

## 1. Introduction

The City of Palmerston is the licensee for Archer Waste Management Facility Lot 11497 Elrundie Avenue. This facility is operated under an Environment Protection Licence issued by the Northern Territory Environment Protection Authority.

## 2. Listed Waste Details

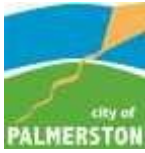
Under EPL 233 the following listed waste is authorised by the licence.

Listed Waste	Collection	Transport	Storage	Treatment	Recycling	Disposal
Acidic solutions or acids in solid forms	x	x	√	x	x	x
Basic solutions or bases in solid form	x	x	√	x	x	x
Lead, lead compounds	x	x	√	x	x	x
Waste mineral oils unfit for their original intended use	x	x	√	x	x	x
Waste mixtures, or waste emulsions, of oil and water or hydrocarbon and water	x	x	√	x	x	x

## 3. Purpose

The purpose of this plan and the associated procedures is to provide practical guidance for the Archer Waste Management Facility (AWMF) to ensure that:

- AWMF is prepared in the event of a hazardous chemical spill or leak within the AWMF activities or areas of responsibility at the location.
- City of Palmerston contractors operating the AWMF is able to respond in a timely and appropriate manner to protect the safety of all personnel and the site.
- AWMF can prevent hazardous chemical spill incidents from having serious consequences for the environment.



#### 4. Scope

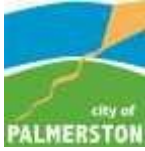
- This plan and the associated procedures apply to all City of Palmerston staff and contractors at all work locations where hazardous chemicals or substances are stored.
- It also covers situations where AWMF is required to provide spill control, containment, or clean-up.
- The plan does not override any situation where Emergency Services provide specific advice on spill preparation requirements.
- Initial chemical spill or leak incident reporting processes remain the same as for all emergency situations.

#### 5. Definitions

City of Palmerston (CoP)	The principle and licensee holder of EP233 for Archer Waste Transfer Station for which this plan is written.
Veolia	The current contractor operating AWMF for the City of Palmerston
AWMF	Archer Waste Management Facility
Major Spill or Leak	These are spills that <b>do</b> pose an imminent threat to health, safety or environment and do have the potential to become an emergency within a short time frame.
Minor Spill or Leak	These are spills that <b>do not</b> pose a significant risk to employees or students in the immediate vicinity or the environment. These spills do not have the potential to become an emergency within a short time frame.
MSDS	Material Safety Data Sheet

#### 6. Spill Response Resources

Sufficient and appropriate spill response kits and materials suitable for the substances or chemicals stored shall be provided by Veolia for use by trained all Veolia staff.



### 6.1. Spill Kits:

Suitable kits shall be stocked with appropriate absorbent material, containment devices, PPE and instructions on most effective use.

- These kits must be checked regularly for the integrity of the attached kit “audit tags” which if intact, indicates to users that the kit contents are untouched and ready for use.
- Kit stocks must be maintained by Veolia or designated personnel to the appropriate levels as per stock checklists provided with each bin unit.

Kits have been assessed and installed in the following work areas or facilities for AWMF use only.

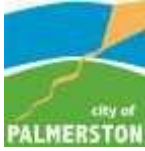
### 6.2. Personal Protective Equipment (PPE):

#### **Minor Spill : *Minimum General Requirements:***

- Nitrile gloves (suitable for limited contact).
- Chemical safety goggles.
- Full length protective clothing covering arms, legs or body
- Safety foot wear (capable of resisting minor chemical contamination)

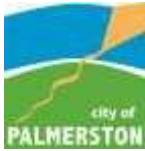
#### **Major Spill: *Minimum General Requirements:***

- Chemical safety goggles.
- Chemical resistant gloves (for prolonged contact) .
- Disposable overalls (e.g. Tyvek suit).
- Safety footwear – chemical resistant
- Half face respirator with cartridge appropriate to contaminants (as per AS/NZS 1715:1994).



**6.3. Particular Spill Types and Recommended Kit Absorbent Material and PPE**

Substance Type	Spill kit absorbent or treatment	PPE
<p><b>Petrol, Diesel, Lubricants and Hydraulic Fluid</b></p>	<ul style="list-style-type: none"> <li>- Absorb spilled substance with kitty litter, sand, earth or vermiculite.</li> </ul>	<p>PVC gloves (min)</p> <p>Half face respirator with organic vapour cartridge (filter complying with AS/NZS 1715 and AS/NZS 1716).</p> <p>Safety glasses or face shield complying with AS/NZS 1337.</p>
<p><b>Strong Acid</b></p>	<ul style="list-style-type: none"> <li>- The spillage should be contained with earth or sand and or neutralised with commercial acid neutralisers.</li> <li>- Alternatively, special non leaching absorbents/materials suitable for strong concentrations of acids or alkaline may be used instead.</li> <li>- Spill kits containing soda ash (sodium bicarbonate) can be sprinkled liberally over the spill.</li> <li>- Do not use rags or sawdust to clean up oxidising acid spills.</li> <li>- This procedure is not valid for Hydrofluoric Acid (HF) spills.</li> </ul>	<p>Neoprene gloves.</p>

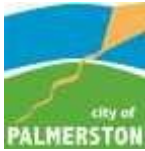


Substance Type	Spill kit absorbent or treatment	PPE
<p><b>Strong Alkali</b></p>	<ul style="list-style-type: none"> <li>- The spillage should be contained with earth or sand and or neutralised with commercial acid neutralisers. <b>Alternatively</b>, special non leaching absorbents/materials suitable for strong concentrations of acids or alkaline may be used instead.</li> <li>- Ensure that no contact occurs between spilled material and aluminium or zinc.</li> </ul>	<p>Neoprene gloves.</p>
<p><b>Solvent or Paint</b></p>	<ul style="list-style-type: none"> <li>- Spills of organic solvents (e.g., turpentine and methylated spirits) should be absorbed using DRY earth, sand or a proprietary product suitable for the absorption of the liquid.</li> <li>- Commercial solvent neutralisers, may act to reduce vapours and raise the flashpoint of the mixture.</li> </ul>	<p>PVC gloves.</p> <p>Half face respirator with organic vapour cartridge.</p>

Refer to **Appendix A** for Spill Response Equipment Selection Guide

**6.4. Veolia Personnel Training**

- Veolia shall ensure that all nominated staff are trained and sufficiently competent to assist in a spill response action, relative to their day to day use of chemical products or provide assistance to others as required.
- Any Veolia personnel who generally handle hazardous chemicals at the location must have an understanding of the requirements for basic



spill control for those substances they handle; and any substance storage incompatibility or reactivity, based on information from Material Safety Data Sheets (MSDS).

The Veolia personnel must be able to attend a spill site with spill equipment or kits and undertake basic containment and or clean-up. Their training should address issues such as:

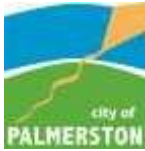
- Emergency alert.
- Public safety considerations.
- Initial assessment of a spill situation. ( Risk Management)
- Selection of appropriate spill response action.
- Safe methods of spill response – containment and clean-up.
- Safe remediation of spill area.
- Spill resources and maintenance.
- Waste disposal methods.

If the spill is outside the scope of training or capability of Veoliastaff, their training should enable them to take sufficient and proper action to contain the spill only, with emergency services (HAZMAT) or other external spill remediation contractors engaged to perform the full clean-up and remediation process of the gross contamination site.

**7 Actions and Responsibilities:**

**7.1 EMERGENCY Spill Responsibilities**

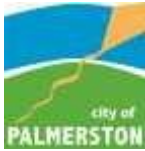
Key Tasks	Who	Action
<p>Make information available for relevant staff about hazardous chemicals used and stored within the work area.</p>	<p>Work Area Supervisor/ Manager</p>	<ul style="list-style-type: none"> <li>– Obtain, update and review MSDS.</li> <li>– Display or make available MSDS at suitable locations within the work place.</li> </ul>
<p>Ensure that sufficient quantities and appropriate types of spill absorbent or control materials, as prescribed in the MSDS, are available.</p>	<p>Work Area Supervisor/ Manager</p>	<ul style="list-style-type: none"> <li>– Ensure regular spill kit inspections are undertaken and replacement of any equipment or absorbent materials is completed.</li> </ul>



<p>Ensure that required PPE is available and maintained.</p>	<p>Work Area Supervisor/ Manager</p>	<ul style="list-style-type: none"> <li>- Ensure that appropriate PPE (as described in Sections 4.2 &amp; 4.3) is available and maintained ready for use.</li> </ul>
<p>Ensure that personnel are familiar with the spill procedures to be followed in the event of an incident, and locations of spill kits.</p>	<p>Work Area Supervisor/ Manager</p>	<ul style="list-style-type: none"> <li>- Ensure appropriate spill response training is provided including refresher training at periodic intervals.</li> <li>- Monitor and review of local spill procedures.</li> <li>- Include and up-date the location of the spill kits on noticeboards or through tool box talks.</li> </ul>

**7.2 MINOR Spill Actions and Responsibilities**

Key Tasks	Who	Action
<p>1. Assess Risk and Alert.</p>	<p>Individual(s) involved in the spill.</p>	<ul style="list-style-type: none"> <li>- Inform Supervisor</li> </ul>

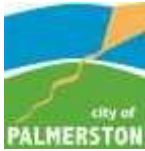


<p>2. Correction, Containment and Clean-up.</p>	<p>The individual(s) involved in the spill.</p>	<ul style="list-style-type: none"> <li>– Restrict access to the affected area.</li> <li>– Have the MSDS, spill equipment and PPE appropriate for the material readily available.</li> <li>– Prompt and proper clean-up in accordance with the MSDS instructions</li> <li>– Use the appropriate PPE as trained</li> </ul>
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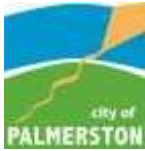
### 7.3 MAJOR Spill Actions and Responsibilities

Key Tasks	Who	Action
<p>1. Assess Risk and Alert.</p>	<p>The individual(s) involved in the spill.</p>	<ul style="list-style-type: none"> <li>– If there is a fire (or fire risk) and/or medical attention is needed, immediately contact Emergency Services (000).</li> <li>– Immediately alert Veolia Management and the Emergency Management Officer at the City of Palmerston.</li> </ul>





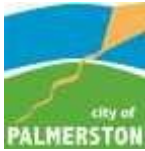
Key Tasks	Who	Action
2. Alert and Response Initiation.	Veolia Management/ City of Palmerston	<ul style="list-style-type: none"> <li>– If there is a fire (or fire risk) and/or medical attention is needed, immediately contact Emergency Services (000).</li> <li>– Organise personnel to attend scene if appropriate.</li> </ul>
3. Correction and Containment.  <b>In the event of a major chemical spill, Veolia personnel should follow the directions of External Emergency Services teams when they arrive on site.</b>	Veolia site staff	<ul style="list-style-type: none"> <li>– Restrict access to the affected area.</li> <li>– Evacuate the affected area, if necessary.</li> </ul>
	Veolia site staff	<ul style="list-style-type: none"> <li>– Initiate measures to contain the spill/leak and recover (where possible) spilled material.</li> </ul>
	Veolia Management.	<ul style="list-style-type: none"> <li>– Establish sufficient resources including material and human resources to mitigate the impact of the spill.</li> <li>– Engage contractors and consultants (if required).</li> </ul>
4. Assessment, Clean-up and Remediation.	Veolia Management and staff	<ul style="list-style-type: none"> <li>– Coordinate Spill Response and contractors.</li> </ul>



Key Tasks	Who	Action
5. Statutory Notification.	City of Palmerston CEO/ Director Technical Services or their delegate.	<ul style="list-style-type: none"> <li>– Fulfil statutory requirements including notification to Pollution Hotline (1800 064 567) and email <a href="mailto:pollution@nt.gov.au">pollution@nt.gov.au</a> within 24 hours (as per Section 14 of the Waste Management and Pollution Control Act. See <b>Appendix B</b>.</li> </ul>

#### 7.4 AFTER Emergency Spill Operations

Key Tasks	Who	Action
1. Contaminated Material Disposal.	External Contractors/consultants	<ul style="list-style-type: none"> <li>– Assess the type and volume of spill and contaminated material to find the most appropriate waste disposal option.</li> <li>– Dispose of used spill kit material through QUT Chemical Disposal Scheme or through a Regulated Waste Removal Contractor organised through AWMF Campus Services.</li> </ul>
2. Incident Documentation.	The individual(s) involved in the spill.	<ul style="list-style-type: none"> <li>– Complete Incident Report</li> </ul>
	Work Area Supervisor/ Manager	

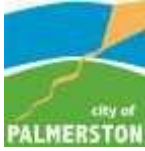


Key Tasks	Who	Action
3. Incident Investigation and Improvement Plan.	City of Palmerston CEO/ Director Technical Services or their delegate.	<ul style="list-style-type: none"> <li>– Investigate the cause of the spill.</li> <li>– Identify all causal factors and areas for improvement.</li> <li>– Recommend preventative /improvement measures, and report on the effectiveness of the new measures.</li> </ul>
4. Debriefing and Close Out	Veolia Management and City of Palmerston CEO/ Director Technical Services or their delegate.	<ul style="list-style-type: none"> <li>– Debrief of all personnel involved in the clean-up after the spill has been resolved.</li> <li>– Identify issues and lessons learned.</li> <li>– Review relevant procedures or work systems as required.</li> </ul>
	Veolia Management	<ul style="list-style-type: none"> <li>– Ensure all spill control supplies are restocked and all damaged or used equipment should be repaired or refilled.</li> </ul>

## 8 General Clean-Up & Remediation Methods

There should always be at least two people present when cleaning up a spill. This is to ensure that each person remains safe and is not affected by potential spill material chemical effects.

1. Neutralise acids / alkalis substances (if required) or use alternate material to absorb strong acids or alkali substances.
2. Distribute loose spill control materials over the entire spill area,



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working from the outside, circling to the inside. This reduces the chance of splash or further spread of the spilled hazardous chemical. Use absorbent material as indicated in the MSDS or as recommended above in this spill plan.

3. When spilled materials have been fully absorbed, use brush and scoop to place materials in an appropriate container (as described in MSDS).
4. Labelled Polyethylene bags may be used for limited volumes. See specific kit bins
5. Mop or clean the affected surface with water.
6. Collect solid residues, place into an appropriate sealed and labelled container for disposal as indicated in the MSDS.
7. The method of disposing this waste will depend on the amount and the type of hazardous material that was spilt.
8. If the spill does enter open ground, storm water drains, or waterways, immediately inform your supervisor who will arrange for further remediation or recovery as needed or pollution assessment.

### **9 Contaminated Spill Material Disposal:**

Disposal of contaminated chemical waste material shall be done in accordance with AS/NZS 2243.2 Section 2.5.8 (Laboratory Chemical Waste) or through an accredited contractor.

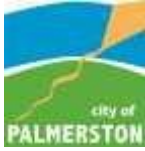
Where absorbent or containment material is of non-leaching type, and contaminants are not expected to leach out, these materials may be able to be disposed of in normal waste systems. Please check with the Environment Protection Agency.

AWMF may be able to assist in arranging for disposal of larger amounts of spill contaminant waste through a Regulated Waste Removal Contractor.

### **10 Related documents or references**

**City of Palmerston**

Environment Management Plan 2009



## CS Services

Listed Waste Management Plan – Archer Waste Transfer Facility

## NT Legislation

Environmental Assessment Act 2013

Environmental Offences and Penalties Act 2011

Environment Protection Authority Act 2012

Waste Management and Pollution Control Act 2013

Waste Management and Pollution Control (Administration) Regulations 2013

Water Act

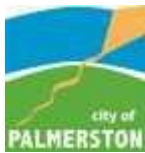
## Standards

AS1940:2004	Storage and Handling of Flammable Liquids.
AS3780:2008	Storage and Handling of Corrosive Substances.
AS4452:1997	Storage and Handling of Toxic Substances.
AS4326:2008	Storage and Handling of Oxidising Agents.
AN/NZS ISO 14001:2004	Environmental Management System – Specification with guidance for use.
AN/NZS ISO 14004:2004	Environmental Management Systems – General guidelines on principles, systems and supporting techniques.
AS/NZ 19011:2003	Guidelines for quality and/or environmental management systems auditing.
ISO 19011:2011	Guidelines for auditing management systems.
ISO 31000:2009	Risk Management – principles and guidelines.
HB 203:2012	Managing environment-related risk.

## 11 Fire

Prior to the onset of the dry season ensure that all firefighting equipment is in working order. Tests are to be carried out in conjunction with the requirements contained within the City of Palmerston's Archer Waste Transfer Station Management contract. In the event of an approaching fire:

1. Dial 000 and request assistance from NT Fire Service.
2. Contact City of Palmerston representative and advise of area under threat.
3. Determine speed and direction of wind.
4. Ensure access to the tank and up stand is not prevented.
5. Assist Emergency Services if required under direction.



## APPENDIX A

### Spill Response Equipment Selection Guide

Use this as a generic guide to assist in determining what types of spill response equipment may be required.

#### 1. What types of liquids do you use that might be spilt?

Use	You Need
Hydrocarbons only (oils, diesel, fuel etc.)	General Purpose Kit or Oil/Fuel if near water
Hazardous Chemicals	Hazchem Kit
Non-hazardous water based chemicals (including paints, pesticides etc.)	General Purpose Kit

#### 2. What is the largest likely spill that might occur?

This is usually derived from the largest volume of liquid that is stored. The chosen spill kit should contain this volume as a minimum.

Spill Volume	You Need
1000 litre Intermediate Bulk Container (IBC)	1000 litre Kit or 4 x 240 litre Kits
205 litre Drum	240 litre Kit
20 to 60 litre Drum	120 litre Kit

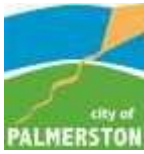
#### 3. On what surface will the spill occur?

As a general rule, loose absorbents and pads can be used on smooth surfaces but rough or porous surfaces require loose absorbents. On bodies of water, hydrocarbon absorbents (pads or booms) should be used as water will be absorbed by all other types of materials.

Surface	You Need
Dirt	Loose Absorbents
Bitumen	Loose Absorbents
Concrete	Pads or Loose Absorbents
Water	Hydrocarbon only Absorbents (if spill is a hydrocarbon)

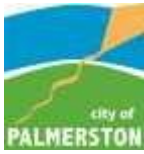
#### 4. How many kits are needed?

It is important to assess the likely locations where spills can occur and try to minimise the distance from the spill kit. As a rule, if the spill kit is located more than 25 metres away from the spill, the ability to respond quickly and successfully contain it, is reduced.



## **5. Other important considerations.**

The spill kit location must be clearly identified and must be labelled to prevent the kit from being moved around. There should be clear signage to allow responders to find the kit rapidly (for example, if the kit is being kept inside a building by a roller door where deliveries are made, a sign might place on the outside of the building to indicate the location of the spill kit). Finally, it is crucial that the spill kits be unobstructed – this means no equipment should be stored in the vicinity of the kit which may prevent it from being accessed.



## APPENDIX B

### 14 Duty to notify of incidents causing or threatening to cause pollution

#### (1) Where:

(a) an incident occurs in the conduct of an activity; and

(b) the incident causes, or is threatening or may threaten to cause, pollution resulting in material environmental harm or serious environmental harm,

the person conducting the activity must notify the NT EPA in accordance with subsection (3) as soon as practicable after (and in any case within 24 hours after) first becoming aware of the incident or the time he or she ought reasonably be expected to have become aware of the incident.

Penalty: environmental offence level 4.

#### (2) Where:

(a) an incident occurs in the conduct of an activity; and

(b) the incident causes, or is threatening or may threaten to cause, pollution resulting in material environmental harm or serious environmental harm,

the person must not intentionally fail to notify the NT EPA in accordance with subsection (3) as soon as practicable and in any case within 24 hours after first becoming aware of the incident.

Penalty: environmental offence level 3.

#### (3) A notification under subsection (1) or (2) is to specify:

(a) the incident causing or threatening to cause pollution;

(b) the place where the incident occurred;

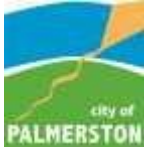
(c) the date and time of the incident;

(d) how the pollution has occurred, is occurring or may occur;

(e) the attempts made to prevent, reduce, control, rectify or clean up the pollution or resultant environmental harm caused or threatening to be caused by the incident; and

(f) the identity of the person notifying.





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(4) It is a defence to a charge of committing an offence against subsection (1) or (2) if the defendant establishes that he or she believed, on reasonable grounds, that the NT EPA had been notified of the incident before 24 hours after the person first became aware, or ought reasonably be expected to have become aware, of the incident.

(5) For the purposes of this section, **incident** includes:

(a) an accident, emergency or malfunction; and

(b) a deliberate action, whether or not that action was taken by the person conducting the activity in the course of which the incident occurred.

(6) Notification provided under subsection (1) or (2) is not to be used as evidence in proceedings before a court, other than proceedings for an offence against this section.