

# Pollution Incident Response Management Plan



Tea Gardens Waste Management Centre JULY 2023

## Pollution Incident Response Management Plan

		Revision History		
No	Issue Date	<b>Revision Notes</b>	Prepared By	Approved By
1	23 June 2015	Additional AOP	Gayle Cusack	Amy McKey
			Mick Cockeram	
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## **PIRMP TEST HISTORY**

Date PIRMP test completed	Name of person completing test	Comments
06/05/2020	Darren Evans	Oil Spill response tested
12/07/2021	Amanda Chapman Emillie Wilde Darren Evans Scott Bell	Fire in greenwaste
9/3/2023	Daniel Tout – Assistant Manager Rodney Isaac – Depot hand Tyla Ralphs – Depot hand Christopher Tout – Team Leader	Fire in compactor bin

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## **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 new 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 and contractors at the **Tea Gardens Waste Management Centre** 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 holders of environment protection licences must prepare a pollution incident response management plan (section 153A, POEO Act).
- The plan must include the information detailed in the POEO Act (section 153C) and be in the form required by the POEO (G) Regulation (clause 98B).
- Licensees must keep the Plan at the premises to which the Environment Protection Licence relates or, in the case of trackable waste transporters and mobile plant, where the relevant activity takes place (section 153D, POEO Act).
- Licensees must test the Plan in accordance with the POEO (G) Regulation (clause 98E).
- If a pollution incident occurs in the course of an activity so that material harm to the environment is caused or threatened, licensees must immediately implement the Plan (section 153F, POEO Act).

#### 1.4 KEY TERMS 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 Tea Gardens Waste Management Centre 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.

In addition to **Midcoast Council** receiving the master copy, a duplicate copy of this Plan will be given to **JR Richards** (principal site contractor) and **Resource Recovery** (Contractors Authorised sub-contractor) at the **Tea Gardens Waste Management Centre** for retention within the site control shed.

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.

#### **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 and the principal site contractor.

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.** 

#### **1.8 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** and relevant personnel engaged by contractor **JR Richards (Or authorised Sub Contractor).** 

The objectives of the training program shall be as follows:

a) To ensure that **Council employees** and personnel engaged by contractor **JR Richards (Or authorised Sub Contractor)** are knowledgeable of their roles and responsibilities concerning this Plan.

*b)* To ensure that **Council employees** and personnel engaged by contractor **JR Richards (Or authorised Sub Contractor)** are knowledgeable of the Plan's procedures to affect a safe and appropriate response to pollution incidents.

**Council employees** and **JR Richards (Or authorised Sub Contractor)** site personnel 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** and personnel engaged by contractor **JR Richards (Or authorised Sub Contractor)** 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 Council 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** and personnel engaged by contractor **JR Richards (Or authorised Sub Contractor)** 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 **Coordinator Waste Operations, Midcoast Council,** will receive additional training, beyond that received by Council employees and site personnel, dealing with actions that are necessary to provide for the safety of employees and facility users, the protection of facility assets, notification protocols and the management of pollution incidents.

#### 1.8.4 Training Competencies

Details of the training competencies achieved by Council employees and contractor's staff relevant to this Plan are provided in **Appendix 2** of this Plan.

#### 1.9 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 issues that were encountered, along with recommendations for Plan modifications.

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

#### 1.10 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.

#### 1.11 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 – Tea Gardens Waste Management Centre

Address – Wanya & Winta Roads, Tea Gardens NSW 2324

Property Description - Lot 1 & 2 DP 392421

Location Map (below)

Figure 1 – Location Map



**Owner** – Midcoast Council

Area - the site occupies an area of approximately 7.211 hectares

**Site access** – site access is via Wanya Road in the Tea Gardens industrial estate. The facility is open Sunday to Friday

#### **Facility Description**

Site Plan

Figure 2 – Site Plan (below)



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 23 of this document.

**Site Activities -** the **Tea Gardens Waste Management Centre** incorporates a number of related activities and comprises –

(i) The landfill operates under EPL 13111 as a General Solid Waste (putrescibles) facility where approximately 2,000 tonnes per annum (tpa) of waste material are buried. Waste material types include asbestos, garden waste and general Municipal Solid Waste. The EPL has now been surrendered.

The council is responsible for the operations of the landfill including the placement of mobile litter fences, the compaction and covering of all incoming wastes, preparation of future filling stages together with overall site maintenance, including the management of stockpile areas containing green waste, metals and concrete.

Leachate collector drains have not been installed and there is no leachate management system within the site. The landfill sits above what could be described as largely sandy soils and the retrofitting of leachate inceptor drains would not be practicable given the permeable nature of the sandy soils and that the landfill has not been fitted with a natural or artificial impermeable liner. This places greater emphasis on ensuring good landfill practices are undertaken to limit the generation of leachate by minimising the catchment at the active tipping area, maintaining good gradients and erosion management on capped areas and ensuring the ponding of surface water is managed and eliminated.

(ii) JR Richards/Gatehouse operations are conducted under subcontract by Resource Recovery, where the gatehouse is the control point for incoming wastes and where the loads are inspected to ensure only approved waste types are accepted, where fees are applied, resources extracted for recycling and instructions given for waste placement. Household recyclables are collected and recovered goods offered for sale. The gatehouse is also the point of separation and storage of chemicals, used gas cylinders, lead acid batteries, used tyres and hazardous materials.

(iii) **Stockpile Areas** – scrap metal, concrete and masonry, and self haul garden wastes are stockpiled in defined areas before removal off site for recycling or for processing on site. Service contracts ensure these materials are removed or processed routinely to ensure stockpiles are maintained at minimum sizes. Shredded garden waste is being used as a revegetation medium as part of the final capping of the landfill.

## 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 and contractor's personnel will be able to identify and respond to conditions that might lead to a pollution incident.

Council employees and contractors 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;

POTENTIAL HAZARD	PRE-EMPTIVE ACTION
Ground water contamination	Undertaking routine inspections in accordance
Surface water contamination	with the EMP checklist (see <b>Appendix 22</b> ) and responding in accordance with Standard
Leachate spring eruption	Operating Procedures (SOPs) as contained in
Fire at tip face	Appendices 6 to 21
Fire in green waste stockpile	
Chemical spill	
• Oil/fuel spills.	
<ul> <li>Failure of hazardous material containment tanks/bund</li> </ul>	
Windblown litter	
• Odour	
• Dust	
Explosion of gas cylinders	

#### Table 1 – Summary of Pre-emptive Actions

#### 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;

POLLUTANT TYPE/ SUBSTANCE	SOLID, LIQUID, GAS or POWDER	QUANTITY	LOCATION (see site plan)	TYPE OF CONTAINMENT	MSDS
Leachate	Liquid	Up to 1,000 litres (contained within active tipping cell)	Eastern face	Excavated earth formed cell	NA
Used tyres	Solid	90 units	Resource Recovery Area	Hardstand	NA
Green waste	Solid	2800 tonnes	Resource Recovery Area	Hardstand	NA
Diesel	Liquid		No fuel stored on site		NA
Oil based paint	Liquid	Up to 50 litres	Tip shop	Bunded pallets	
Water based paint	Liquid	Up to 50 litres	Tip Shop	Bunded pallets	
Gas cylinders	Solid	Up to 10 units	Gatehouse	Pallet	NA
General household chemicals	Liquid or Powder	Up to 20 litres	Gatehouse	Bund and locked storage cabinet	Recorded
Solvents	Liquid	Up to 20 litres	Gatehouse	Bund and locked storage cabinet	Recorded
Lead Acid Batteries	Solid	Up to 100 units	Gatehouse	Bunded pallet	NA

#### Table 2 – Summary of Potential Pollutants

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

#### 3.3 NATURE AND LIKELIHOOD OF POLLUION 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 whereby a pollution incident may occur. 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 **Tea Gardens Waste Management Centre** 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.

#### 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.

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.

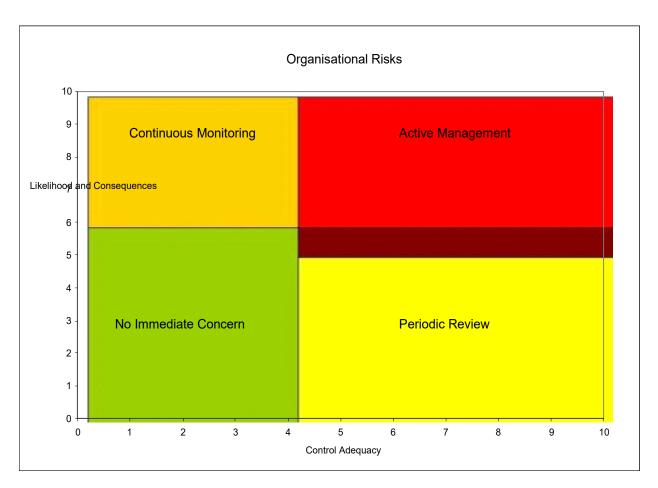
#### **Definitions – Report Key**

Rating	
	Definition
Low	Acceptable Risk - Review consequence and likelihood and manage through
1 – 2	routine procedures
Moderate	Ensure management system controls risk and managerial responsibility is defined.
3 – 5	
Significant	Ensure system and process controls are such that the risk is as low as is
6 – 8	reasonably practicable and that due diligence systems are established so that
	appropriate management processes can be demonstrated to be in operation.
High	Risk must be assessed and reduced or eliminated. If the risk cannot be reduced
9 – 10	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 -

#### <u> Table 5 – Risk Management Plan</u>

Pollution Hazard	Risk Factors	Outcome	Likelihood/ Consequence (Rating)	Pre-emptive Actions	Reference	Likelihood/ Consequence post control (Rating)	Incidence Response Actions	Reference
<ul><li>(1) ENVIRONMENTAL</li><li>(a) Leachate Discharge Off Site</li></ul>	Leachate run off from active tipping area	Leachate contamination of adjacent land and/or waterways	Possible/major (Significant)	Routine inspection included in EMP checklist Surface water monitoring of down gradient points	EMP Inspection checklist as provided in Appendix 22 of the PIRMP	Rare/Major (Moderate)	SOP Appendix 6	SOP within the PIRMP
	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 22 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
	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 22 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 22 of the PIRMP	Rare/Major (Moderate)	SOP Appendix 6	SOP within the PIRMP
(b) Combustion	Stockpile of used tyres ignites	Combustion creates smoke and oil residues	Possible/moder ate (Moderate)	Maintain buffer zones Limit quantity of tyres held on site Routine inspection included in EMP checklist	EMP Inspection checklist as provided in Appendix 22 of the PIRMP	Rare/Moderate (Low)	SOP Appendix 10	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
	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 22 of the PIRMP	Rare/Moderate (Moderate)	SOP Appendix 11	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 22 of the PIRMP	Rare/Moderate (Low)	SOP Appendix 12	SOP within the PIRMP
(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 covered bunded storage areas	EMP Inspection checklist as provided in Appendix 22 of the PIRMP	Rare/Moderate (Low)	SOP Appendix 13	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
	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 22 of the PIRMP	Rare/Moderate (Low)	SOP Appendix 15	SOP within the PIRMP
(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	EMP Inspection checklist as provided in Appendix 22 of the PIRMP	Rare/Moderate (Low)	SOP Appendix 17	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

Pollution Hazard	Risk Factors	Outcome	Likelihood/ Consequence (Rating)	Pre-emptive Actions	Reference	Likelihood/ Consequence post control (Rating)	Incidence Response Actions	Reference
(e) Dust	Dust migrating off site	Complaints to EPA	Possible/moderate (Moderate)	Wet down unsealed trafficable areas Use shredded green waste on exposed areas of placed cover material	EMP Inspection checklist as provided in Appendix 22 of the PIRMP	Rare/Minor (Low)	SOP Appendix 17	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 22 of the PIRMP	Rare/Minor (Low)	SOP Appendix 18	SOP within the PIRMP
(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 22 of the PIRMP	Rare/Minor (Low)	SOP Appendix 19	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 22.	Rare/Moderate (Low)	SOP Appendix 21	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	Established tool box meeting protocols Contractor's Health, Safety and Environment Plan Contractor's Health, Safety and Environment Plan SOP Appendix 2 Contractor's Health, Safety and Environment Plan	Unlikely/moderate (Moderate)		SOPs within the PIRMP

		Emergency and evacuation plans prepared and	SOP Appendix 20		
		tested			

#### 3.4 INCIDENT PREPAREDNESS

#### 3.4.1 Response Equipment and Features

The **Tea Gardens Waste Management Centre** 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;

EQUIPMENT	LOCATION	QUANTITY	MAINTAINANCE REQUIREMENTS/STANDARDS
	Senior Waste		
Asbestos kit	Operations	1	Monthly inspection
	Officer vehicle		
Chemical spill kit	Gatehouse	1	Monthly inspection
Fire extinguisher	Gatehouse	2	Six monthly inspection and
	Galenouse		tagging
Fire Hose	Gatehouse	1	Six monthly inspection and
1 110 11030	Galenouse	I	tagging
Sandbags	Gatehouse	20	Three monthly inspection and
Sanubays	Galenouse	20	replenishment
First Aid Kit	Gatehouse	1	Monthly inspection and
	Galenouse		replenishment.

Table 6 – Response Equipment Inventory

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 identifiable so that Council employees and contractor's staff 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.

#### 3.4.2 Communication System

A landline telephone system is installed within the **Tea Gardens Waste Management Centre** with this system providing for communication externally via a telecommunications service provider. In a pollution incident this telephone can be used as a means of notifying those individuals/organisations responsible for activating this Plan and managing the incident response. In addition to the telephone system, mobile phones will be an accepted means of communications should suitable reception be available.

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 on Council's web site.

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

#### 3.4.3 Security

Access to the **Tea Gardens Waste Management Centre** by unauthorised persons and unauthorised activities occurring on the site will be controlled at the gatehouse by **JR Richards** (**Or authorised Sub Contractor**) staff who are required to provide access to authorized persons only.

#### 3.4.4 First Aid Equipment

A suitable fully stocked and easily accessible first aid kit is located at the gatehouse and its location clearly labelled.

#### 3.4.5 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, contractors and facility users.

#### 3.4.6 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 arrangements are in place;

- Reserves within Council's Waste Fund
- 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.

NAME	POSITION	CONTACT DETAILS (24 Hours)	NOTIFICATION RESPONIBILITIES	COMMUNICATION RESPONSIBILITIES
DAVID REES	Waste Manager	0436 830 159	Emergency Services, EPA, Emergency services, Council Executive	Contractors Neighbouring property owners Media releases Web update
Duncan Russ	Coordinator Waste Operations	0402 089 222	Coordinator Operations Officer , EPA, Emergency Services	As delegated by the Coordinator Operations Officer
Emillie Wilde	Senior Waste Operations Officer	0421 791 174	Coordinator Waste Operations, EPA, Emergency services	As delegated by the Coordinator Operations Officer
Tony Evans	Manager JR Richards	0438 472 256	Coordinator Waste Operations, Senior Waste Operations Officer, EPA Environmental Hotline, Emergency Services	As delegated by the Coordinator Operations Officer

#### Table 7 - Plan Activation Contact Details

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.

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

#### Table 8 - Incident Contact Details

ORGANISATION	CONTACT NAME	CONTACT DETAILS	
Fire and Rescue NSW	Duty Officer	000	
Police Force NSW	Duty Officer	4997 0244 (local) 000	
Ambulance Service of NSW	Duty Officer	1312333 000	
John Hunter Hospital		4921 3000	
Manning Base Local Hospital	Reception	6592 9111 000	
Environmental	EPA Environment Line	131 555	
Protection Authority (EPA)	Newcastle Regional Office	4908 6800	
Department of Environment and Conservation (NP&WS)	NSW Parks and Wildlife Service	1300 361 967 or 02 9995 6500	
SafeWork Authority Gosford Office	Duty Officer	4321 5455	
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 Authority	Reception	132 213	

Bureau of Meteorology	Land weather and flood warnings	1300 659 218

#### 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.

#### 4.3.1Small 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 **Coordinator Waste Operations, Midcoast Council** so that an assessment of the level of response required can be made.

The landline 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** 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 Waste, Health & Regulatory Services.

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<sup>4</sup>
- the SafeWork 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 **Tea Gardens Waste Management Centre.** 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 MCC	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	Coordinator Waste Operations MCC	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	Coordinator Waste Operations MCC	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	Coordinator Waste Operations MCC	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	Coordinator Waste Operations MCC	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, contractors 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 contractor's staff and facility users from the hazardous area.

In this regard the standard operating procedures applicable to facility evacuation, refer to **Appendix No 20**, must be implemented once a decision is made to evacuate the facility.

The decision to evacuate the facility is to be taken by the site contractor's responsible employee (JR Richards (Or authorised Sub Contractor)) or Councils Coordinator Waste Operations.

#### 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 site contractor's responsible employee (**JR Richards (Or authorised Sub Contractor))** 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 site contractor's responsible employee (JR Richards (Or authorised Sub Contractor)) and supported by the facility management.

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 site contractor's responsible employee (**JR Richards (Or authorised Sub Contractor))** will be tasked with 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, violet 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 site contractor's responsible employee (JR Richards (Or authorised Sub Contractor)), 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

The procedures for assisting mobility-impaired persons should be discreetly discussed with the individual concerned.

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

#### 4.4.5 Evacuation Assembly Areas

Given the relatively small size of the site, low usage with the likelihood of few personnel present at any one time and the limited quantities of potential pollutants retained on the site that would be harmful to human health, site contractors **JR Richards (Or authorised Sub Contractor)'s** primary role in the evacuation of the site will be to ensure all contractors, council staff and facility users that may be on site vacate the site as directed, the facility entry gates are closed and site contractor's responsible employee (**JR Richards (Or authorised Sub Contractor))** waits for emergency services to arrive or other actions as directed by **Coordinator Waste Operations**, **Midcoast Council.** 

#### 4.6.6 Post Evacuation Assembly Point

Once the facility has been evacuated and the presence of personnel confirmed, arrangements will be made by the site contractor's responsible employee (**JR Richards (Or authorised Sub Contractor))** for any Council employees and contractors to be moved to the Post Evacuation Assembly Point which for the purposes of this Plan is Memorial Park, Witt Street Tea Gardens. Incident debriefing and incident investigation will be undertaken at the Post Evacuation Assembly Point. Further management instructions by **Coordinator Waste Operations, Midcoast Council** will also be provided.

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

**Appendices No 6 to 20** 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 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 **Tea Gardens Waste Management Centre**.

#### 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, Midcoast Council, in collaboration with the site contractors JR Richards (Or authorised Sub Contractor) 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**, **Midcoast Council**, 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, Midcoast Council** 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 site contractors **JR Richards (Or authorised Sub Contractor)** 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, Midcoast Council and the site contractors JR Richards (Or authorised Sub Contractor) 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**, **Midcoast Council** 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, Midcoast Council** must prepare a report documenting activities that took place during a major pollution incident.

The report of the **Coordinator Waste Operations, Midcoast Council** and all related documentation will be submitted to the **EPA** and to the Manger Waste, Health & Regulatory Services 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, Midcoast Council** 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 contractors and 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 **Director of Liveable Communities**.

## POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN AMENDMENT NOTIFICATION FORM

Following a review of the Pollution Incident Response Management Plan that was conducted on (date to be added), the following amendments to the plan have been made. Accordingly these changes are to be incorporated into the Pollution Incident Response Management Plan document which is kept by you.

DISTRIBUTION		DATE SENT
<ul><li>Master copy</li><li>Site copy</li></ul>		
PAGE NUMBER	PLAN SECTION	DESCRIPTION OF CHANGE
Management Au	thorization	Dated
		endments to this PLAN and have nt for which I am responsible.
Signed		Dated

# Training

## **Standard Operating Procedure**

#### Purpose and Scope

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

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

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

#### Procedure/Standard

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

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

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

#### **Program A – Site Environment Induction (EMP)**

Key points to be covered in this program may include:

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

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 or contractors commence at the site.

#### 1.1.1.1 Program B – Fire Fighting

Key points to be covered in this program may include:

- 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

• Procedures for communication in the event of fire

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.

#### 1.1.1.2 Program C – Hazardous Substance and Dangerous Goods Management

Key points to be covered in this program may include:

- Use and interpretation of material safety data sheets
- Identification of hazardous materials
- Handling of hazardous materials
- Labelling of containers
- Storage and transport of hazardous substances and dangerous goods
- Spill management and basic first aid procedures
- Compatibility of materials.

This training would be provided by a suitable service provider. Where required, additional input may be required from external Workcover Accredited OH&S Consultants.

#### Training Records

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.

#### Benefit of Compliance to Procedure:

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

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

Reviewed by:	Approved by:
Date:	Date

Pollution Incident Response Management Plan Training/Competency Summary				
Operational staff	Training/Competency Program			
	<b>Program A –</b> Site Environmental Induction	<b>Program</b> B – Fire Fighting	<b>Program C –</b> Hazardous Substance and Dangerous Good Management	
Name & Position	Date of Training Completion			

# POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

## **EXERCISE EVALUATION FORM**

Facility: Tea Gardens Waste Transfer Station Date:			
	Hours	Minutes	
Incident uncovered			
Assessment of significance			
Initiation of incident response/notification of incident			
Evacuation decision (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 Procedure	es (SOP's)		
2. Competency of Employees assessment			
3. Time frames for response			
4. General Comments/Recommendations for actio	n		
Observer			
Signed			
Date			

POLLUTION		<b>REPORT</b>	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 Team Leader, Waste - GTCC				
Name of Reporting Person				
Management Authorizatio	on			

# 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 re	sults	
Explanation as to why and how the discharge occurred			
Plan of Action to prevent a similar discharge			
Name of Reporting Person			
Management Authorizatio	on		

### **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.asp
- 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.

# 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**

• 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 company's (JR Richards (Or authorised Sub Contractor)) to determine and initiate appropriate actions.

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

- Immediately report the incident and actions taken to the **Coordinator Waste Operations.**
- 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.
- Source a tanker truck to pump out the retained leachate
- Notify 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:**

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

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

• Violations and/or fines from Regulatory Agencies

Reviewed by:	Approved by:
Date:	Date

# Groundwater Monitoring Standard Operating Procedure

#### **Purpose and Scope**

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

Primary Environmental Goal - Detecting water pollution. Benchmark technique 6

#### Procedure/Standard

All ground water monitoring wells at the landfill site are to be sampled on an annual basis in accordance with the requirements of the EPL. The locations of the groundwater monitoring bores are referenced in the EPL and the parameters to be analysed should align with those prescribed in the EPL. The frequency of monitoring may be reviewed after data has been collected for at least five consecutive years.

#### Preparation

Before starting, a check of the required equipment is needed before sampling takes place. Table 1 shows what is needed to undertake a groundwater sampling exercise.

Cross X	Apparatus/Equipment List	
	Rubber gloves	
	Sampling pole or pump	
	Chain of custody documentation	
	Clipboard	
	Log sheets	
	Calibrated water quality field meters	
	Pencil/pens	
	Decontamination equipment and water	

#### Table 1: Equipment List for Groundwater Quality Sampling

#### 1. Field Procedure

- i. Measure Standing Water Level (SWL) prior to each sampling event
  - Hydrological measurements to establish the SWL with an accuracy of ±0.3cm
- ii. Before collecting water sample, pump stagnant water to allow recharge of borehole
  - Stagnant waters are subject to evaporation which may change the groundwater chemistry. The water may contain animal and plant life which is not representative of the groundwater. If the water has not been pumped within the last 24 hours it will be necessary to allow recharge before taking the sample.
- iii. Well purging to remove stagnant water from well casing. Wells must be purged until successive pH readings agree by 0.1pH unit.
- iv. Measure the field temperature, pH, EC and Eh of the water and record on field sheet (refer to Attachment A)

	• Chemical changes can occur due to the oxidation of the sample during the recovery from a bore. Oxidation can occur from the pump. Because groundwater is in a reduced state some of the changes that can be expected include:
	<ul> <li>- oxidation of organics</li> <li>- oxidation of sulphide to sulphate</li> <li>- oxidation of ferrous iron and precipitation of ferric hydroxide</li> <li>- oxidation of ammonium ion to nitrate</li> </ul>
	Problems with oxidation can largely be avoided by monitoring the oxidation state of the bore during pumping (Eh meter) and taking a sample only after the water has stabilised.
	ly take a water sample after pH and eC of the water being pumped is stabilised. e containers as recommended below in Table 2.
	• Release of carbon dioxide during pumping can cause an increase in pH which in turn causes many metallic ions to come out of solution (iron, manganese, magnesium, cadmium, arsenic, selenium and boron.
	• Samples must be taken with a positive displacement pump or dual valve bailer. When taking the sample the flow rate should be reduced to approximately 100ml/minute to reduce the loss volatile components.
	• Take a bottle from the customised sample kits that the laboratory has provided. The bottle needed to test the analyses is colour coded as shown in Table 2.
	<ul> <li>Care should be taken not to touch the lid or the inside of the bottle as the bottle has been preserved and cleaned.</li> </ul>
2. Pre	ecautions
•	All sampling equipment should be cleaned with deionised water and industrial strength detergent so that cross contamination does not occur.
•	Avoid any source of contamination coming into contact with equipment (eg the ground surface).
•	Do not transfer the sample from one container to the other container because of losses of organic material into the walls of the container or aeration should occur.
•	Label water sample container with sample identification, date, sampler's initials and job number.
•	No headspace should exist in the sample container.
•	Wear gloves to avoid contamination and for OH&S reasons.
3. Bo	ttle Size and Type of Preservation/Acidification
laboratory. customise	vation/ acidification/ solvent washing should have been performed by the . Once the specifications and numbers of samples has been decided, use d sampling kits containing correct number and type of bottles as well as ice bricks, custody forms, security seals and address labels.
•	Groundwater samples that are being analysed for dissolved metals should be Field Filtered prior to preservation.
•	Field filtered samples will need to be collected in a red labelled bottle preserved with nitric acid.

Bottle Type	Test Parameter	
2 x 40ml vials no headspace (fill to	AOX (Absorbable Organic Compounds)	
top)		
1 x 1litre plastic Sulphuric Acid	Ammonia, Nitrate, Total Phenois (APHA method,	
Preserved (purple label)	non speciated)	
1 x 40ml glass vial Sulphuric Acid	Total Organic Carbon (TOC)	
Preserved (purple label)		
1 x 1litre Natural Plastic (green	Alkalinity, pH, Calcium, Magnesium, Sodium,	
label)	Potassium, Chloride, Sulphate, Fluoride	
1 x 250ml Nitric Acid Preserved	Dissolved Heavy Metals (Mn, Fe)	
Plastic Bottle – Field Filtered (red		
label)		

- All samples should be labelled and stored as shown in Table 3 below. However all samples should be sent to the lab as soon as possible following sampling under completed Chain of Custody Documentation.
- Fasten lid tightly and place in cooler with frozen ice bricks (must be kept at 4°C).

#### 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
рН	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

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 1 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 1 MS per 10 samples).

#### **Organics**

- 2 x Duplicates per analytical lot of samples (ie 1 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 Matrix Spikes (MS) per analytical lot of samples (ie 1 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.

# Note: Water samples in particular require the submission of additional containers for the analysis of MS and duplicates)

#### 5. Reporting

All results received shall be reviewed by the **Coordinator Waste Operations**.

#### Benefit of Compliance to Procedure:

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

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

Reviewed by:	Approved by:
Date:	Date

# 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 22** 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.

#### Procedure/Standard

Surface water should be sampled on a quarterly basis. The surface water sampling locations is to the immediate right inside the entrance to the landfill. The parameters to be tested should include the basic leachate indicators.

#### 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 – <b>unfiltered</b> (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
рН	6 hours	Cool to 4°C
Total Phenolics (APHA Method, Non	28 days	Cool to 4°C
Speciated)		
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 analystical lot of samples
- 2 xz 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 MCC** 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

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

Reviewed by:	Approved by:
Date:	Date

## Operation and Maintenance of Sediment Control Systems

## Standard Operating Procedure

**Purpose and Scope** To ensure that the surface water control system 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, integrity of siltation fences and concentrations 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, the **Senior Waste Operations Officer** 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

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

Reviewed by:	Approved by:
Date:	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
	Inspect lining of open drains to determine any scour or damage requiring repair. In particular the connection points from the batter drainages into the stormwater channel need to be investigated for evidence of scour.	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. This inspection is required for both lined and unlined batter drains, including where the drain crosses benches.	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 dam linings for damage and general condition	6 monthly
	Inspect retention dams for damage or debris collection	6 monthly
	Trash screens to be visually inspected after heavy rainfall events to ensure they are free of debris and litter	As required
Inlet/Outlet culverts	Inspect culverts, headwalls and overflow weirs for signs of deterioration (scouring), blockage or damage	6 monthly#
	Trash screens to be visually inspected after heavy rainfall events to ensure they are free of debris and litter	As required

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# 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. The EPA Environmental Protection Licence includes used tyres into the waste limit but makes no reference to the maximum quantity or number of tyres that can be kept on the site. 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**

- 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 -

- 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 **Coordinator Waste Operations** 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 **Coordinator Operations Officer.**

#### **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:	Approved by:	
Date:	Date	

## 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 awaiting use for on-site for erosion control, as a revegetation medium on the final capping or for 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

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

Reviewed by:	Approved by:
Date:	Date

# Fire at the Tipping Face Standard Operating Procedure

#### Purpose and Scope

To define a procedure for responding to a fire that is detected at the tipping face or elsewhere on the landfill.

Primary Environmental Goal – Adequate Fire Fighting Capacity. Benchmark technique 38.

#### Procedure/Standard

#### Fire

1. Attempt to extinguish a small, controlled fire with equipment on site without endangering facility personnel and equipment. This may include the use of a fire extinguisher, water pump/trailer or isolating the source of the fire and covering with earth by using on-site plant.

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.

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 **Coordinator Waste Operations** 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 **Coordinator Waste Operations**
- 6. 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

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

Reviewed by:	Approved by:
Date:	Date

# 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 **Tea Gardens Waste Management Centre** 

#### Procedure/Standard

• Chemical spillage

Actions required in response to such an event may vary and it will be the role of the site contractor (JR Richards (Or authorised Sub Contractor)) 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 drainage swales and/or place temporary bunding
- For small spills, use the spill kit kept on site.
- Advise the Coordinator Waste Operations 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 if appropriate or await instructions from the **Coordinator Waste Operations**.

A copy of the Pollution Incident Report form is to be referred to the **Coordinator Waste Operations** 

#### **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:	Approved by:	
Date:	Date	

## Storage/Handling of Chemicals and Hazardous Substances

## **Standard Operating Procedure**

#### Purpose and Scope

The use of chemicals and hazardous substances the **Tea Gardens Waste Management Centre** will be limited to paints, household chemicals, lead acid batteries, gas cylinders and small quantities of herbicides/pesticides for controlling pests within the site facilities.

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 addresses the management of hazardous substances imported to the site by users of the waste management facility.

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

#### Benefit of Compliance to Procedure:

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

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

Reviewed by:	Approved by:
Date:	Date

## **Inspection of Loads**

## **Standard Operating Procedure**

#### Purpose and Scope

To ensure that only **Permitted Waste** is accepted at the **Tea Gardens Waste Management Centre** through the adoption and implementation of appropriate vehicle inspection procedures.

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

#### **Procedure/Standard**

The gatehouse 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 gatehouse 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 gatehouse 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 by the plant operator. No sealed containers shall be deposited without substantiation that the contents are acceptable for disposal.
- 6. All private waste collection and disposal companies servicing commercial and industrial premises and using the facility shall be required to enter into an agreement with the customer regarding disposal of collected wastes. This agreement shall include the identification of excluded wastes and undertakings by the customer not to deposit such wastes in the collection receptacle.

#### Benefit of Compliance to Procedure:

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

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:	Approved by:	
Date:	Date	

# 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 **Tea Gardens Waste Management Centre**.

#### 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 **Coordinator Waste Operations**. 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 disposal to the landfill area. Sand contaminated by oil is to be stockpiled on plastic sheeting in a bunded area.
- If sufficient product exists, hand pumps should be used and product transferred to a suitable container (lined drums, skips or tankers). Avoid the use of electrical equipment that could be the source of ignition.

#### Benefit of Compliance to Procedure:

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

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

Reviewed by:	Approved by:
Date:	Date

## **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 **Tea Gardens Waste Management Centre**.

#### **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 **Council's staff** to ensure preventative measures are put in place to control the generation of dust. Such measures include –

- 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:**

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

- Complaints from adjoining property owners
- Improper use of landfill

Reviewed by:	Approved by:
Date:	Date

## Odour Management Standard Operating Procedure

#### **Purpose and Scope**

The purpose of this procedure is to define the procedure for controlling excessive odours at the **Tea Gardens Waste Transfer Station**.

#### **Procedure/Standard**

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

It is the responsibility of the **Council staff** to ensure preventative measures are put in place to control the generation of odour. Such measures include –

- Ensuring the examination of incoming loads is undertaken so that only permitted wastes are accepted
- Placing of daily cover (VENM) at the end of the pushing up and compaction operations, ensuring the VENM completely covers the placed waste and is to a depth of at least 150 mm.
- Animal carcasses are buried deep within the waste mass
- Routine inspections are undertaken in accordance with the EMP checklist (see Appendix 22) to ensure there are no areas of exposed waste resulting after storm events or site activities

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

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

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

- Complaints from adjoining property owners
- Improper use of landfill

Reviewed by:	Approved by:
Date:	Date

# Covering of Waste/Litter Control Standard Operating Procedure

#### Purpose and Scope

To define a procedure for the covering of waste/litter at the **Tea Gardens Waste Management Centre** 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 **Tea Gardens Waste Management Centre.** 

#### 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 conclusion of pushing up and compacting operations. 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, thus ensuring 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.
- Litter fences are to be placed around the active tipping area and routine inspections of litter/perimeter fences and litter pick-ups undertaken 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:	Approved by:
Date:	Date

## **Facility Evacuation** Standard Operating Procedure

#### Emergency Response

1. Upon notification of an incident the Chief Warden (JR Richards (Or authorised Sub Contractor)) 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 delivers 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 **Coordinator Waste Operations** on the incident and provide an update of the action initiated to date.

9. The Chief Warden is to report the details of the event on an Incident Notification Report Form and refer to the **Coordinator Waste Operations** 

Reviewed by: Approved by: Date: Date:

## **Emergency Checklist for Chief Warden**

Name of Chief Warden:				
Time at which potential emergency was raised:				
Location of	potential emergend	sy:		
Description	of potential emerge	ency:		
If Emergend	cy is declared:			
Emergency	declared		Time	
ALERT sigr	al activated		Time	
If fire exists	phone fire brigade	on 000		
	ergency exists phor authority on 000	e relevant		
ambulance				
police				
If site evacuation is necessary:				
Evacuation signal activated		Time		
Deputy/ Area Wardens report evacuation is complete:				
Area	Warden	Area Evacuate	ed	Comments
				[]
* Made con	tact with emergenc	y service	Time	

# 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 **Tea Gardens Waste Management Centre**. A pollution incident is defined as 'material harm to the environment' as described in section 147 of the Act. Material harm includes on-site harm, as well as harm to the environment beyond the premises where the pollution incident occurred. A 'pollution incident' includes a leak, spill or escape of a substance, or circumstances in which material harm is likely to occur.

#### Note

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

- 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 company staff member, 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
- As soon as possible during or immediately following an incident notify the Coordinator Waste Operations 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 (JR Richards (Or authorised Sub Contractor)) 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 **Coordinator Waste Operations** 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 company (JR Richards (Or authorised Sub Contractor)) or responsible Council officer (Senior Waste Operations 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 company (JR Richards (Or authorised Sub Contractor)) or responsible Council officer (Senior Waste Operations Officer), must, within 24 hours of being notified of a pollution incident, prepare a report documenting activities that took place during the incident.

This report, and all related documentation, will be submitted to the **Coordinator Waste Operations** for review and necessary follow up actions.

Where there is potential for litigation in relation to the incident the **Coordinator Waste Operations** shall prepare a written report for referral to the Council'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 Team			
Leader, Waste - GTCC			
Name of Damanting			
Name of Reporting			
Person			
Managamant Authorizatio	n		
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 Authorizatio	on	
Dated		

## Appendix 22

#### **EMP Checklist - Annual Licence Audit**

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

#### **Environmental Management Plan**

The following procedures define the protocol for undertaking site inspection and audits at the **Tuncurry Waste Management Centre** 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)	Site contractor/ MCC Senior Waste Operations Officer
Site Audit	Quarterly, six monthly	Coordinator Waste Operations, Senior Waste Operations Officer
EMP Audit	Annual	Coordinator Waste Operations, Senior Waste Operations Officer



#### Annual Licence Check List

#### EPA Landfill & Transfer Station Licence Condition Checklist

Licence Number being Audited & Facility Name	Tea Gardens Waste Management Centre Licence # 20846	
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 area not to exceed area capacity		

Licence Number being Audited & Facility Name	Tea Gardens Waste Management Centre Licence # 20846	
Requirement	Comment	Comply (Y/N)
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	ited Tea Gardens Waste Management Centre Licence # 20846	
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



# Clean up of Orphaned Asbestos and Toxic Chemicals Standard Operating Procedure

#### **Purpose and Scope**

The purpose of this procedure is to define an incident response in the event of a hazardous material detected or reported to the landfill operations.

#### Procedure/Standard

#### Definition

- Asbestos and Chemicals orphaned illegally due to dumping at a landfill or areas to be removed.
- Equipment available

#### Steps in this procedure

- Absorbent material / coveralls / breathing equipment / gloves personal PPE / tape / barrier units / plastic / spray unit and sealed containers.
- Problem identified and located.
- Evaluate situation and safe clean up.
- For large volumes and /or amounts contact relevant governing authorities.
- Accredited personnel evaluate the process.

#### Action

- Area is cordoned off.
- Barricade drainage points if required.
- Utilise spray kit or absorbent material.
- Use relevant PPE to address the situation removal and clean up procedures.
- Container usage for all contaminated PPE and / or products to be disposed of at the landfill.
- Document and report all procedures

#### Benefit of Compliance to Procedure:

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

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

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

Reviewed by:	Approved by:
Date:	Date