and product transferred to a suitable container (lined drums, skips or tankers).
- Avoid the use of electrical equipment that could be the source of ignition.

#### **BENEFIT OF COMPLIANCE TO PROCEDURE:**

- Employee's safety protected
- Health and safety of public / facility user protected
- Impacts on the environment are minimised

- Injury to employee
- Injury to public / facility user
- Environmental pollution
- Violations and / or fines from regulatory agencies

REVIEWED BY:	APPROVED BY:
DATE:	DATE

#### **APPENDIX 21: DEPOSITING OF WASTE AT TIPPING AREA**

#### **Standard Operating Procedure (SOP)**

#### **PURPOSE AND SCOPE**

The purpose of this procedure is to define the procedure for the depositing of waste from collection vehicles or waste transfer bins at the landfill site.

Primary Environmental Goal – Preventing Degradation of Local Amenity & EPA Benchmark Technique 39

#### PROCEDURE/STANDARD

- 1. All staff and private contractors engaged in the collection and disposal of waste are to be oriented in the proper management of the landfill tipping area.
- 2. Drivers are to undertake a physical inspection of the disposal site and assess the disposal location for risks, such as uneven/sloping ground, obstacles, hazards, unstable ground, sharp objects, moving plant, other vehicles, etc.
- 3. The vehicle is to be reversed to the disposal location as directed by the **Landfill Operator**, stopped in the appropriate position and brakes applied
- 4. The tailgate/tipping body is to be unlatched and/or secured in the open position
- 5. The body is to be lifted to the upright position and the waste emptied
- 6. The vehicle is to move from the disposal site with the tailgate/tipping body secured in the closed position.

#### **BENEFIT OF COMPLIANCE TO PROCEDURE:**

- Employee safety is protected
- Vehicle damage is avoided
- Adherence to landfill protocols

- Employee safety is put at risk
- Vehicular damage
- Improper use of landfill

REVIEWED BY:	APPROVED BY:
DATE:	DATE

#### **APPENDIX 22: DUST MANAGEMENT**

#### **Standard Operating Procedure (SOP)**

#### **PURPOSE AND SCOPE**

The purpose of this procedure is to define the means for controlling the creation and distribution of dust at the **Glen Innes Waste Management Depot**.

Primary Environmental Goal – Preventing Degradation of Local Amenity & EPA Benchmark Technique 34

#### PROCEDURE/STANDARD

Dust can arise from a number of sources in the operation of a waste management facility and these include unsealed roads, previously capped and un-vegetated areas, from shredding of green waste, concrete crushing, the movement of stockpiles of dry materials and tipping of wastes.

It is the responsibility of the **Assets Coordinator (GISC)** to ensure preventative measures are put in place to control the generation of dust. Such measures include:

- Applying shredded green waste to capped areas within the landfill operations areas.
- Wetting piles of green waste immediately prior to shredding
- Operating mist sprays where concrete or hard rock are being crushed
- Wetting of roadways
- Wetting down of dusty loads or requiring materials to be wet and bagged prior to delivery to site (in the case of asbestos type materials)

#### **BENEFIT OF COMPLIANCE TO PROCEDURE:**

- Mitigating the likelihood of a pollution incident
- Adherence to landfill protocols

- Complaints from adjoining property owners
- Improper use of landfill

REVIEWED BY:	APPROVED BY:
DATE:	DATE

#### **APPENDIX 23: ODOUR MANAGEMENT**

#### **Standard Operating Procedure (SOP)**

#### **PURPOSE AND SCOPE**

The purpose of this procedure is to define the means for controlling excessive odours at the **Glen Innes Waste Management Depot**.

Primary Environmental Goal - Preventing Degradation of Local Amenity & EPA Benchmark Technique 36

#### PROCEDURE/STANDARD

Odour can arise from a number of sources in the operation of a waste management facility and these include uncovered waste, composting of organic material that includes food waste, landfill gas, animal carcasses, exposing anaerobic decomposing materials, sewer sludge and disturbed areas of previously placed waste.

It is the responsibility of the **Assets Coordinator (GISC)** to ensure preventative measures are put in place to control the generation of odour. Such measures include:

- Examination of incoming loads to ensure only permitted wastes are accepted
- Daily cover (VENM) or suitable inert waste is to be placed over any exposed waste end of the day's operations
- Greenwaste mulch / composting operations to occur strictly in accordance with the approved methodology
- Animal carcasses and odorous loads are deep buried within the waste mass
- Grading and profiling of the site is undertaken to avoid ponding over filled areas or areas of exposed wastes
- Use of odour suppression sprays and masking agents, liming or specialised dosing.
- Routine inspections are undertaken in accordance with the Environmental Checklist (see
   Appendix 29) to ensure there are no areas of exposed waste resulting after storm events or site activities

#### **BENEFIT OF COMPLIANCE TO PROCEDURE:**

- Mitigating the likelihood of a pollution incident
- Adherence to landfill protocols

- Complaints from adjoining property owners
- Improper use of landfill

REVIEWED BY:	APPROVED BY:
DATE:	DATE

#### APPENDIX 24: COVERING OF WASTE / LITTER CONTROL

#### **Standard Operating Procedure (SOP)**

#### **PURPOSE AND SCOPE**

To define a procedure for the covering of waste at the **Glen Innes Waste Management Depot** to ensure waste / litter is controlled in an acceptable manner.

Primary Environmental Goal – Preventing Degradation of Local Amenity & EPA Benchmark Technique 33

#### PROCEDURE/STANDARD

#### **Covering of Waste**

- The purpose of 'daily cover' is to control litter, flies, rodents, birds, odour and to reduce the risk of fire and improve the visual appearance of the landfill.
- It is important to thoroughly compact the waste prior to the placement of the daily cover. A uniform, even surface will allow the placement of a controlled thickness of soil whereas an uncompacted or uneven surface results in a high percentage of soil being used.
- The waste is to be covered with 150mm of inert waste or soil at the end of each day.
- The cover material previously placed over the underlying layer of waste should be bladed off to expose the waste such that the newly placed waste is in direct contact with the old waste.

#### **Litter Control**

The following measures shall be implemented to minimise the potential for migration (off site) of litter:

- Waste will be compacted and covered as per the covering frequency indicated above.
- Daily inspection of litter/perimeter fences and clearing as required.
- Signage will be placed at the entry/exit points to advise customers that if they drop or transport waste in a manner that could result in littering they may be liable for prosecution.
- Vehicles transferring rubbish to the site must have the waste material covered at all times.
- Semi permanent litter fencing will be erected in close proximity to the active tipping areas
- If required, mobile litter barricades will be used and relocated around the tipping area as wind direction dictates

#### Reporting

Non conformances shall be reported in the weekly inspection checklist. Major non conformances shall be reported to the **Assets Coordinator (GISC)** before the end of the day which the non conformance occurred or is identified.

#### **BENEFIT OF COMPLIANCE TO PROCEDURE:**

- Meeting the environmental goal.
- Impacts on the natural environment are minimised

# CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION: • Violations and/or fines from Regulatory Agencies • Pollution of the environment REVIEWED BY: DATE: APPROVED BY: DATE

#### **APPENDIX 25: FACILITY EVACUATION**

#### **Standard Operating Procedure (SOP)**

#### **PURPOSE AND SCOPE**

To define a procedure for the covering the requirement to implement and Evacuation of the **Glen Innes Waste Management Depot** in an acceptable manner.

**Primary Environmental Goal** – N/A (Public / Staff Safety focus)

#### PROCEDURE/STANDARD

#### **Emergency Response**

- 1. Upon notification of an incident the **Chief Warden** (generally this would be the **Assets Coordinator** (GISC) or other most senior staff member at the site determines the need for evacuation.
- 2. **Chief Warden** contacts by telephone the emergency services by dialling '000' providing all information they require (i.e. your name, incident type, size, etc.).
- 3. **Chief Warden** sounds the evacuation alarm (if present) or provides evacuation advice to all personnel and facility users on site.
- 4. The Chief Warden initiates measures to restrict vehicles entering the facility.
- 5. The **Chief Warden** determines safe evacuation routes and direct personnel and facility users to the Primary Evacuation area. Where necessary unlock gates on evacuation routes so as to provide for movement to the **Primary Evacuation Point** or the **Secondary Evacuation Point**.
- 6. The **Chief Warden** provides direction to **Primary Evacuation Point**.
- 7. Prior to leaving the facility the **Chief Warden** with the assistance of any area deputy / area wardens accounts for all personnel including checking of all work areas.
- 8. Upon arrival at the **Primary Evacuation Point** the **Chief Warden** is to;
  - a) Confirm the presence or otherwise of all personnel/staff and facility users (as far as practical)
  - b) Determine the suitability of the **Primary Evacuation Point**. If necessary initiate movement to **Secondary Evacuation Point** or **Post Evacuation Assembly Area**.
  - c) Upon their arrival brief the emergency services including the status of facility personnel.
  - d) Co-ordinate the movement of personnel to the Post Evacuation Assembly Area.
  - e) Brief the **Manager Technical Services (GISC)** on the incident and provide an update of the action initiated to date.
- 9. The **Chief Warden** is to report the details of the event on an Incident Notification Report Form and refer to **Manager Technical Services (GISC)**

#### **BENEFIT OF COMPLIANCE TO PROCEDURE:**

- Meeting the legislative requirements.
- Improved safety for site staff and users

# CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION: • Violations and/or fines from Regulatory Agencies • Death or injury to site staff / visitors REVIEWED BY: DATE APPROVED BY: DATE

E	MERGENCY	CHECKI	LIST FOR CH	IEF WARDEN	
Name of Chief Warden:					
Time at which	n potential emergency	was raised:			
Location of po	otential emergency:				
Description o	f potential emergency:				
IF EMERGENC	CY IS DECLARED:				
Emergency de	eclared		Time		
ALERT signal a	activated (if available)		Time		
Phone releva	nt Emergency Service o	n 000	Time		
IF SITE EVACU	JATION IS NECESSARY:				
Evacuation sig	gnal activated / advice	issued?	Time		
Deputy/ Area complete:	Wardens report evacu	ation is			
AREA	WARDEN	AREA EVAC	UATED	COMMENTS	
ADVISED EM	ADVISED EMERGENCY SERVICE:				

#### APPENDIX 26: MANAGEMENT OF ASBESTOS

#### **Standard Operating Procedure (SOP)**

#### **PURPOSE AND SCOPE**

The purpose of this procedure is to define the activities of acceptance and management of waste materials that contain asbestos at **Glen Innes Waste Management Depot**.

#### PROCEDURE/STANDARD

#### **ACCEPTANCE:**

All disposals must be pre arranged with the site in advance by calling the Assets Coordinator (GISC).

#### **Bookings:**

- Staff will request and record details of the type of waste, number and size of loads and transport / unloading method proposed by customer.
- Staff will advise the customer of the requirements for packaging and presentation (below)
- Council will limit acceptance to an appropriately designated time on a suitable day when staffing and equipment is available. Generally 24-48 hours notice would be required.
- Confirm with customer to contact the landfill on the day of arranged disposal in case conditions to accept the load are not suitable (rain etc).
  - The decision to proceed with acceptance on the agreed day will be confirmed by the **Assets Coordinator (GISC)** or **most senior staff member at the site** based on an assessment of site safety, traffic ability etc
- Staff to contact customer to advise if agreed disposal must be changed for any reason (e.g. if equipment / staff become unavailable.

NOTE: If conditions allow and the requirements for disposal are met (staff /equipment, weather etc),

domestic quantities may be accepted without the required notice / booking, at the discretion of the

Assets Coordinator (GISC) or most senior staff member at the site

#### Packaging, Presentation for Disposal:

• **Friable Asbestos** waste must be presented in two (2) sealed, heavy duty bags made from low density polyethylene (LDPE) at least 0.2mm thick.

Each bag will have maximum dimensions less than or equal to 1.2 m in height and 0.9 m in width and a maximum weight of 25 kg.

Each bag must be marked "CAUTION ASBESTOS" in letters of not less than 40 mm in height.

These sealed bags must be placed on the ground in a manner which prevents their rupture.

- Bonded Asbestos waste must be must be securely packaged at all times
- For Asbestos Contaminated Soil the customer to provide a report from an occupational hygienist confirming:
  - 1. if the asbestos material in the soil is bonded or friable
  - 2. the extent of asbestos contamination
  - 3. safe work procedures for the remediation of the site

If the asbestos is classified as friable, the customer must supply copies of:

- An AS1 licence for the person / company undertaking the removal.
- The AS1 licensee's safe work method statements, which must address disposal as well as the removal of the asbestos contaminated soil.
- The current application / permit issued by WorkCover to remove the asbestos contaminated soil
- Asbestos contaminated soils must be wetted down before delivery.
- The customer <u>must</u> inform staff on arrival that the waste contains asbestos
- The customer must place the waste in the location designated by Council (pre delivery inspection by the customer may be appropriate)
- When unloading and disposing of <u>any</u> asbestos waste at the site, the waste must be unloaded in a manner as to prevent the generation of dust or the stirring up of dust
- Vehicles and their containers must be cleaned before leaving the waste facility

#### **REJECTION:**

Where loads of asbestos waste are identified and **rejected** for disposal (for any reason):

- Details of the waste generator and transporter should be recorded in a **rejected load register**.
- The waste generator should be notified and, preferably, issued with a **rejected load certificate**.

(Maintaining a register of rejected loads will ensure a more stringent inspection regime on those waste generators and transporters who repeatedly deliver waste that is rejected).

#### **BURIAL / DISPOSAL:**

Asbestos waste presented to or discovered at the site, must be covered with virgin excavated natural material or other material as approved in the facility's environment protection licence:

- 1. initially (at the time of disposal), to a depth of at least 0.15 metre, and
- 2. at the end of each day's operation, to a depth of at least 0.5 metre, and
- 3. finally, to a depth of
  - at least 1 metre (in the case of bonded asbestos waste or asbestos-contaminated soils) OR
  - 3 metres (in the case of friable asbestos material) beneath the final land surface of the landfill site.

#### **BENEFIT OF COMPLIANCE TO PROCEDURE:**

- Limit environmental damage
- Health and safety of staff, public / facility users protected

#### **CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:**

• Infringements and/or fines from Regulatory Agencies

REVIEWED BY:	APPROVED BY:
DATE:	DATE

# APPENDIX 27: MANAGEMENT OF OZONE DEPLETING GASED ITEMS

### **Standard Operating Procedure (SOP)**

#### **PURPOSE AND SCOPE**

The purpose of this procedure is to define the activities of acceptance and management of waste materials that contain ozone depleting gas (refrigerant gas) at **Glen Innes Waste Management Depot**.

#### PROCEDURE/STANDARD

**Gatehouse** staff to determine if incoming loads contain items which commonly contain ozone depleting gas (including refrigerators, freezers, air-conditioners or similar) are present through the load inspection protocol SOP in this PIRMP.

Items that are identified and are understood to be still containing gas (have no degassing certificate) OR have no obvious signs to suggest gas has been released (missing compressors, cut pipes etc) will be:

- Deposited by the user at a predetermined location on the site where damage / release of gas is minimised Instructions on that location shall be will to provided to the site user by the Gatehouse Attendant.
- Segregated from other waste until such time as a suitably qualified and certified party can be engaged to decant the gas from the units and certify gas has been removed
- Items can then be co-mingled with the metal waste stockpiles at the site (pushed up)

It is considered essential that all **staff** at the site are aware and understand the specific requirements for safe handling of items (not to be crushed or damaged / pushed into stockpiles until advised that degassing has been completed).

#### **BENEFIT OF COMPLIANCE TO PROCEDURE:**

- Limit environmental damage
- Health and safety of public / facility user protected

#### **CONSEQUENCE OF NON-COMPLIANCE TO INSTRUCTION:**

Infringements and/or fines from Regulatory Agencies

REVIEWED BY:	APPROVED BY:
DATE:	DATE



#### **APPENDIX 29: ENVIRONMENTAL REPORTING CHECKLISTS**

The following procedures define the protocol for undertaking site inspection and audits at the **Glen Innes Waste Management Depot** with the aim of:

- minimising the likelihood of a pollution incident occurring
- identifying non-conformance with EPA licence conditions and to implement corrective actions where necessary
- identifying non-conformance with the **PIRMP** and the implementation of corrective actions

AUDITING AND INSPECTION PROGRAM – OVERVIEW								
TYPE OF AUDIT	FREQUENCY	RESPONSIBILITY						
Site Inspection	Daily, weekly, monthly, quarterly and after a rainfall event that causes significant run-off (>25mm event)	Assets Coordinator (GISC)						
Site Audit	Quarterly, Six monthly	Trainee Environmental Officer (GISC)						
Environmental Audit	Annual	Manager - Technical Services (GISC)						

The inspection and auditing functions are to be undertaken in accordance with the following requirements:

# LANDFILL(ED) AREAS, LEACHATE POND SYSTEM & RESOURCE RECOVERY AREAS - SITE INSPECTION CHECKLIST GLEN INNES WASTE MANAGEMENT DEPOT

DATE:							INSPECTED BY:	
ISSUE	INSPECTION	ON FREQUE	NCY AND A	ACKNOWLE	OGEMENT	SATISFACTORY Y/N	ACTION TAKEN	COMMENTS:
Perimeter fence line secure and intact	Weekly	Week 1	Week 2	Week 3	Week 4			
	,							
Detention basins / dams – empty and	Monthly/							
de-silted	After rain							
Site re-vegetation areas are in good condition – no exposed faces, erosion	Monthly							
Site vegetation control —slashing, no evidence of weed infestation	Monthly							
Leachate pumps operational. Check records of volumes discharged are	Weekly	Week 1	Week 2	Week 3	Week 4			
retained for each pumping instance	Weekly							
Leachate dam/s sound – no erosion,	Weekly	Week 1	Week 2	Week 3	Week 4			
slips or seepage observed	,							
Leachate drainage lines and discharge lines in place, intact and secure	Weekly	Week 1	Week 2	Week 3	Week 4			
		Week 1	Week 2	Week 3	Week 4			
Intermediate cover applied to filled areas	Weekly	Week 1	WCCK 2	VICERS	WCCK 4			
Final capping applied to final landform design.	Monthly							
No evidence of erosion of the	Monthly/							
intermediate capping	After rain							
No evidence of leachate eruption	Weekly /	Week 1	Week 2	Week 3	Week 4			
through the capped zone/landfill toe/batters	After rain							

# LANDFILL(ED) AREAS, LEACHATE POND SYSTEM & RESOURCE RECOVERY AREAS - SITE INSPECTION CHECKLIST GLEN INNES WASTE MANAGEMENT DEPOT

DATE:						INSPECTED BY:		
ISSUE	INSPECTION	ON FREQUE	NCY AND A	CKNOWLE	ACTION TAKEN	COMMENTS:		
Tipping face being kept to minimum size	Marabba	Week 1	Week 2	Week 3	Week 4			
and shaped for minimum cover placement	Weekly							
Waste placed in 200-300mm layers and	Daily	Week 1	Week 2	Week 3	Week 4			
the correct compaction pattern applied	Duny							
Daily cover placed at the end of the		Week 1	Week 2	Week 3	Week 4			
days operation and exposed waste areas completely covered	Daily							
Daily cover 'stripped' to expose waste	Daile	Week 1	Week 2	Week 3	Week 4			
whenever over filling with waste occurs	Daily							
Any evidence of litter beyond the active	Weekly	Week 1	Week 2	Week 3	Week 4			
tipping area.	vveekiy							
Condition and functionality of	Monthly/							
stormwater infrastructure sound.	After rain							
Any evidence of sedimentation downstream of stormwater basins or detention structures	Monthly/ After rain							
Evidence of soil tracking onto road	Weekly/	Week 1	Week 2	Week 3	Week 4			
surfaces	After rain							
Signs of dust generation around perimeter of site	Weekly	Week 1	Week 2	Week 3	Week 4			
Surface of hardstand areas intact/repairs or rectification required.	Monthly							

#### LANDFILL(ED) AREAS, LEACHATE POND SYSTEM & RESOURCE RECOVERY AREAS - SITE INSPECTION CHECKLIST **GLEN INNES WASTE MANAGEMENT DEPOT INSPECTED BY:** DATE: SATISFACTORY INSPECTION FREQUENCY AND ACKNOWLEDGEMENT **ACTION TAKEN COMMENTS: ISSUE** Y/N Sediment controls maintained around Monthly cover stockpiles Week 1 Week 2 Week 3 Week 4 Compliance with facility operating times Weekly Leachate pump wells, sumps, pipes and Week 1 Week 2 Week 3 Week 4 storages, inspected and are operational. Weekly No evidence of overflows noted or likely Evidence of feral animal activity Monthly Week 1 Week 2 Week 3 Week 4 Record of Incidents or site complaints Daily up to date (entire facility) Week 1 Week 2 Week 3 Week 4 Evidence of bird infestations at tipping Weekly face Oil Storage levels checked and no Week 1 Week 2 Week 3 Week 4 evidence of overflow or likely discharge. Daily Servicing arranged? **VERIFIED BY: Assets Coordinator (GISC)** Satisfactory Unsatisfactory DATE:

ANIMAL	JANUARY	APRIL	JULY	OCTOBER	PRESENCE Y/N	ACTION TAKEN	COMMENTS		
Feral Cats					,				
Data/ssiss									
Rats/mice									
Dogs									
Oogs									
oxes									
O.K.C.S									
VERIFIED BY: Assets Coordinator (GISC)									

# SMALL VEHICLE WASTE TRANSFER STATION (WHEN CONSTRUCTED) - SITE INSPECTION CHECKLIST

DATE:			INSPECTED BY:					
ISSUE	INS	SPECTION FREC	QUENCY AND A	CKNOWLEDGE	SATISFACTORY Y/N	ACTION TAKEN	COMMENTS	
Roads and tipping platform free of dirt and debris	Monthly/ After rain							
Emergency spill kit/s on site and fully stocked	Weekly	Week 1	Week 2	Week 3	Week 4			
Evidence of vermin sightings/sound/droppings	Weekly	Week 1	Week 2	Week 3	Week 4			
Unwanted chemicals & hazardous materials removed & properly stored	Daily	Week 1	Week 2	Week 3	Week 4			
General housekeeping – site tidy – litter collected, signage in place, mowing etc	Daily	Week 1	Week 2	Week 3	Week 4	_		
Fire extinguisher and hose reel in place and tags current	Weekly	Week 1	Week 2	Week 3	Week 4			
Transfer bin lids closed at end of shift (where lids fitted)	Daily	Week 1	Week 2	Week 3	Week 4			
Test dousing showers	Weekly	Week 1	Week 2	Week 3	Week 4			
Fuel containers & fuel storage – secured/not leaking / properly sealed / bunded	Weekly	Week 1	Week 2	Week 3	Week 4			
Stockpiles of combustible materials minimised	Weekly	Week 1	Week 2	Week 3	Week 4			

GLEN INNES WASTE MANAGEMENT D								
DATE:	I	INSPECTED BY:						
SSUE	INSPECTION FREQUENCY AND ACKNOWLEDGEMENT  SATISF.  Y						ACTION TAKEN	COMMENTS
Record of incidents up to date &		Week 1	Week 2	Week 3	Week 4			
PIRMP review occurred for each ncident	Daily							
Gas bottles are stored in accordance	Daily	Week 1	Week 2	Week 3	Week 4			
with WorkCover and EPA requirements.								
Typossiyo adayrs not prosent	\A_{\alpha} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Week 1	Week 2	Week 3	Week 4			
xcessive odours not present Weekly	Weekly							
Waste transfer bins not being		Week 1	Week 2	Week 3	Week 4			
overfilled	Daily							
		Week 1	Week 2	Week 3	Week 4			
itter controlled around the facility	Weekly							
Oil Storages levels checked and no		Week 1	Week 2	Week 3	Week 4			
evidence of overflow or likely discharge. Servicing arranged?	Daily							
All signage and traffic control	Deily	Week 1	Week 2	Week 3	Week 4			
operating effectively	Daily							
VEDICIED DV. Assats Consultration (	cicc)							
VERIFIED BY: Assets Coordinator (	GISC)		Satisfact	J L	atisfactory			

## **GREEN WASTE / CONCRETE STOCKPILING AND PROCESSING- SITE INSPECTION CHECKLIST**

DATE:				INSPECTED BY:				
ISSUE:	INSPECT	ION FREQU	ENCY AND A	CKNOWLED	GEMENT	SATISFACTORY Y/N	ACTION TAKEN	COMMENTS
Hardstand areas, roads and unloading zone	Weekly/	Week 1	Week 2	Week 3	Week 4			
free of excessive dirt and debris	After rain							
Adjacent stormwater infrastructure clear of	Weekly/	Week 1	Week 2	Week 3	Week 4			
debris, litter and sediment accumulations	After rain							
Evidence of vermin	Weekly	Week 1	Week 2	Week 3	Week 4			
sightings/sound/droppings	VVCCKIY							
Surface of hardstand areas intact/repairs or rectification required	Monthly/ After rain							
General housekeeping – site tidy – litter	Weekly	Week 1	Week 2	Week 3	Week 4			
collected, signage in place, mowing etc	,							
Record of incidents up to date	Daily	Week 1	Week 2	Week 3	Week 4			
Record of incidents up to date	Daily							
Processing of stockpiled green waste is occurring routinely	Monthly							
Safety exclusion zones in place during	When							
mulching and materials loading	mulching / loading							
Bulk mass of stockpiles being managed to	NA/a = Ld	Week 1	Week 2	Week 3	Week 4			
prevent likelihood of spontaneous combustion.	Weekly							

GREEN WASTE / CONCRETE STO	CKPILING	AND PRO	CESSING	G- SITE IN	ISPECTION	N CHECKLIS	Т	
GLEN INNES WASTE MANAGEMENT DEPOT								
DATE:							INSPECTED BY:	
ISSUE:	INSPECT	INSPECTION FREQUENCY AND ACKNOWLEDGEMENT					ACTION TAKEN	COMMENTS
Excessive odours not present	Weekly	Week 1	Week 2	Week 3	Week 4			
Excessive oddurs not present	VVEEKIY							
Excessive dust not occurring during	When							
mulching	mulching							
Leachate Sprinklers connections tested /		Week 1	Week 2	Week 3	Week 4			
flushed	Monthly					-		
		Week 1	Week 2	Week 3	Week 4			
Contamination being controlled	Weekly					-		
VERIFIED BY: Assets Coordinator (GISC)								
DATE:		Satisfacto	ory l	Jnsatisfacto	ory			

## WEIGHBRIDGE / GATEHOUSE & SITE SURROUNDS – SITE INSPECTION CHECKLIST

DATE:			INSPECTED BY:					
ISSUE	INSPECT	ON FREQUE	NCY AND AC	KNOWLEDGI	EMENT	SATISFACTORY Y/N	ACTION TAKEN	COMMENTS
Entrance and exit roads free of excessive	Weekly/	Week 1	Week 2	Week 3	Week 4	_		
dirt and debris	After rain							
Adjacent stormwater infrastructure clear of	Weekly/	Week 1	Week 2	Week 3	Week 4			
debris, litter and sediment accumulations	After rain							
Roadways and hardstand areas intact/repairs or rectification required	Monthly/ After rain			I	I			
intact/repairs or rectification required	Aiterrain				I			
General housekeeping – site tidy – litter	Weekly	Week 1	Week 2	Week 3	Week 4	_		
collected, signage in place, mowing etc								
Evidence of fuel / lubricant contamination /	NA/a alaha	Week 1	Week 2	Week 3	Week 4			
spillage	Weekly							
Record of Incidents up to date	Daily	Week 1	Week 2	Week 3	Week 4			
Record of incidents up to date	Daily							
All signage and traffic control apprating		Week 1	Week 2	Week 3	Week 4			
All signage and traffic control operating effectively	Daily							
Activities confined to operational area	Monthly			I	ı			

WEIGHBRIDGE / GATEHOUSE &	SITE SURF	ROUNDS	- SITE IN	SPECTION	CHECKL	IST		
GLEN INNES WASTE MANAGEMENT DEPO	ЭТ							
DATE:	INSPECTED BY:							
ISSUE	INSPECTION FREQUENCY AND ACKNOWLEDGEMENT  SATISFACT Y/N							COMMENTS
Fire safety buffer zone maintained around tyre, mulch / timber stockpiles.	Monthly							
Wastewater, septic, leachate tanks		Week 1	Week 2	Week 3	Week 4			
inspected and are operational. No evidence Weekly of overflows noted or likely	Weekly							
Emergency spill kit, asbestos kit and sharps	NA/a alaha	Week 1	Week 2	Week 3	Week 4			
kit on site and fully stocked	Weekly							
Test & re-fill dousing shower (portable unit)	Monthly	Week 1	Week 2	Week 3	Week 4			
Test & Te-fill dousing shower (portable diffe)	iviontny							
Fuel containers and fuel storage – secured/not leaking/properly sealed /	Weekly	Week 1	Week 2	Week 3	Week 4			
bunded	,							
VERIFIED BY: Assets Coordinator (GISC)								
DATE:		S	Satisfactory	Unsat	isfactory			

## **QUARTERLY & SIX MONTHLY SITE AUDIT CHECKLIST**

DATE:		CONDUCTED BY:			
ISSUE		EQUENCY AND LEDGEMENT	SATISFACTORY Y/N	ACTION TAKEN	COMMENTS
EPL Environmental Monitoring (Leachate, Groundwater, Surface water, Gas monitoring etc) undertaken, evaluated and published to webpage within 14 days of receipt from Lab	Quarterly				
Leachate management system intact and operational	Quarterly				
Intermediate cover applied to filled areas	Quarterly				
Final capping applied to final landform.	Quarterly				
Surveys undertaken to confirm final landform design is being achieved	Six Monthly				
Vermin – inspection undertaken	Quarterly				
Fire Safety Certificate inspection undertaken for all essential fire safety equipment onsite. Fire breaks being maintained.	Six Monthly				
Activities confined to appropriate areas	Quarterly				
Conditions of EPA licence for facility being met	Quarterly				
Incident reporting – entries correct and complete	Six Monthly				
Register of weekly site inspections – current and complete	Six Monthly				
Review of on-site procedures against PIRMP undertaken	Six Monthly				

QUARTERLY & SIX MONTHLY SITE AUDIT CH	ECKLIST				
GLEN INNES WASTE MANAGEMENT DEPOT					
DATE:				CONDUCTED BY:	
ISSUE		EQUENCY AND LEDGEMENT	SATISFACTORY Y/N	ACTION TAKEN	COMMENTS
SOPs understood by staff & required training for EPL / PIRMP etc up to date.	Six Monthly				
Inspection of septic infrastructure undertaken (corrective action / servicing initiated if required)	Six Monthly				
Inspection of stormwater infrastructure undertaken (corrective action initiated if required)	Six Monthly				
Review of incident reports and corrective actions	Six Monthly				
Review of dust and sediment control requirements	Quarterly				
Acoustic testing undertaken for licence conformity	Six Monthly				
Weighbridge tested and verified (if installed)	Six Monthly				
Financial transaction activities audited by independent third party	Six Monthly				
Waste Compaction survey undertaken	Quarterly				
VERIFIED BY: Trainee Environmental Officer (GISC)					
DATE:	Satisfactory	Unsatisfactory			

GLEN INNES WASTE MANAGEMENT DEPOT								
DATE:		CONDUCTED BY:						
ISSUE	ACTIVITY FREQUENCY & ACKNOWLEDGEMENT	SATISFACTORY Y/N	ACTION TAKEN	COMMENTS				
Annual volumetric filling survey undertaken	Annual							
Review of environmental monitoring records.	Annual							
Review of environmental management documentation including LEMP, PIRMP, SOPs, registers and reporting	Annual							
Toolbox meeting with site staff and lease/facility operators to ensure an understanding of the PIRMP requirements are satisfactory	Annual							
Review of non-conformance reports, weekly inspection checklist, Quarter & Six monthly audit, Pollution Incident Records and PIRMP reviews (occurred as required)	Annual							
Identification and implementation of any improvements to the operation of the facility	Annual							
Annual water quality (surface water, ground water and leachate) and gas monitoring reports prepared.  Trend information prepared & reviewed for LEMP / PIRMP amendments / EPA reports	Annual							

### **APPENDIX 30: SITE SERVICES & INFRASTRUCTURE PLANS**