



MIDCOAST
council

Gloucester Waste Management Centre



Pollution Incident Response Management Plan

Pollution Incident Response Management Plan

Revision History				
No	Issue Date	Revision Notes	Prepared By	Approved By
1	January 2016		T Parkinson	
2	January 2017	Update MCC info	T. Parkinson	
3	May 2018	Update positions and phones numbers	G Yates	
4	May 2019	Update Landfill Supervisor contact number Updated facility name	G Yates	
5	June 2020	Updated Landfill Supervisor information, Updated name Appendix 6	D Harris	
6	September 2020	Updated contact details and layout	David Rees	Amy Hill
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9	July 2023	Update contacts	Duncan Russ	
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March 2024

PIRMP Test History

Date test completed	Name of person whom completed test	Comments
22/03/2022	Daryl Harris Steve Campbell	Leachate emission from landfill
18/03/2023	Duncan Russ Nick Kenny	Asbestos spilled at weighbridge
22/03/2024	Duncan Russ Nick Kenny Steve Campbell	Fire in tip face

Contents

Gloucester Landfill	
Gloucester	
1. Administration	1
1.1 PURPOSE	1
1.2 OBJECTIVE AND SCOPE OF PLAN	1
1.3 LEGISLATIVE CONTEXT	2
1.4 KEY TERMS AND MEANINGS.....	2
1.5 FACILITY COVERED BY THIS PLAN	3
1.6 PLAN DISTRIBUTION	3
1.7 PLAN REVIEW.....	3
1.8 PLAN DRILLS AND EXERCISES.....	5
1.9 FORM OF PLAN	5
1.10 RELATIONSHIP WITH OTHER EMERGENCY AND INCIDENT RESPONSE PLANS.	5
2. Facility Description	6
2.1 LOCATION	6
2.2 FACILITY DESCRIPTION.....	8
3. Pollution Incident Prevention, Recognition And.....	9
Preparedness	9
3.1 PREVENTION AS AN INCIDENT RESPONSE.....	9
3.2 INVENTORY OF POTENTIAL POLLUTANTS	10
3.3 NATURE AND LIKELIHOOD OF POLLUION INCIDENTS	11
3.4 INCIDENT PREPAREDNESS	21
3.4.1 Response Equipment and Features.....	21
3.4.1 Communication System.....	21
3.4.2 Security	22
3.4.3 First Aid Equipment	22
3.4.4 Signs and Labels.....	22
3.4.5 Funding Arrangements and Support	22
4. Pollution Incident Control and Response	
4.1 KEY FACILITY INCIDENT MANAGEMENT CONTACT DETAILS	20
4.2 KEY INCIDENT CONTACT DETAILS.....	
4.3 INCIDENT NOTIFICATION AND COMMUNICATION	25
4.4 FACILITY EVACUATION.....	28
5. Pollution Incident Response Procedures	30
6. Post Pollution Incident Activities	30
6.1 RECOVERY OPERATIONS	31
6.2 INCIDENT INVESTIGATION	31
6.3 DOCUMENTATION	31
6.4 INCIDENT DAMAGE ASSESSMENT	32

6.5	INCIDENT DEBRIEFING	32
6.6	INCIDENT CRITIQUE	32
6.7	MEDIA MANAGEMENT	32

List of Appendices

Appendix 1 – Notification of Change Form
Appendix 2 – Staff Training/Competency Summary and SOP
Appendix 3 – Pollution Incident Exercise Evaluation Form
Appendix 4 – Incident Notification Report Form
Appendix 5 – EPA Notification Protocol
Appendix 6 – Leachate Discharge SOP
Appendix 7 –Surface Water Monitoring SOP
Appendix 8 – Sedimentation Control System SOP
Appendix 9 – Used Tyres Stockpile Management SOP
Appendix 10 – Green Waste Stockpile Management SOP
Appendix 11 – Fire at the Landfill tipping Face SOP
Appendix 12 – Fire in a Load SOP
Appendix 13 – Chemical Spill SOP
Appendix 14 – Storage and Handling of Chemicals SOP
Appendix 15 – Inspection of Loads SOP
Appendix 16 – Clean up of Oil/Fuel Spill SOP
Appendix 17 - Depositing of Waste SOP
Appendix 18 – Dust Management SOP
Appendix 19 – Odour Management SOP
Appendix 20 – Covering Waste SOP
Appendix 21 – Evacuation SOP
Appendix 22 – Incident Reporting SOP
Appendix 23 – EMP Checklist
Appendix 24 – Site Services and Infrastructure Plan
Appendix 25 – Communications Recipient Schedule
Appendix 26 – Community Recycling Centre SWIMS

1. ADMINISTRATION

1.1 PURPOSE

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

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

The purpose of this Pollution Incident Response Management Plan is to assist Council staff at the Gloucester Landfill facility 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 plan contains guidance in determining the appropriate actions to take to 'prevent material harm' to the environment.

1.2 OBJECTIVE AND SCOPE OF PLAN

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

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

The objectives of this plan are to:

- 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 and Rescue NSW) and people outside the facility who may be affected by the impacts of the pollution incident
- ensure that the Plan is properly implemented by trained staff, identifying persons responsible for implementing it, and ensuring that the plan 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 Plan 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 Plan also includes provisions for record keeping, testing, reporting and document revision.

1.3 LEGISLATIVE CONTEXT

The specific requirements for pollution incident response management plans 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 licensees must prepare a PIRMP (section 153A).
- A PIRMP must be in the form required by the regulations and must include the information detailed in the POEO Act (section 153C) and the General Regulation (clause 98C).
- Licensees must keep the PIRMP at the premises the environment protection licence relates to, or where the relevant activity takes place (in the case of trackable waste transporters and mobile plant) (section 153D), and make certain parts of the PIRMP available on a publicly accessible website of the licensee, or alternatively provide a copy upon written request (clause 98D).
- Licensees must test their PIRMP in accordance with the regulations (section 153E and clause 98E).
- Licensees must implement their PIRMP immediately if a pollution incident occurs that causes or threatens material harm to the environment (as defined in section 147) (section 153F).

1.4 KEY TERMS AND MEANINGS

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

1.4.1 Pollution Incident

The definition of a pollution incident is:

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

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 Immediately

Industry is now required to report pollution incidents *immediately* to the EPA, NSW Health, Fire and Rescue NSW, WorkCover NSW and the local council. 'Immediately' has its ordinary dictionary meaning of promptly and without delay. These strengthened provisions will ensure that pollution incidents are reported directly to the relevant response agencies so they will have direct access to the information they need to manage and deal with the incident in a faster time.

1.5 FACILITY COVERED BY THIS PLAN

The operation of the **Gloucester Landfill** is covered by this plan.

1.6 PLAN DISTRIBUTION

A copy of this Plan is to be kept at the premises to which the relevant Environmental Protection Licence (EPL) relates, or where the relevant activity takes place, so that it is readily available to those responsible for its implementation and to an authorised officer on request.

The master copy of this plan is to be maintained by the Coordinator Waste Operations, **MidCoast Council** who will be responsible for revisions of the Plan and for the distribution of revised copies to the abovementioned.

1.7 PLAN REVIEW

The Pollution Incident Response Management Plan is to be reviewed annually by the Coordinator Waste Operations, MidCoast Council in conjunction with relevant Council staff.

When revisions are made to the Plan, 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, refer to **Appendix No 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 Plan assigned to that party has been updated. This form is to then be retained on file by the Coordinator Waste Operations, MidCoast Council.

Alternatively, the Coordinator Waste Operations may determine that the updated version of the Plan should replace the existing copy in its entirety, in which case copies of the Plan will be exchanged with the new version adopting currency and the former version discarded.

PLAN TRAINING

To ensure that this plan 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 Plan.*

*b) To ensure that **Council employees** are knowledgeable of the Plan's procedures to affect a safe and appropriate response to pollution incidents.*

Council employees will receive training in the plan appropriate to the level of their expected involvement.

The following is the general training program which is to be implemented:

1.8.1 Training Frequency

Council employees will receive training during initial employment orientation and refresher training at least annually. When employees change areas in which they work or responsibilities for the work they undertake, they will receive from their supervisor appropriate training in their responsibilities and actions as required by the Plan for their new work area/new responsibilities.

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

1.8.2 Training Level

All **Council employees** will receive training in the general Plan procedures and specific procedures related to the Plan.

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 Landfill Supervisor, Senior Waste Operations Officer and Coordinator Waste Operations, MidCoast Council will receive additional training, beyond that received by Council employees, dealing with actions that are necessary to provide for the safety of employees and facility users, 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 Plan are provided in **Appendix 2** of this Plan.

1.8 PLAN DRILLS AND EXERCISES

To ensure that this Plan will meet current conditions and that all involved individuals will respond appropriately, the Plan 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 plan procedures.

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

The Plan must also be tested within one month of any pollution incident occurring in the course of an activity to which a licence relates to assess, in the light of that incident, whether the information included in the Plan is accurate and up to date, and the Plan is still capable of being implemented in a workable and effective manner.

The Senior Waste Operations Officer, MidCoast Council will complete a Pollution Incident Action Plan Exercise Evaluation Form, refer to **Appendix No 3**, and maintain copies for review.

1.9 FORM OF PLAN

As the purpose of this Plan is to mitigate the likelihood and to improve the management of pollution incidents and facilitate better coordination with the relevant response agencies, this Plan must be provided in written form, and be available at the subject premises and able to be provided to an authorised EPA officer on request. While this Plan can be prepared and stored in other forms, a printed copy must be available to an authorised EPA officer and to any person who is responsible for implementing the plan.

1.10 RELATIONSHIP WITH OTHER EMERGENCY AND INCIDENT RESPONSE PLANS

This Plan is meant as a stand alone document, the implementation of which is required to be undertaken to mitigate risk of a pollution incident but also to respond to any pollution incident where there is a potential of 'material harm to the environment'.

2. FACILITY DESCRIPTION

2.1 LOCATION

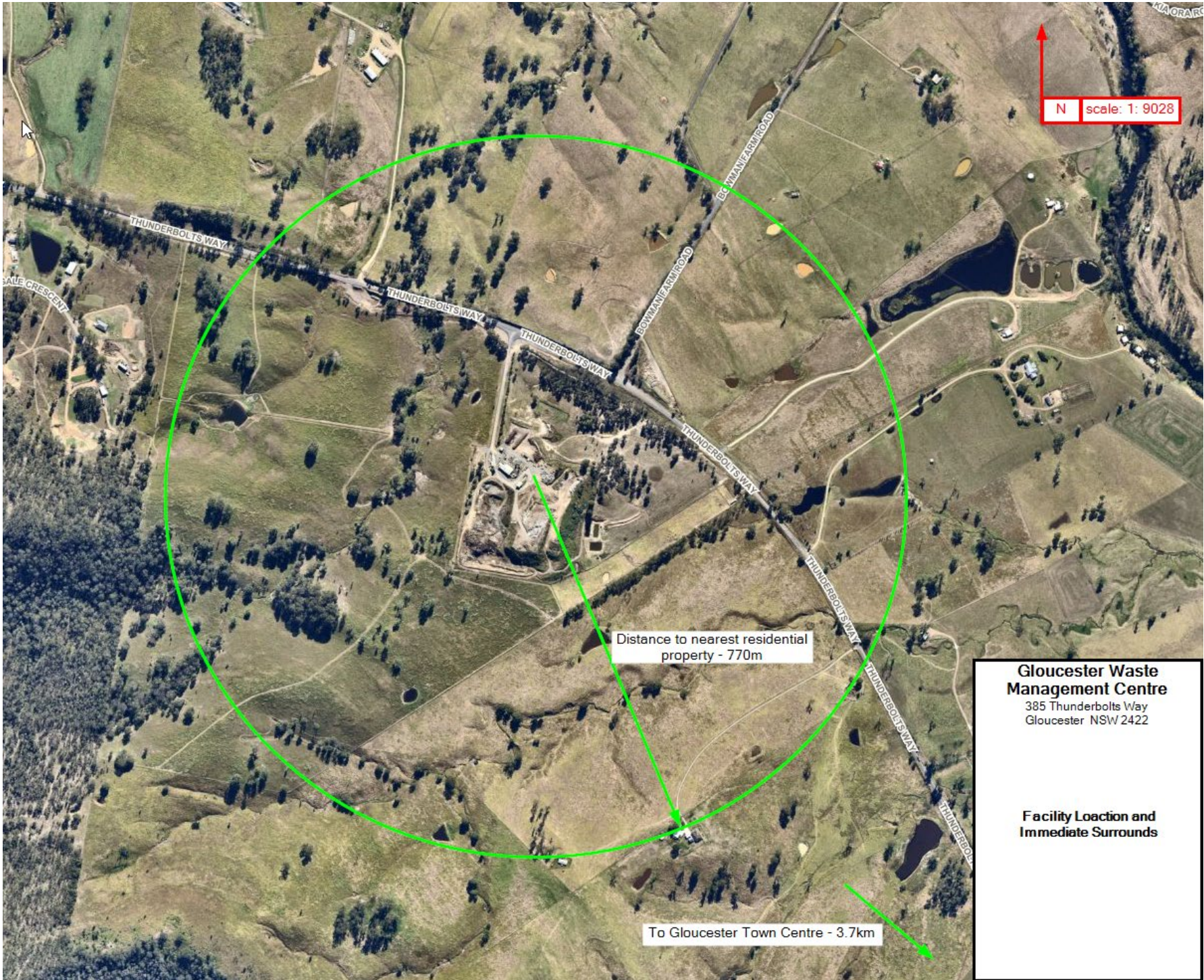
Name of the Facility – Gloucester Waste Management Centre

Address – 385 Thunderbolts Way Gloucester NSW 2422

Property Description – Lot 7 DP 852189 and Part Lot 8 DP 852189

Location Map

Figure 1 – Location Map



Owner –MidCoast Council

Area – the site occupies an area of approximately 15 hectares.

Site access – site access is via Thunderbolts Way through the main entry gate and linked to the quarry access road.

2.2 FACILITY DESCRIPTION

Site Plan

Figure 2 – Site Plan

The Site Services and Infrastructure Plan described as figure 2 shows the overall site arrangement, activity areas, the locations of first response equipment in the event of a pollution incident together with the identification of the sources of potential pollutants.

The Site Services and Infrastructure Plan can be located in **Appendix 24** of this document.

Site Activities - the Gloucester Landfill incorporates a number of related activities and comprises –

(i) The landfill operates under EPL 13100 as a General Solid Waste (putrescibles) facility where approximately 3500 tonnes per annum (tpa) of waste material are buried. Waste material types include asbestos, dead animals as well as general Municipal Solid Waste.

Leachate collection lines have been installed at the toe of the eastern landfill batter to prevent leachate from migrating out of the landfill, the natural topography of the land causes leachate to travel from west to east following the natural contours of the earth.

(ii) Weighbridge/Gatehouse is the control point for incoming wastes where the loads are weighed and inspected to ensure only approved waste types are accepted, where fees are applied, and instructions given for waste placement.

(iii) Opportunity shop/workshop is the area where recovered goods are offered for sale, resources are extracted for recycling and goods are

(iv) Stockpile Areas – scrap metal, drumMuster containers, e-waste, oil, e-waste, mattresses, silage wrap and used tyres are stockpiled in an area defined as “resource recovery” before removal off site for re-processing. Service contracts ensure these materials are removed routinely to ensure stockpiles are maintained at minimum sizes.

Waste concrete and masonry are stockpiled on the landfill before re-use on the landfill for hardstand and internal road construction.

(v) Organics Storage and Processing – organic material comprises self haul garden waste together with kerbside collected green waste. Up to 1200 tonnes per annum are managed within this site. The materials are stockpiled, shredded and pasteurised onsite before being taken offsite or used within the site for erosion control, dust suppression and as a revegetation medium over intermediate capped zones.

(vi) Quarry – quarrying operations are undertaken within the site on a campaign basis by Council and overseen by Council staff. The void space created from the quarrying works provide for future land filling.

(vii) Community Recycling Centre. The Community Recycling Centre accepts hazardous and problem wastes from the community, such as gas bottles, household batteries, fluorescent light globes, household chemicals, and paint. These items are collected by a contractor once the receptacles are full.

3. POLLUTION INCIDENT PREVENTION, RECOGNITION AND PREPAREDNESS

3.1 PREVENTION AS AN INCIDENT RESPONSE

MidCoast Council is committed to minimizing 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 be able to identify and respond to conditions that might lead to a pollution incident.

Council employees are to be instructed, as part of their training and orientation, 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 identified in Section 2.2 above are provided as follows;

Table 1 – Summary of Pre-emptive Actions

POTENTIAL HAZARD	PRE-EMPTIVE ACTION
<ul style="list-style-type: none"> • Ground water contamination • Surface water contamination 	Undertaking routine inspections in accordance with the EMP checklist (see Appendix 24) and responding in accordance with Standard Operating Procedures (SOPs) as contained in

<ul style="list-style-type: none"> • Leachate spring eruption • Fire at tip face • Fire in incoming load • Fire at tyre stockpile • Fire in shredded green waste • Chemical spill • Oil/fuel spills. • Failure of hazardous material containment tanks/bund • Windblown litter • Odour • Dust • Explosion of gas cylinders 	Appendices 6 to 22
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3.2 INVENTORY 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	LOCATION (see site plan)	TYPE OF CONTAINMENT	MSDS
Leachate	Liquid	Up to 100 litres (contained within berm at the active tipping area)	Active tipping area	Earth formed	NA
Used tyres	Solid	100 units	Resource Recovery Area	Hardstand	NA
Shredded green waste	Solid	1,200 cubic metres	Resource Recovery Area	Hardstand	NA
Diesel	Liquid	40 litres in fuel tank	Generator Shed	Bunded Pallet	yes
Petrol	Liquid	80 litres	Generator Shed/Pump Container	Bunded Pallet	yes
Oil based paint	Liquid	Up to 50 litres	OP shop and CRC	Bunded pallet	yes
Water based paint	Liquid	Up to 50 litres	OP Shop and CRC	Bunded pallet	yes

Gas cylinders	Solid	Up to 50 units	CRC	Bunded pallet	NA
General household chemicals	Liquid or Powder	Up to 60 litres	CRC	Bund and locked chemical cabinet	yes
Used Motor Oil	Liquid	Up to 1500 litres	Resource Recovery Area	Bunded storage	yes
Solvents	Liquid	Up to 20 litres	CRC	Chemical cabinet	yes
Lead Acid Batteries	Solid	Up to 100 units	Gatehouse	Bunded pallet	NA

A map showing the location of pollutant locations is provided **under Part 2.2 of this Plan**.

3.3 NATURE AND LIKELIHOOD OF POLLUTION INCIDENTS

Notwithstanding **MidCoast Council'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
- Spill of chemical or other hazardous materials
- Leachate discharge off site
- Litter, odour and dust

Having regard to the nature of the operation of the **Gloucester Landfill** facility, 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 was 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.

Table 3 - Likelihood of a risk occurring.

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.
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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.

Table 4 – Consequence of a risk occurring

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	Catastrophic	Major environmental impact which maybe 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.

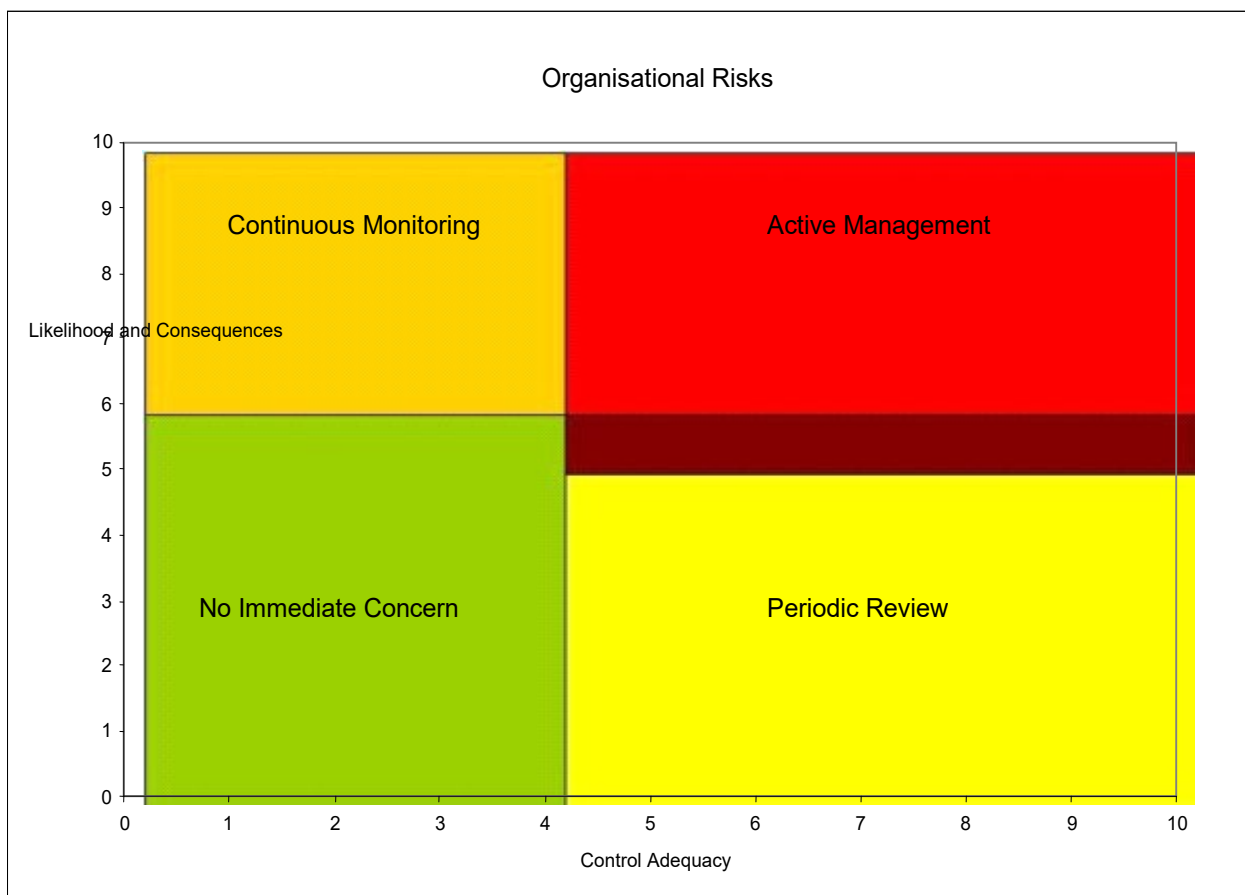
Definitions – Report Key

Rating	Definition
Low 1 – 2	Acceptable Risk – Review consequence and likelihood and manage through routine procedures
Moderate 3 – 5	Ensure management system controls risk and managerial responsibility is defined.
Significant 6 – 8	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.
High 9 – 10	Risk must be assessed and reduced or eliminated. If the risk cannot be reduced from “High”, then management must provide continuing assurance that due diligence systems are in place so that appropriate management processes can be demonstrated as being in operation.

The residual risk has been shown by measuring the inherent risk against the assessed effectiveness of the controls. High risks will be eliminated by change of scope or schedule.

For the purposes of this Plan high risks and significant risks will be eliminated or managed. Moderate risks will be monitored. Low risks will be accepted.

Figure 3 – Risk Priority Matrix



The outcomes of the risk assessment together with the relevant incident control/management action are summarized in Table 5 below. A detailed risk assessment of the CRC is attached in Appendix 26

Table 5 – Risk Management Plan

Pollution Hazard	Risk Factors	Outcome	Likelihood/Consequence (Rating)	Pre-emptive Actions	Reference	Likelihood/Consequence post control (Rating)	Incidence Response Actions	Reference
(1) ENVIRONMENTAL (a) Leachate Discharge Off Site	Leachate contamination of the surface water management system.	Leachate contamination of adjacent land and/or waterways	Possible/major (Significant)	Routine inspection included in EMP checklist to ensure suitable management procedures, including bund separation at active tipping area	EMP Inspection checklist as provided in Appendix 23 of the PIRMP	Rare/Major (Moderate)	SOP Appendix 6	SOP within the PIRMP
	Leachate retention berm failure	Leachate contamination of adjacent land and/or waterways	Possible/major (Significant)	Routine inspection included in EMP checklist	EMP Inspection checklist as provided in Appendix 23 of the PIRMP	Rare/Major (Low)	SOP Appendix 6	SOP within the PIRMP
	Leachate seepage from landfill operations into water table	Leachate migration and possible contamination of water table	Possible/major (Significant)	Monitoring of ground bores to detect leachate migration	EMP Inspection checklist as provided in Appendix 23 of the PIRMP	Rare/Major (Low)	SOP Appendix 7	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 (Significant)	Routine inspection included in EMP checklist	EMP Inspection checklist as provided in Appendix 23 of the PIRMP	Rare/Major (Moderate)	SOP Appendix 6	SOP within the PIRMP

Pollution Hazard	Risk Factors	Outcome	Likelihood/Consequence (Rating)	Pre-emptive Actions	Reference	Likelihood/Consequence post control (Rating)	Incidence Response Actions	Reference
(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 inspection included in EMP checklist	EMP Inspection checklist as provided in Appendix 23 of the PIRMP	Rare/Moderate (Low)	SOP Appendix 9	SOP within the PIRMP
	Green waste stockpile ignites	Combustion creates smoke and fire hazard	Possible/moderate (Moderate)	Routine inspection included in EMP checklist to ensure stockpile size management and maintenance of buffer zones	EMP Inspection checklist as provided in Appendix 23 of the PIRMP	Rare/Moderate (Moderate)	SOP Appendix 10	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 as required in EMP checklist. Site secured at close of day	EMP Inspection checklist as provided in Appendix 23 of the PIRMP	Rare/Moderate (Low)	SOP Appendix 11	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 as required in EMP checklist.	EMP Inspection checklist as provided in Appendix 23 of the PIRMP	Rare/Moderate (Low)	SOP Appendix 12	SOP within the PIRMP

Pollution Hazard	Risk Factors	Outcome	Likelihood/Consequence (Rating)	Pre-emptive Actions	Reference	Likelihood/Consequence post control (Rating)	Incidence Response Actions	Reference
(c) Chemical Spills	Chemical spill from ruptured or leaking storage containers	Soil contamination Creation of volatile fumes Explosion/fire	Possible/major (Significant)	Retain minimum quantities on site Separation areas between stored chemicals Creation of bunded storage areas	EMP Inspection checklist as provided in Appendix 23 of the PIRMP	Rare/Moderate (Low)	SOP Appendix 13	SOP within the PIRMP
	Incompatible chemical cross contamination in storage areas	Explosion/fire	Possible/major (Significant)	Retain minimum quantities on site Use approved chemical safes for storage Separation areas between stored chemicals Creation of bunded storage areas	EMP Inspection checklist as provided in Appendix 23 of the PIRMP	Rare/Moderate (Low)	SOP Appendix 14	SOP within the PIRMP
	Leakage from incoming loads	Soil contamination Contamination of adjacent land and/or waterways	Possible/major (Significant)	Inspection of all incoming loads as required in EMP checklist.	EMP Inspection checklist as provided in Appendix 23 of the PIRMP	Rare/Moderate (Low)	SOP Appendix 15	SOP within the PIRMP

Pollution Hazard	Risk Factors	Outcome	Likelihood/Consequence (Rating)	Pre-emptive Actions	Reference	Likelihood/Consequence post control (Rating)	Incidence Response Actions	Reference
(d) Oil/Fuel Spillage	Rupture of fuel containers or storage tanks	Soil contamination Creation of volatile fumes Explosion/fire	Possible/major (Significant)	Retain minimum quantities on site Creation of bunded storage areas	EMP Inspection checklist as provided in Appendix 23 of the PIRMP	Rare/Moderate (Low)	SOP Appendix 16	SOP within the PIRMP
	Rupture of mobile plant hydraulic lines	Soil contamination Contamination of adjacent land and/or waterways	Possible/major (Significant)	Staff training in waste placement and compaction techniques. Routine plant servicing.	Staff training records	Rare/Moderate (Moderate)	SOP Appendix 17	SOP within the PIRMP
(e) Dust	Dust migrating off site	Complaints to EPA	Possible/moderate (Moderate)	Install dust monitor Wet down unsealed trafficable areas Use shredded green waste on exposed areas of cover material	EMP Inspection checklist as provided in Appendix 23 of the PIRMP	Rare/Minor (Low)	SOP Appendix 18	SOP within the PIRMP
(f) Odour	Offensive odour	Complaints to EPA	Possible/moderate (Moderate)	Provide daily cover/landfill lids to active tipping area	EMP Inspection checklist as provided in Appendix 23 of the PIRMP	Rare/Minor (Low)	SOP Appendix 19	SOP within the PIRMP

Pollution Hazard	Risk Factors	Outcome	Likelihood/Consequence (Rating)	Pre-emptive Actions	Reference	Likelihood/Consequence post control (Rating)	Incidence Response Actions	Reference
(g) Litter	Litter migrating off site	Complaints to EPA	Possible/moderate (Moderate)	Provide daily or intermediate cover to waste Erect litter fences Litter collection activities	EMP Inspection checklist as provided in Appendix 23 of the PIRMP	Rare/Minor (Low)	SOP Appendix 20	SOP within the PIRMP
(2) COMPLIANCE (a) Incident Reporting	Non-compliance with statutory reporting	Cautionary Notice PIN	Unlikely/Moderate	Prepare reports as required	Reporting protocols included in EMP checklist. Appendix 23.	Rare/Moderate (Low)	SOP Appendix 22	SOP within the PIRMP

Pollution Hazard	Risk Factors	Outcome	Likelihood/Consequence (Rating)	Pre-emptive Actions	Reference	Likelihood/Consequence post control (Rating)	Incidence Response Actions	Reference
(3) WORKPLACE HEALTH and SAFETY	Personal injury to staff, contractors, general public attending the facility	Trauma Lost time Rehabilitation Compensation	Likely/major	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 Safety Handbook and Safety Management System Council's Safety Handbook and Safety Management System SOP Appendix 2 Council's Safety Handbook and Safety Management System SOP Appendix 21	Unlikely/moderate (Moderate)		SOPs within the PIRMP

3.4 INCIDENT PREPAREDNESS

3.4.1 Response Equipment and Features

The **Gloucester Landfill** has a number of active and passive pollution control/safety devices and 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	QUANTITY	MAINTAINANCE REQUIREMENTS/STANDARDS
Asbestos kit	OP shop	1	Weekly inspection
Chemical spill kit	OP shop and CRC	1	Weekly inspection
Fire extinguisher	Gatehouse, OP shop, CRC	4	Six monthly inspection and tagging
Absorbent material	OP shop, CRC	4 bag	Three monthly inspection and replenishment
First Aid Kit	Gatehouse, OP shop, CRC	3	Monthly inspection and replenishment.

Active systems and equipment such as portable fire extinguishers should only be used by persons who are suitably trained and it is safe to do so.

The location of all incident response equipment will be clearly signposted so that Council employees faced with an incident and under pressure will confidently locate and select the appropriate type of equipment.

The maintenance of the systems and equipment is to be undertaken in accordance with the standards nominated in the Table above.

3.4.1 Communication System

A telephone system is installed within the **Gloucester Landfill**. The Waste Supervisor also has a mobile phone. In a pollution incident the telephone can be used as a means of notifying those individuals/organisations responsible for activating this Plan and managing the incident response.

Further, Council has an obligation to inform members of the local community should a pollution incident occur that could affect their property or safety. Communication mechanisms include phoning occupiers of neighbouring properties, issuing media releases and providing information of Council's web site.

A summary of community notification and communication is provided in table 9 of Section 4.3.2

3.4.2 Security

Access to the **Gloucester Landfill** by unauthorised persons and unauthorised activities occurring on the site will be controlled at the gatehouse by **Council personnel** who are required to provide access to authorized persons only.

3.4.3 First Aid Equipment

A suitable fully stocked and easily accessible first aid kit is located at the gatehouse, the Community Recycling Centre, and the OP shop with the locations clearly labelled.

3.4.4 Signs and Labels

Signs and labels provide key information to facility personnel and users. The location of signs is important.

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's staff and facility users.

3.4.5 Funding Arrangements and Support

As the costs associated with the clean up of an incident can be significant – in past cases these have been in excess of \$1 million – consideration must also be given to funding arrangements, such as taking out appropriate insurance or having contingency funds available. The cost of any clean up that is undertaken by emergency response agencies and the EPA will generally be recovered from the company or individual responsible for the pollution incident.

Having regard to the above the following pollution incident funding arrangement is in place;

- Public liability insurance policies

4. POLLUTION INCIDENT CONTROL AND RESPONSE

4.1 KEY FACILITY INCIDENT MANAGEMENT CONTACT DETAILS

The following is a list of incident response individuals who are responsible for activating this Plan together with their notification and communication responsibilities.

Table 7 - Contact List

NAME	POSITION	CONTACT DETAILS (24 Hours)	NOTIFICATION RESPONSIBILITIES	COMMUNICATION RESPONSIBILITIES
Duncan Russ	Coordinator Waste Operations	0402 089 222	Emergency Services EPA Waste Program Coordinator	Contractors Neighbouring property owners
Nick Kenny	Landfill Supervisor	0418 490 137	EPA Emergency Services Coordinator Waste Operations & Sustainability	Emergency services Site personnel Facility users
Emillie Wilde	Senior Waste Operations Officer	0421 791 174	EPA Emergency Services Coordinator Waste Operations & Sustainability	Emergency services Site personnel Facility users
David Rees	Waste Manager	0436 830 159	Emergency Services EPA Council Executive	Contractors Neighbouring property owners Media releases Web update

For incidents out of business hours phone the on call supervisor at Council on: 0439573816. The on call supervisor will open the landfill and activate the Contact List.

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. Those organizations specified in red are to be reported to immediately by the appropriate officer outlined in Table 7.

Table 8 - Incident Contact Details

ORGANISATION	CONTACT NAME	CONTACT DETAILS
Fire and Rescue NSW	Duty Officer	000
Police Force NSW	Duty Officer	6558 1204 (local) 000
Ambulance Service of NSW	Duty Officer	1312333 000
Manning Base Local Hospital	Reception	6592 9111 000
Department of Environment and Conservation (EPA)	EPA Environment Line	131 555
	Newcastle Regional Office	4908 6800
Department of Environment and Conservation (NPWS)	NSW Parks and Wildlife Service <i>Gloucester</i>	6538 5300
Workcover Authority	Duty Officer	131 050
Department of Primary Industries (NSW Fisheries)	Reception	1300 550 474
Poisons Information	Duty Officer	131 126 000
NSW Ministry of Health	Reception	9391 9000
Department of Families and Community Services	Reception	9248 0900
State Emergency Service	Duty Officer	132 500 000
Roads and Traffic	Reception	132 213

Authority		
Bureau of Meteorology	Land weather and flood warnings	1300 659 218
Rural Fire Service	Reception	6558 8800 000

4.3 INCIDENT NOTIFICATION AND COMMUNICATION

4.3.1 Incident Notification

In order to provide for the safety of employees and facility users and to ensure 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 organizations 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 Small Area/Minor Incidents

Incidents such as small chemical spills or litter will generally not require the notification of incident response agencies.

However, it will be the general practice that **all** incidents will be notified immediately to the **Coordinator Waste Operations, MidCoast Council** so that an assessment of the level of response required can be made.

The mobile telephone 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, refer to **Appendix 4**, is to be completed and forwarded to the **Coordinator Waste Operations, MidCoast Council**.

4.3.2 Major Incident

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

Where a major incident occurs, the **Coordinator Waste Operations, MidCoast Council**. The **Coordinator Waste Operations, MidCoast Council** is to **immediately** implement the pollution notification protocol included as **Appendix 5**.

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 of Waste, MidCoast Council**.

Importantly Appendix 5 requires the immediate notification of;

- the appropriate regulatory authority (ARA) for the activity under the POEO Act (usually the EPA or local authority) – the local authority is a local council of an area under the Local Government Act 1993), the Lord Howe Island Board for Lord Howe Island, or the Western Lands Commissioner for the Western Division (except any part of the Western Division within the area of a local council)
- the EPA, if it is not the ARA – phone Environment Line on 131 555
- the Ministry of Health via the local Public Health Unit see www.health.nsw.gov.au/publichealth/infectious/phus.asp
- the WorkCover Authority – phone 13 10 50
- the local authority if this is not the ARA
- Fire and Rescue NSW – phone 000.

The above organisations must be notified immediately of a major pollution incident.

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

Table 9 - Community Notification and Communications Plan

NATURE OF INCIDENT	IMPACT ON COMMUNITY	NOTIFICATION REQUIREMENTS	RESPONSIBILITY	NOTIFICATION MECHANISM/TOOLS	KEY MESSAGE
Leachate discharge off site	Local impact, ranging from minor to significant	EPA Occupiers of neighbouring properties	Coordinator Waste Operations (CWO)	Phone call to EPA Environment Line followed by a written report Phone call to occupiers of neighbouring properties Information displayed on Council's web site	Assessment of severity Type and quantity of material involved Explanation of what happened Date and time of incident Response actions taken Council will provide ongoing information
Fire	Local impact, likely to be minor, depending on the severity of the fire	EPA Occupiers of neighbouring properties Local community	CWO	Phone call to EPA Environment Line followed by a written report Phone call to occupiers of neighbouring properties Media release	Date and time of incident Response actions taken Type of fire Location of fire within the site Agency responding Management of any leachate generated from fire fighting activities
Chemical spill	Local impact, likely to be minor	EPA, depending on severity	CWO	Phone call to EPA Environment Line followed by a written report	Date and time of incident Response actions taken Type of chemicals Agency responding
Oil/fuel spill	Local impact, likely to be minor	EPA, depending on severity	CWO	Phone call to EPA Environment Line followed by a written report	Date and time of incident Response actions taken Type of oil/fuel Agency responding
Explosion	Local impact, likely to be minor	EPA and nearby property occupants depending on severity	CWO	Phone call to EPA/ property owners followed by a report to the EPA	Assessment of severity Agency responding Date and time of incident Damage report

4.4 FACILITY EVACUATION

4.4.1 General Requirements

Most minor pollution incidents will not require the evacuation of all or part of the facility however it is acknowledged that any major incident may require the facility to be evacuated.

Evacuation of Council employees and facility users in the event of a major incident 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 and facility users from the hazardous area.

In this regard the standard operating procedures applicable to facility evacuation, refer to **Appendix No 21**, must be implemented once a decision is made to evacuate the facility.

The decision to evacuate the building is to be taken by the **Landfill Supervisor or Councils Coordinator Waste Operations**, and supported by facility personnel.

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.

It will be, due to facility operational practicalities, the responsibility of the **Landfill Supervisor** to determine the need for and the extent of facility evacuation in the event of a major pollution incident.

Whilst the need for evacuation will be based upon the nature and scale of an incident, it is of primary importance that personal and public health is not put at risk at anytime during a pollution incident. In this regard a precautionary approach to facility evacuation is to be taken by the **Landfill Supervisor** and supported by facility staff.

*In the event of a Total Facility Evacuation, the Facility is not to be re-entered unless permitted to do so by the **Coordinator Waste Operations, MidCoast Council**.*

4.4.3 Priority of Evacuation

The **Landfill Supervisor** 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 **Landfill Supervisor**, the following action is to be initiated:*

- *Ensure that the person has been clearly advised that they are required to evacuate the building 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 could affect their capacity to evacuate the site.

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 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 employees will remain until the **Landfill Supervisor** has determined the status of all personnel and;

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

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

Primary Assembly Point is in the cleared area at the entry to the weighbridge where the “**Emergency Assembly**” sign is located.

Secondary Assembly Point is at the entry to the site at Thunderbolts Way. The Site Services and Infrastructure Plan in **Appendix 24** shows the locations of the Primary and Secondary assembly points.

4.6.6 Post Evacuation Assembly Point

Once the facility has been evacuated to the Primary or Secondary Evacuation Assembly Point and the presence of personnel confirmed, arrangements will be made by the **Landfill Supervisor**, for Council employees to be transported/moved to the Post Evacuation Assembly Point which for the purposes of this Plan is Gloucester Showground located on Showground Road in Gloucester.

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 21 of this Pollution Incident Response Management Plan 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
- Fire
- Chemical spill
- Oil/fuel spill
- Explosion
- Facility Evacuation

6. POST POLLUTION INCIDENT ACTIVITIES

This section of the Pollution Incident Response Management 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 **Gloucester Landfill**.

6.1 RECOVERY OPERATIONS

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

The **Coordinator Waste Operations**, in collaboration with the **Landfill Supervisor** will need to prioritize activities that can be accomplished with available staff and resources.

Immediately following the emergency phase of an incident, the **Coordinator Waste Operations**, will develop an operational recovery plan.

6.2 INCIDENT INVESTIGATION

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 Coordinator Waste Operations 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 **Landfill Supervisor** 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 Coordinator Waste Operations and the **Landfill Supervisor** 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 must be retained for future reference.

Following a pollution incident or emergency situation, the Coordinator Waste Operations 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 Coordinator Waste Operations must prepare a report documenting activities that took place during a major pollution incident.

The report of the Coordinator Waste Operations and all related documentation will be submitted to the **EPA** and to the **Waste Manager, MidCoast Council** to review and to take all necessary follow-up actions.

6.4 INCIDENT DAMAGE ASSESSMENT

Following an incident, an assessment of damage 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 minimize further damage and restore the facility for operational use or to rehabilitate the environment.

The Coordinator Waste Operations 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 INCIDENT CRITIQUE

The critique of the incident is a review of what actions took place during the pollution incident, both good and bad. A critique is not designed to place blame, but rather to allow for the flow of ideas and recommendations to improve the effectiveness of the Pollution Incidence Response Management Plan and the facility procedures.

6.7 MEDIA MANAGEMENT

Under no circumstance is any member of Council's staff or the contractor to provide information or statement to the media unless authorized by the Waste Manager, MidCoast Council.

APPENDIX 2

Training Standard Operating Procedure
<p>Purpose and Scope</p> <p>To ensure the safe and effective management at the Gloucester Landfill, it is essential that all relevant staff receive training appropriate to their position, duties and level of responsibility.</p> <p>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.</p> <p>Primary Environmental Goal – Adequate staffing and training. Benchmark Technique 39.</p>
<p>Procedure/Standard</p> <p>Staffing and training requirements shall be adequate to enable responsible management and capable service delivery</p> <p>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.</p> <p>The guidance for specific training programs that are integral to the operation of Council's facilities is described below.</p>
<p>Program A – Site Environment Induction (EMP)</p> <p>Key points to be covered in this program may include:</p> <ul style="list-style-type: none">• 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 <p>This training would be in-house, and would be provided by the Council's waste officers, the site contractor or his representative or by consultants. Training would be provided when new staff commence at the site.</p>
<p>1.1.1.1 Program B – Fire Fighting</p> <p>Key points to be covered in this program may include:</p> <ul style="list-style-type: none">• Types of fires (eg 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

<ul style="list-style-type: none"> • Procedures for communication in the event of fire <p>This training would be undertaken at the site in the form of a toolbox talk and may include practical demonstrations by external service providers. The training would be prepared and delivered by suitably qualified personnel, including by officers of the local NSW Fire and Rescue.</p>	
<p>1.1.1.2 Program C – Hazardous Substance and Dangerous Goods Management</p> <p>Key points to be covered in this program may include:</p> <ul style="list-style-type: none"> • 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. <p>This training would be provided by a suitable service provider. Where required, additional input may be required from external Workcover Accredited OH&S Consultants.</p>	
<p>Training Records</p> <p>A record of all training undertaken will be maintained at the Council's and the company's offices and will be made available for inspection by authorised personnel.</p>	
<p>Benefit of Compliance to Procedure:</p> <ul style="list-style-type: none"> • Impacts on the natural environment are minimised • Operational issues identified • Demonstrated operational competency • Employees safety protected • Health and safety of public/facility user protected • Meeting environmental goal 	
<p>Consequence of Non-Compliance to Instruction:</p> <ul style="list-style-type: none"> • Violations and/or fines from Regulatory Agencies • Pollution of the environment • Unresolved operational issues • Injury/Death to employee • Injury/Death to public/facility users • Violations and/or fines from Regulatory Agencies 	
<p>Reviewed by:</p> <p>Date:</p>	<p>Approved by:</p> <p>Date</p>

APPENDIX 3

POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN EXERCISE EVALUATION FORM		
Facility: the Gloucester Landfill		
Date:		
EMERGENCY SEQUENCE:	TIME	
	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		
1. Compliance with Standard Operating Procedures (SOP's)		
2. Competency of Employees assessment		
3. Time frames for response		
4. General Comments/Recommendations for action		
Observer		
Signed		
Date		

APPENDIX 4

POLLUTION INCIDENT REPORT FORM (A)			
Date of Incident:		Time of Incident:	
Nature of incident Eg: Leachate discharge, Fire, Chemical spill.			
Location of incident Where did it occur?			
Type and quantity of material involved			
Outline action initiated in response to incident			
Was it necessary to initiate the major incident notification protocol?			
Was the Community Notification and Communications Plan activated?			
Was action in accordance with SOP? If not - why?			
Is there a need to review SOP in response?			
Date and time of details provided to the Waste and Environment Coordinator GSC			
Name of Reporting Person			
Management Authorization..... Dated.....			

POLLUTION INCIDENT REPORT FORM (B)

Leachate Discharge/Overflow

Date of Incident:		Time of Incident:	
Nature of incident Eg: leachate dam overflow, leachate spring eruption.			
Details of person reporting or 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			
Weather conditions at the time of the discharge or overflow.			
Daily rainfall in mm on the day of the discharge. Rainfall for the week prior to the discharge			
Most recent monitoring results of the chemical composition of the leachate.	Attach analytical results		
Explanation as to why and how the discharge occurred			
Plan of Action to prevent a similar discharge			
Name of Reporting Person			
Management Authorization.....			
Dated.....			

APPENDIX 5

EPA NOTIFICATION PROTOCOL

Firstly, call 000 if the incident presents an immediate threat to human health or property. Fire and Rescue NSW, the NSW Police and the NSW Ambulance Service are the first responders, as they are responsible for controlling and containing incidents.

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:

- the appropriate regulatory authority (ARA) for the activity under the POEO Act (usually the EPA or local authority) – the local authority is a local council of an area under the Local Government Act 1993), the Lord Howe Island Board for Lord Howe Island, or the Western Lands Commissioner for the Western Division (except any part of the Western Division within the area of a local council)
- the EPA, if it is not the ARA – phone Environment Line on 131 555
- the Ministry of Health via the local Public Health Unit see www.health.nsw.gov.au/publichealth/infectious/phus.aspx
- the WorkCover Authority – phone 13 10 50
- the local authority if this is not the ARA
- Fire and Rescue NSW – phone 000.

The appropriate contact for the relevant local authority and Public Health Unit will vary.

All necessary contact numbers should be found in advance and stored for immediate access should a pollution incident need to be notified. These contact numbers should also be identified in the Pollution Incident Response Management Plan prepared for the premises.

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	
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 the landfill operations.	
Procedure/Standard <ul style="list-style-type: none">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 the 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: <ul style="list-style-type: none">Confine the source of the discharge and/or sources of inflows to limit the spread of its effects without endangering personnel.Construct sand bag barriers or earth berms to contain the flow and/or excavate temporary retention dams to withhold discharges.Secure the affected area(s) by using barricades and bunting if necessary.Immediately report the incident and actions taken to the Coordinator Waste OperationsSource a tanker truck to pump out the retained leachateNotify neighbours who may be affected by the incident.A copy of the Pollution Incident Report Form is to be referred to the council 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: <ul style="list-style-type: none">Limit environmental damageHealth and safety of public/facility user protected	
Consequence of Non-Compliance to Instruction: <ul style="list-style-type: none">Violations and/or fines from Regulatory Agencies	
Reviewed by: Daryl Harris Date:25/6/2020 Changed from Jason Collins Transport staff too Council staff	Approved by: Date

APPENDIX 7

Surface Water Quality Monitoring Standard Operating Procedure

Purpose and Scope

Prevention of contamination entering the stormwater management system should be the first priority and the EMP checklist in **Appendix 23** 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. Although surface water quality sampling/monitoring is not an EPL requirement, Council should continue to monitor water quality at the down gradient ponds located within the licensed area.

Procedure/Standard

Surface water should be sampled on a quarterly basis. The locations of the surface water sampling locations are the ponds down gradient of the landfill operational area and the parameters to be tested should include the basic leachate fingerprint of ammonia.

1. Preparation

The following equipment is needed to undertake the surface water sampling.

Check	Apparatus/Equipment List
	Rubber gloves
	Sampling pole
	Chain of custody documentation
	Clipboard
	Log sheets
	Calibrated water quality field meters
	Pencils/pens
	Decontamination equipment and water

There are a number of methods that can be used to obtain surface water samples including:

- Immersion of a sample bottle by hand to just below the surface (typically 0.25-0.50m depth), provided that the sampler has on a disposable rubber glove and any surface film is avoided.
- To maintain adequate distance from the sampling point the sample bottle can be held by the sampling pole. (preferred method).

2. Surface Water Sample Containers

Bottle Type	Test Parameter
2 x 40 ml vials (fill to the top)	AOX (Absorbable Organic Compounds)
1 x 1 litre sulphuric acid preserved (Purple label)	Ammonia, Nitrate, Total Phenols
1 x 40 ml glass vial sulphuric acid preserved (Purple label)	Total Organic Carbon (TOC)
1 x 1 litre natural plastic (Green label)	Alkalinity, pH, Calcium, Magnesium,

	Sodium, Potassium, Chloride, Sulphate, Fluoride
1 x 250ml Nitric Acid preserved plastic bottle – unfiltered (Red label)	Total heavy metals

3. Sample Acquisition

- Take a bottle from the customised sampling kits (eskies) that the lab has provided. The bottles needed to test the analytes are colour coded as shown in Table 2.
- Clearly label the bottle with sample number, location, sampler's name, date and time.
- Care should be taken not to touch the lid or the inside of the bottle as the bottles have been preserved and cleaned.
- Take the right sample container and plunge the bottle upside down to about a depth of 0.25-0.50m below the surface. Quickly turn the bottle upright and allow the bottle to fill.
- Care should be taken so that no liquid spills onto your skin
- Fasten lid tightly and place in cooler with frozen ice bricks (must be kept at 4°C)
- Field observations should be recorded in the sample field record sheet (attached). Observations would include smell, weather conditions etc
- When using a field meter ensure it has been calibrated. Record calibration method. Field measurements should be made of pH, temperature and conductivity.
- Use deionised water to rinse the field recorder between uses
- All samples should be stored as shown in Table 3 below. However all samples should be sent to the lab immediately.

Table 3 Sample storage and transportation conditions

Analyte	Holding Time (time before analysis)	Storage
Absorbable Organic Compounds (AOX)	14 days	Cool to 4°C
Alkalinity	14 days	Cool to 4°C
Ammonia	28 days	Cool to 4°C
Calcium	6 months	Cool to 4°C
Chloride	28 days	Cool to 4°C
Fluoride	28 days	Cool to 4°C
Iron	6 months	Cool to 4°C
Magnesium	6 months	Cool to 4°C
Manganese	6 months	Cool to 4°C
Nitrate	28 days	Cool to 4°C
pH	6 hours	Cool to 4°C
Total Phenolics (APHA Method, Non Speciated)	28 days	Cool to 4°C
Potassium	6 months	Cool to 4°C
Sodium	6 months	Cool to 4°C
Sulphate	28 days	Cool to 4°C
Total Organic Carbon	28 days	Cool to 4°C
Suspended Solids	7 days	Cool to 4°C
Poly Aromatic Hydrocarbons	Extract within 7 days, analyse within 40 days	Cool to 4°C
Volatile Organic Compounds	14 days	Cool to 4°C

Volatile Halogenated Compounds	14 days	Cool to 4°C
Phenois (GCMS – Speciated)	Extract within 7 days, analyse within 40 days	Cool to 4°C

4. Quality Control

All samples analysed by the laboratory are analysed according to the following Quality Control Schedule:

Inorganic

- 2 x duplicates per analytical lot of samples (ie one duplicate per 10 samples)
- 1 x Method Blank (where appropriate) per 20 samples
- 1 x Standard Reference Material or independent source standard analysed per 20 samples
- 2 x Matrix Spikes (MS) per analytical lot of samples (ie one MS per 10 samples)

Organics

- 2 x duplicates per analytical lot of samples (ie one duplicate per 10 samples)
- 1 x Method Blank per lot
- 1 x Single Control Sample (SCS) containing all target compounds per analytical lot of samples
- 1 x Duplicate Control Sample (DCS) containing all target compounds per analytical lot of samples
- 2 x MS per analytical lot of samples (ie one MS per 10 samples)
- Addition and analysis of surrogate compounds (where appropriate) to all samples.

Compliance to this QC Schedule is reliant upon the submission of appropriate sample volumes.

NB: Water samples in particular require the submission of additional containers for the analysis of MS and duplicates.

Please inform the laboratory of your QC requirement prior to ordering sample containers.

5. Reporting

All results received shall be reviewed by the **Coordinator Waste Operations** and reported to the NSW Environment Protection Authority (EPA) should characteristics of leachate be detected.

Benefit of Compliance to Procedure:

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

Consequence of Non-Compliance to Instruction:

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

Reviewed by:

Date:

Approved by:

Date

APPENDIX 8

Operation and Maintenance of Sediment Control Systems/Water Quality Basins

Standard Operating Procedure

Purpose and Scope To ensure that the surface water control system, including the stormwater dams/filter ponds, 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 basins.

Definition: “Water quality control structures” are small dams/filter ponds 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. The sediment and water quality control basin (retention dam) is found at the location described in the site services/infrastructure plan.

Primary Environmental Goal – Detecting water pollution. Benchmark technique 7.

Procedure/Standard

Non vegetated and unsealed areas such new waste disposal stages, recently completed filling areas, stockpile areas and roads have a high potential to release sediments into stormwater, and sedimentation and erosion controls need to be established 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 basin 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 **Council's Coordinator Waste Operations** for action.
- Items that are to be subject to routine inspections and form part of the Environmental Management Plan checklist 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 EMP check list 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, a bobcat should be employed to remove the accumulated sediment and restore the capacity of the sediment basin. Relocate the sediment to an area away from the drainage paths.
- Personnel completing the routine inspections 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 (ie greater than 50mm 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 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 **Coordinator Waste Operations**.

5. Attachments

- A Water Quality Basin Inspection Requirements

Benefit of Compliance to Procedure:

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

Consequence of Non-Compliance to Instruction:

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

Reviewed by:

Date:

Approved by:

Date

Attachment A - Water Quality Basin Inspection Requirements

Item/Area Min	Routine Inspections for Maintenance	Frequency
Drains/pipes/pits	Inspect surface access points to underground culverts, diversion pit, other pits and pipes as well as surface in the area of the access points. Particular attention should be paid to damage or blockage	6 monthly
	To be visually inspected after heavy rainfall events to ensure they are free of debris and litter.	As required
Batter drainage	Inspect batter drains for evidence of deterioration and scour.	6 monthly
	Inspect batter drains for debris and overgrown vegetation	6 monthly
	To be visually inspected after heavy rainfall events to ensure they are free of debris and litter	As required
Retention system		
	Inspect retention dams for damage or debris collection	6 monthly
Inlet/Outlet culverts	Inspect culverts, headwalls and overflow weirs for signs of deterioration (scouring), blockage or damage	6 monthly

APPENDIX 9

Used Tyre Stockpile Management and Maintenance Standard Operating Procedure	
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. Good practice would ensure that the quantity of tyres kept on site at any one time was minimal and certainly not exceeding 50 tonnes.	
Procedure/Standard <ul style="list-style-type: none">• Tyres are to be placed on a hardstand area compacted of a depth of at least 900 mm if located above previously placed general waste.• 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.• Tyres are to be removed from site on a routine basis to ensure the stockpile is kept to a minimum.• 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 – <ul style="list-style-type: none">• Attempt to extinguish a small, controlled fire with equipment on site without endangering facility personnel and equipment. This equipment includes suitable fire extinguisher. When in doubt, evacuate the area and call 000 and request the presence of the Fire Brigade.• Report any potentially dangerous fire to “000” and request the fire brigade, providing all information they require (ie your name, fire location, type, size, etc)• As soon as possible notify the Environment and Waste Coordinator 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.• Report the details of the fire on an Incident Notification Report and refer to the Environment and Waste Coordinator.	
Benefit of Compliance to Procedure: <ul style="list-style-type: none">• Impacts on the natural environment minimised	
Consequence of Non-Compliance to Instruction: <ul style="list-style-type: none">• Violations and/or fines from Regulatory Agencies• Pollution of the environment	
Reviewed by: Date:	Approved by: Date

APPENDIX 10

Green Waste Stockpile Management and Maintenance

Standard Operating Procedure

Purpose and Scope

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

Procedure/Standard

- Stockpiles and windrows of shredded green waste are to be limited to between 1.5 and 2.0m in height and 3-4m in width.
- Stockpiles and windrows of shredded green waste are to be visually inspected weekly and an assessment of the temperature and odour 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 within the stockpile exceed about 50°C.

ALTERNATIVELY water is to be added to the stockpile so as to reduce the core temperature.

Benefit of Compliance to Procedure:

- Impacts on the natural environment 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 11

<h1>Fire at the Tipping Face</h1> <h2>Standard Operating Procedure</h2>	
<p>Purpose and Scope</p> <p>To define a procedure for responding to a fire that is detected at the tipping face or elsewhere on the landfill.</p> <p>Primary Environmental Goal – Adequate Fire Fighting Capacity. Benchmark technique 38.</p>	
<p>Procedure/Standard</p> <p>Fire</p> <ol style="list-style-type: none"> 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 extinguisher, water tanker or isolating the source of the fire and covering with earth by using on-site plant. <p>When in doubt, evacuate area and immediately call '000' and request the presence of the Fire and Rescue NSW. Note: If using a fire extinguisher, be sure to use the correct extinguisher for the fire type.</p> <ol style="list-style-type: none"> 2. Report any potentially dangerous fire to '000' (Fire Brigade) providing all information required (ie your name, fire location, type, size etc). 3. As soon as possible notify the company Director 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. Report the details of the fire on a Pollution Incident Report form and refer to the Waste and Environment Coordinator 6. A copy of the Pollution Incident Report form is to be referred to the council. 	
<p>Benefit of Compliance to Procedure:</p> <ul style="list-style-type: none"> • Meeting environmental goal. • Employee's safety protected • Health and safety of public/facility user protected • Minimise damage to public property 	
<p>Consequence of Non-Compliance to Instruction:</p> <ul style="list-style-type: none"> • Injury/death to employee • Injury/death to public/facility user • Damage to public property • Violations and/or fines from Regulatory Agencies 	
<p>Reviewed by:</p> <p>Date:</p>	<p>Approved by:</p> <p>Date:</p>

APPENDIX 12

Fire in Load Standard Operating Procedure

Purpose and Scope

To define a procedure for responding to a fire which is detected in a load of material brought to the Gloucester Landfill facility for disposal.

Primary Environmental Goal – Adequate Fire Fighting Capacity. 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. The driver is to dump the material in a clear area that is away from any building and clear of any vegetation and/or debris.
2. Should it not be possible to move the vehicle to a clear space, isolate the vehicle and evacuate the area
3. Notify the Fire Brigade by telephoning “000” providing all information they require (ie your name, fire location, type, size, etc)
4. As soon as possible notify the Environment and Waste Coordinator of the incident and provide an update of the action initiated to date.
5. Contain the fire, and if possible spread out the load and extinguish the fire with water or soil.
6. 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.
7. Where hazardous wastes are involved contact the Fire Brigade by telephoning “000” and request their attendance. Provide all information they require ie .your name, fire location, type, size, etc.
8. Report the details of the fire on a Pollution Incident Report form and refer to the Environment and Waste Coordinator.

A copy of the Pollution Incident Report form is to be referred to the council

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

Consequence of Non-Compliance to Instruction:

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

Reviewed by:

Date:

Approved by:

Date

APPENDIX 13

Chemical Spill Response Standard Operating Procedure

Purpose and Scope

The purpose of this procedure is to define an incident response in the event of a chemical spill from ruptured or leaking chemical containers at the Gloucester Landfill.

Procedure/Standard

- Chemical spillage

Actions required in response to such an event may vary and it will be the role of the Waste Supervisor 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 barricades and bunting.
- If necessary, initiate evacuation of staff, members of the public and others that may be on site, including contractors
- Engage measures to restrict vehicles entering the site
- Where possible, confine the incident and prevent the spread of its effects without endangering personnel. This may include building sand bag bunding, rotating the container or plugging the leak.
- Cover drains and/or place temporary bunting
- For small spills, use the spill kit kept on site.
- Advise the Environment and Waste Coordinator of all actions taken or proposed.
- Obey the instructions from the emergency services who may attend the site.
- Notify neighbours who may be affected by the incident.
- A copy of the Pollution Incident Report form is to be referred to the council

Benefit of Compliance to Procedure:

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

Consequence of Non-Compliance to Instruction:

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

Reviewed by:

Date:

Approved by:

Date

APPENDIX 14

Storage/Handling of Chemicals and Hazardous Substances

Standard Operating Procedure

Purpose and Scope

The use of chemicals and hazardous substances the Gloucester Landfill will be limited to paints and solvents for maintenance of site facilities and herbicides/pesticides for controlling pests.

Dangerous Goods legislation requires licensing of premises when storage exceeds specified quantities of dangerous goods. 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 empty paint cans, gas bottles etc.

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 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 as a minimum
- 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 hazardous substance comes into contact with the operator's skin, eyes or if the substance is swallowed or ingested by the operator.

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. Paints in containers less than 5 litres would generally not require licensing.

5. Handling Hazardous Substances and Dangerous Goods

- Hazardous substances brought 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, chemicals and gas bottles.
- These materials and substances will be collected on regular basis 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

Consequence of Non-Compliance to Instruction:

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

Reviewed by:

Date:

Approved by:

Date

APPENDIX 15

Inspection of Loads Standard Operating Procedure

Purpose and Scope

To ensure that only **Permitted Waste** is accepted at the Gloucester Landfill through the adoption and implementation of appropriate vehicle inspection procedures.

Primary Environmental Goal – Assuring quality of incoming waste. Benchmark technique 21.

Procedure/Standard

The weighbridge operator 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. All loads shall be subject to a visual inspection to ensure no excluded wastes are contained within the loads. The weighbridge operator shall also enquire to the customer whether hazardous materials, such as lead acid batteries, gas bottles, solvents, paints etc, are contained within the load. Empty chemical containers should be checked for triple rinsing before accepting for recycling.
3. Any vehicles suspected of containing excluded wastes shall be refused entry until verified otherwise. The weighbridge operator 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 eg provision of a test certificate.
4. Where wastes are contained in enclosed vehicles, eg private waste collection vehicles, the gatehouse operator shall identify the source and nature of the waste by inquiry.
5. At the tipping face of the waste disposal areas the discharge of wastes from enclosed vehicles is to be inspected. No sealed containers shall be deposited without substantiation that the contents are acceptable for disposal.

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

Consequence of Non-Compliance to Instruction:

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

Reviewed by:

Date:

Approved by:

Date

APPENDIX 16

Clean Up of Fuel/Oil Spills

Standard Operating Procedure

Purpose and Scope

To define the procedure for the containment, management and cleanup of minor fuel/oil spills at the Gloucester Landfill facility.

Procedure/Standard

1.1.1.3 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 (eg 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 company's area manager. This equipment or "spill kit" should be stored close to point of use or in a readily transportable form eg on a trailer or in a wheelie 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, eg 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 (eg 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, eg soil, sand).
- All used absorbent material is to be placed in drums or skips for transport and

<p>disposal to the landfill area. Sand contaminated by oil is to be stockpiled on plastic sheeting in a bunded area.</p> <ul style="list-style-type: none"> • 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. 	
<p>Benefit of Compliance to Procedure:</p> <ul style="list-style-type: none"> • Employee's safety protected • Health and safety of public/facility user protected • Impacts on the environment are minimised 	
<p>Consequence of Non-Compliance to Instruction:</p> <ul style="list-style-type: none"> • Injury to employee • Injury to public/facility user • Environmental pollution • Violations and/or fines from regulatory agencies 	
<p>Reviewed by: Date:</p>	<p>Approved by: Date</p>

APPENDIX 17

Depositing of Waste Standard Operating Procedure	
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.	
Procedure/Standard <ol style="list-style-type: none">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 site as operated by the principal contractor.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 site plant operator, stopped in the appropriate position and brakes applied4. The tailgate/tipping body is to be unlatched and/or secured in the open position5. The body is to be lifted to the upright position and the waste emptied6. The vehicle is to move from the disposal site with the tailgate/tipping body secured in the closed position.	
Benefit of Compliance to Procedure: <ul style="list-style-type: none">• Employee safety is protected• Vehicle damage is avoided• Adherence to landfill protocols	
Consequence of Non-Compliance to Instruction: <ul style="list-style-type: none">• Employee safety is put at risk• Vehicular damage• Improper use of landfill	
Reviewed by: Date:	Approved by: Date

APPENDIX 18

Dust Management Standard Operating Procedure	
Purpose and Scope The purpose of this procedure is to define the procedure for controlling the creation and distribution of dust at the Gloucester Landfill facility.	
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 and the movement of stockpiles of dry materials. It is the responsibility of the Waste Supervisor to ensure preventative measures are put in place to control the generation of dust. Such measures include – <ul style="list-style-type: none">• Wetting unsealed roads• 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	
Benefit of Compliance to Procedure: <ul style="list-style-type: none">• Mitigating the likelihood of a pollution incident• Adherence to landfill protocols	
Consequence of Non-Compliance to Instruction: <ul style="list-style-type: none">• Complaints from adjoining property owners• Improper use of landfill	
Reviewed by: Date:	Approved by: Date

APPENDIX 19

<h1 style="margin: 0;">Odour Management</h1> <h2 style="margin: 0;">Standard Operating Procedure</h2>	
<p>Purpose and Scope</p> <p>The purpose of this procedure is to define the procedure for controlling excessive odours at the Gloucester Landfill facility.</p>	
<p>Procedure/Standard</p> <p>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.</p> <p>It is the responsibility of the Coordinator Waste Operations to ensure preventative measures are put in place to control the generation of odour. Such measures include –</p> <ul style="list-style-type: none"> • Examination of incoming loads to ensure only permitted wastes are accepted • Placing of daily cover (VENM) at the end of the day’s operations, ensuring the VENM completely covers the placed waste and is to a depth of at least 150 mm. • Composting operations that include food waste are undertaken strictly in accordance with the approved methodology • Animal carcasses are buried within the waste mass • Routine inspections are undertaken in accordance with the EMP checklist (see Appendix 23) to ensure there are no areas of exposed waste resulting after storm events or site activities 	
<p>Benefit of Compliance to Procedure:</p> <ul style="list-style-type: none"> • Mitigating the likelihood of a pollution incident • Adherence to landfill protocols 	
<p>Consequence of Non-Compliance to Instruction:</p> <ul style="list-style-type: none"> • Complaints from adjoining property owners • Improper use of landfill 	
<p>Reviewed by:</p> <p>Date:</p>	<p>Approved by:</p> <p>Date:</p>

APPENDIX 20

Covering of Waste/Litter Control

Standard Operating Procedure

Purpose and Scope

To define a procedure for the covering of waste/litter at the Gloucester Landfill facility to ensure waste/litter is controlled in an acceptable manner.

Primary Environmental Goal – Preventing degradation of local amenity. Benchmark technique 33.

Procedure/Standard

The following covering frequency is applicable to the Gloucester Landfill facility.

Covering of Waste –

- The purpose of daily cover is to control litter, flies, rodents, birds and odour, to reduce the risk of fire and to improve the visual appearance of the landfill.
- The waste is to be covered with 150mm of inert soil at the end of each day. The material selected should preferably be free draining of a low clayey content. Highly permeable daily cover materials may be difficult to strip from the advancing the tipping face to ensure waste is placed against waste.
- It is important to thoroughly compact the waste prior to the placement of the cover material. 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 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. The cover may be removed by a traxcavator or similar equipment.

1. Windows in Cover Material

The development of 'windows' within the daily cover layers as the landfill is progressively raised is to allow the vertical migration of leachate so it does not become 'perched' within the waste mass. The ready migration of leachate through a waste mass (including recirculated leachate) encourages biodegradation and reduces the time for waste to stabilise.

2. Litter Control

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

- 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.

3. Reporting

Non conformances shall be reported in the weekly inspection checklist. Major non conformances shall be reported to the **Coordinator Waste Operations** within 48 hours of the non conformance.

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 21

Facility Evacuation Standard Operating Procedure

Emergency Response

1. Upon notification of an incident the Chief Warden (Waste Supervisor) determines the need for evacuation.
2. Chief Warden contacts by telephone the emergency services by dialing '000' providing all information they require (i.e., your name, incident type, size, etc.).
3. Chief Warden sounds the evacuation alarm/provision of 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 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.
 - (b) Determine the suitability of the Primary Evacuation Area. 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 GSC on the Environment and Waste Coordinator 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 the Environment and Waste Coordinator.

Reviewed by:

Date:

Approved by:

Date:

Emergency Checklist for Chief Warden

Name of Chief Warden:			
Time at which potential emergency was raised:			
Location of potential emergency:			
Description of potential emergency:			
If Emergency is declared:			
Emergency declared		Time	
ALERT signal activated		Time	
If fire exists phone fire brigade on 000			
If other emergency exists phone relevant emergency authority on 000 ambulance police			
If site evacuation is necessary:			
Evacuation signal activated		Time	
Deputy/ Area Wardens report evacuation is complete:			
Area	Warden	Area Evacuated	Comments
* Made contact with emergency service		Time	

APPENDIX 22

Pollution Incident Reporting Standard Operating Procedure

Purpose and Scope

The purpose of this procedure is to define the pollution incident reporting requirements which are applicable to the operation of the Gloucester Landfill. 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 Protection of the Environment Operations Act 1997 (POEO Act) 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 service 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 36.

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) Guidance can be found by referring to the SOP within the facility's Pollution Incident Response Management Plan.
2. If the incident presents an immediate threat to human health or property, Fire and Rescue NSW, the NSW Police and the NSW Ambulance Service should be contacted for emergency assistance - phone 000.
3. At an appropriate time, either during or after an incident, the Waste Supervisor or Council officer 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 or immediately following an incident notify the company site manager or Council's responsible officer of the incident and provide an update of the action initiated. Council to notify the EPA by telephoning the Environment Line service on 131 555
 5. The company staff member, supervisor or Council officer is to report the details of the incident on a Pollution Incident Notification Form within 24 hours of the incident occurring and the report is to be referred to the responsible council officer for recording and reporting to the EPA.

1.1.1.4 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 responsible Council officer, 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 responsible Council officer must, within 24 hours of being notified of a pollution incident, prepare a report documenting activities that took place during the incident.

All related documentation, will be submitted to Council's responsible officer for review and necessary follow up actions.

Where there is potential for litigation in relation to the incident the responsible Council officer shall prepare a written report for referral to the company's legal representative

Attachment:

- 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

POLLUTION INCIDENT REPORT FORM (A)

Date of Incident:		Time of Incident:	
Nature of incident Eg: Leachate discharge, Fire, Chemical spill.			
Location of incident Where did it occur?			
Type and quantity of material involved			
Outline action initiated in response to incident			
Was it necessary to initiate the major incident notification protocol?			
Was the Community Notification and Communications Plan activated?			
Was action in accordance with SOP? If not - why?			
Is there a need to review SOP in response?			
Date and time of details provided to the Sustainability Officer GSC			
Name of Reporting Person			
Management Authorization..... Dated.....			

POLLUTION INCIDENT REPORT FORM (B)

Leachate Discharge/Overflow

Date of Incident:		Time of Incident:	
Nature of incident Eg: leachate dam overflow, leachate spring eruption.			
Details of person reporting or 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			
Weather conditions at the time of the discharge or overflow.			
Daily rainfall in mm on the day of the discharge. Rainfall for the week prior to the discharge			
Most recent monitoring results of the chemical composition of the leachate.	Attach analytical results		
Explanation as to why and how the discharge occurred			
Plan of Action to prevent a similar discharge			
Name of Reporting Person			
Management Authorization.....			
Dated.....			

APPENDIX 23

EMP REPORTING CHECKLIST

Environmental Management Plan

The following procedures define the protocol for undertaking site inspection and audits at the Thunderbolts Way Waste Management facility 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 Environmental Management Plan (EMP) 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)	Landfill Supervisor
Site Audit	Quarterly, six monthly	Coordinator Waste Operations
EMP Audit	Annual	Coordinator Waste Operations

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



1.1.1 Annual Licence Check List

EPA Landfill & Transfer Station Licence Condition Checklist

Licence Number being Audited & Facility Name	Gloucester Waste Management Centre	
Requirement	Comment	Comply (Y/N)
Landfilling of general solid waste limited to licence requirements		
Waste stored as per licence conditions		
Tar treated timber from oyster farms A/N 2007/16		
Noise emission criteria – 45dB(A) working hours, 35dB(A) other times (List report number)		
Operations undertaken in a competent manner in line with EPA and contractual requirements		
All plant and equipment in good condition and meets current safety and environmental standards		
Dust minimisation procedures effective in reducing emission of dust to acceptable level		
Leachate collection system installed and operating as per design		
Leachate disposal to leachate irrigation		

Licence Number being Audited & Facility Name	Gloucester Waste Management Centre	
Requirement	Comment	Comply (Y/N)
area not to exceed area capacity		
Leachate holding pond and sedimentation basins maintained to ensure design capacity is available		
Stormwater diverted from landfilled areas and directed to sediment ponds		
Weighbridge and operator inspection screening effective ensuring prohibited wastes are not accepted		
Weighbridge calibration completed as required (List date completed and report number)		
Filling has occurred as per approved filling plan		
Cells have been capped progressively		
Any incidents of site not being secured appropriately		
Litter management procedures effective in minimising wind-blown litter		
Traffic management & road maintenance plan effective in minimising the tracking of mud and waste by vehicles		
Landfill operating procedures ensuring daily cover is applied as per solid waste landfill guidelines 2016.		
Landfill management procedures effectively controlling Pests, vermin and weed.		
Pasteurisation data & testing completed for organics		
Concrete and bricks testing completed as required		
Asbestos received and handled as per procedure		

Licence Number being Audited & Facility Name	Gloucester Waste Management Centre	
Requirement	Comment	Comply (Y/N)
Fire prevention measures in place, staff have received appropriate training.		
Maximum tyres stockpiled limited to licence conditions, are located in clearly defined areas and properly maintained.		
Surface water, leachate and gas monitoring undertaken by an appropriately trained person (list report identification number listed and date of testing)		
Pollution complaint register kept (list any complaints or actions)		
Annual return to be submitted to EPA (List date submitted)		
Staff Trained adequately as per operation plan		
Register maintained at the facility to record fires		
Any incidents of leachate discharge to surface waters during the reporting period		
A current copy of the licence is kept at the premises to which the licence applies and staff aware of its location		
Safe operating procedures updated annually		
Fire equipment tagged and tested as per fire regulation		
Any damage or recommended works required at the facility		

Website Audit		
Leachate monitoring data spreadsheet up		

to date with last 4 years of monitoring data available on facility home page		
Last monitoring sample date displayed on facility home page		
Updated PIRMP available on facility home page		
Licence available on facility home page		
Map monitoring points available on facility home page		

Waste Officer Undertaking Audit _____

Date _____

Appendix 24 Site Services and Infrastructure Plan

