

# **Site Based Management Plan**

## Mount Isa City Council Refuse Facility

October 2017





## Site Based Management Plan

### Mount Isa City Council Refuse Facility

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## Document History and Status

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## 1. Introduction

### 1.1. Scope

This Site Based Management Plan (SBMP) covers all site-based activities undertaken at the Mount Isa City Council (MICC) Refuse Facility (the site). This SBMP does not cover waste management activities undertaken by MICC at other sites, or mobile units such as rubbish collections trucks.

### 1.2. Role of SBMP

The role of this SBMP is to identify and document:

- environmental objectives for the site
- site-based activities
- environmental monitoring, performance criteria, action limits and corrective actions
- record keeping and reporting requirements
- the action plan for continual improvement.

### 1.3. Objectives

The objectives of this SBMP are to:

- identify and implement opportunities for the recycling of waste to reduce the volume of waste disposed to landfill
- enhance and improve current processes
- maintain and improve environmental performance
- empower staff by providing specific training in the aspects of this SBMP
- identify actions for on-going performance improvement.

### 1.4. Environmental Policy

MICC are committed to avoiding or reducing environmental harm and improving environmental performance across the site-based activities at the MICC Refuse Facility. To minimise potential environmental impacts MICC will strive to:

- Adopt the highest achievable environmental standards in all areas of operation, meeting and exceeding all relevant legal and other requirements.
- Assess our activities and identify areas where we can minimise impacts, reduce pollution and avoid or minimise environmental harm.
- Continually improve and broaden the environmental knowledge and expertise of staff.
- Reduce our environmental footprint through adherence to the waste hierarchy.
- Establish, implement, maintain and continually improve the SBMP.
- Undertake site-based activities in a manner that minimises adverse environmental impacts.
- Periodically review performance and report these to Council.

### 1.5. Environmental Commitments

MICC aim to achieve the following commitments:

- investigate options for increased recycling

- improve training delivered to onsite staff
- continually improve performance
- compliance with legal and other requirements

## 1.6. Legislation and Other Requirements

### 1.6.1. Environmental Protection Act 1994 (EP Act)

The EP Act states that:

*A person must not carry out any activity that causes, or is likely to cause, environmental harm unless the person takes all reasonable and practicable measures to prevent or minimise the harm (the general environmental duty).*

All persons have a duty to notify environmental harm, as set out in sections 320 to 320G of the EP Act.

The duty to notify ensures that the administering authority, the Department of Environment and Heritage Protection (DEHP), and other relevant persons are made aware of incidents that may have caused or threaten serious environmental harm or material environmental harm, and that appropriate action can be taken to minimise the extent of environmental harm caused.

Employees have a duty to notify their employers of environmental harm, with 24 hours of becoming aware of the harm. employers must notify DEHP and any owners or occupiers of affected land within 24 hours of becoming aware of the harm.

#### **Definition of environmental harm.**

##### **Environmental harm**

1. *Environmental harm is any adverse effect, or potential adverse effect (whether temporary or permanent and of whatever magnitude, duration or frequency) on an environmental value, and includes environmental nuisance.*
2. *Environmental harm may be caused by an activity—*
  - a) *whether the harm is a direct or indirect result of the activity; or*
  - b) *whether the harm results from the activity alone or from the combined effects of the activity and other activities or factors.*

Environmental nuisance is not a notifiable incident, however it is an offence to cause environmental nuisance and there are often site specific approval conditions relating to environmental nuisance that must be complied with.

#### **Definition of environmental nuisance.**

**Environmental nuisance** is unreasonable interference or likely interference with an environmental value caused by—

- a) *aerosols, fumes, light, noise, odour, particles or smoke; or*
- b) *an unhealthy, offensive or unsightly condition because of contamination; or*
- c) *another way prescribed by regulation.*

On 19 December 2014, the administering authority, Department of Environment and Heritage Protection (DEHP) issued a combined development approval for the Camooweal Landfill, Mount Isa Refuse Tip, Camooweal Sewage Treatment Plant and the Mount Isa Sewage Treatment Plant.

### **1.6.2. Environmental Protection Regulation 2000 (EP Reg)**

Under the EP Reg, a receiver of waste that has been transported is considered to be a waste handler (in addition to the generator and transporter). MICCC, as the receiver of transported waste at the site, has obligations under the EP Waste Reg as a waste handler. The EP Reg outlines obligations of waste receivers:

1. When the transporter gives the waste to the receiver, the receiver must record the prescribed information about the waste.
2. The receiver must give the prescribed information about the waste to the administering authority in the prescribed way and within the prescribed time after receiving the waste from the transporter.
3. As soon as practicable after becoming aware of a discrepancy in the information received from the transporter under section 24, the receiver must give written notice of the discrepancy to the administering authority.
4. The receiver must keep the record mentioned in subsection (1) for at least 5 years.

Trackable waste, relevant to the EP Reg, is listed in Appendix B. The process for waste tracking is presented in Appendix C. In general after receiving the waste and the waste tracking certificate, the waste receiver (Mount Isa City Council) must send the white waste tracking certificate to DEHP.

#### **4.1.1. Waste Reduction and Recycling Act 2011 (WRR Act) and Waste Reduction and Recycling Regulation 2011 (WRR Reg)**

The WRR Act requires an operator of a waste disposal site nominated in Schedule 5 of the WRR Reg to submit a waste data return on a quarterly basis on the last business day of the month immediately following the reporting period. Reporting periods for Schedule 5 sites are:

- 1 July to 30 September
- 1 October to 31 December
- 1 January to 31 March
- 1 April to 30 June.

Information included on the waste data return may include:

1. the types and amount of waste:
  - a. delivered to the site
  - b. disposed of to landfill at the site
  - c. moved from the site to a place outside the site
2. if a weighbridge is installed at the site—the operation of the weighbridge during the reporting period for the site.

Reporting may be completed online using the Department of Environment and Heritage Protection (DEHP) system. Mount Isa City Council is included in Schedule 5 of the WRR Reg.

### **1.6.3 Biosecurity Act 2014**

The *Biosecurity Act 2014* came into effect on 1 July 2016. The Act provides comprehensive biosecurity measures to safeguard our economy, agricultural and tourism industries, environment and way of life, from:

- pests (e.g. wild dogs and weeds)
- diseases (e.g. foot-and-mouth disease)
- contaminants (e.g. lead on grazing land).

The Act will replace the many separate pieces of legislation currently used to manage biosecurity. Under the Act, the *Biosecurity Regulation 2016* sets out how the Act is implemented and applied.

Under the *Biosecurity Act 2014* there is a duty to inform an inspector of a notifiable incident. A notifiable incident may include:

- unexpected crop failures
- unacceptable contaminant levels
- blisters on the mouth or feet of stock
- abnormally high mortality or morbidity rates in animals or plants
- a sudden and unexplained fall in production
- a contaminant (such as heavy metals, asbestos, residual organochlorine pesticides or pathogenic bacteria) above a prescribed threshold.

The inspector must be notified when a person:

- becomes aware of the incident
- believes that the incident is a notifiable incident or should reasonably believe the incident is a notifiable incident
- has no reason to believe an inspector is already aware of the incident.

It is also a requirement to notify an authorised officer of risks listed as prohibited matter and category 1 and 2 restricted matter.

### **1.6.4 Guidelines and Other Relevant Documentation**

The DEHP have published the *Guideline – Landfill siting, design, operation and Rehabilitation Version: 2* to provide guidance on development, operation and rehabilitation of waste disposal facilities that fall within the definition of Environmental Relevant Activities ERA 60 (formerly ERA 75).

In addition to the guideline, DEHP have published model operating conditions for ERA 60. Whilst these model operating conditions are not directly applicable to the site, they provide an indication of best practice and have been used as a guide when determining performance criteria for the site.

## 2. Site Details

### 2.1. Location

Mount Isa Refuse Facility is located at Lot 73 on SP134707, on Jessop Drive, Mount Isa, north-west Queensland approximately 2 km from the Mount Isa town centre. Figure 1 indicates the landfill location in relation to the Mount Isa town centre.



Figure 1 Locality Plan

### 2.2. Site Description

The site covers an area of 126 ha, with approximately 1 ha being utilised for landfill activities. A hill borders the western boundary of the site, providing a natural barrier for sound, noise and amenity between the residential areas of Mount Isa and the landfill site.

The site includes the following features:

- access roads
- weighbridge, office and staff facilities
- depot
- effluent water and fresh water standpipes
- disposal cells

- recycling areas
- leachate ponds
- groundwater monitoring bores
- security fencing around site perimeter and litter mesh along strategic locations within the site.

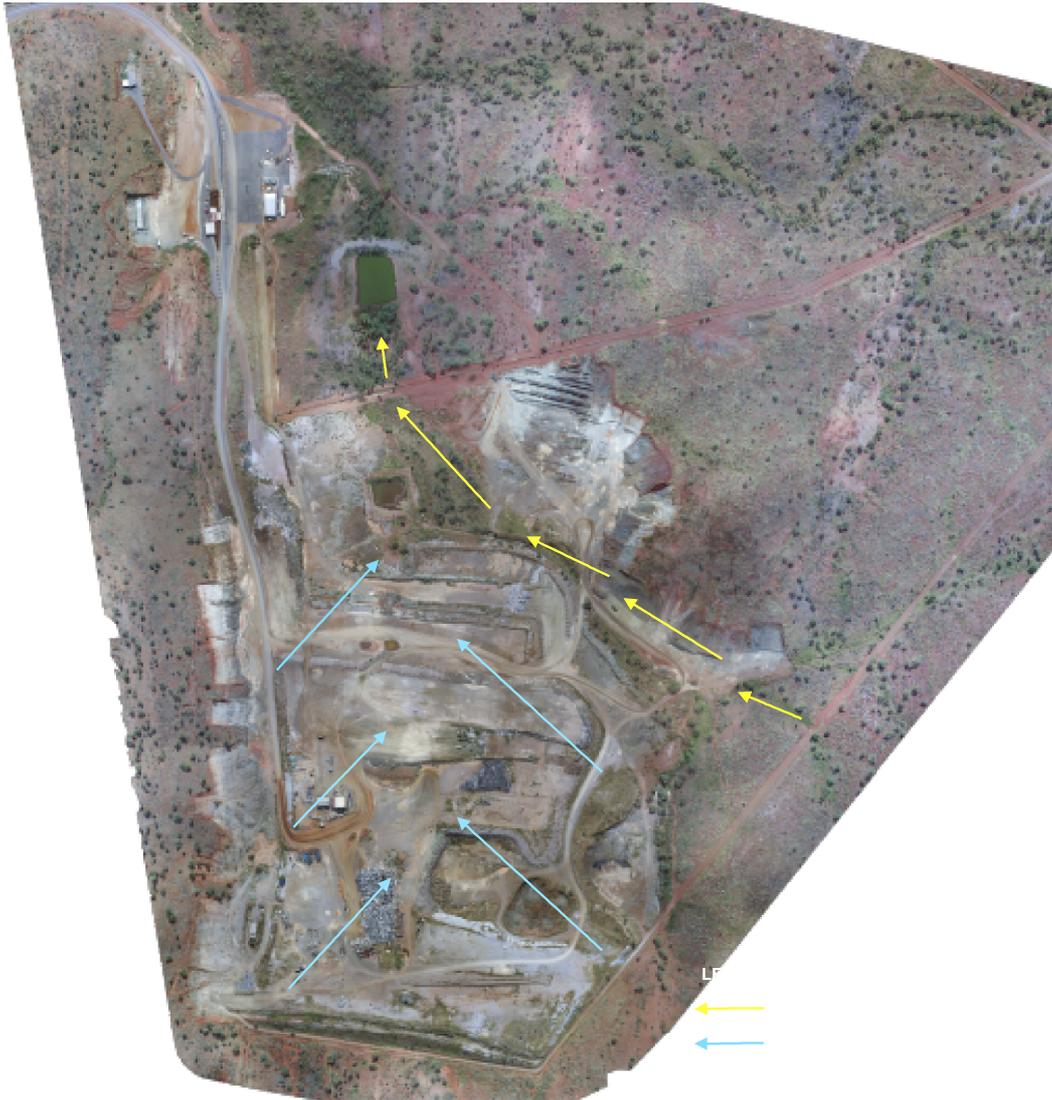
Figure 2 depicts the general site layout.



**Figure 2 Site Layout**

The landfill methods employed onsite are broadly described as change in topography method. The landfill cells are generally shallow excavated to rock or rubble. These excavated areas are initially utilised as trench burial areas for carcasses. Following the filling of trenches, the cells receive rubble or mixed waste which is compacted daily and covered weekly. New cells are progressively brought on line as needed.

Stormwater within the landfill areas flows via gravity to a central leachate pond. External stormwater flows are directed around the landfill areas to an additional holding pond located to the north of the landfill. Figure 3 identifies the storm water flows across the site.



**Figure 3 Stormwater Flows**

Two creeks, and their tributaries are associated with the site, Breakaway Creek to the south of the site skirts the landfill area and is unlikely to receive runoff from the site. Depot Creek runs in a north-westerly direction through the site, its tributaries run to the north of the landfill areas. Figure 3, Stormwater Flows depicts the general flow of stormwater across and around the site.

The site is not identified as containing a mapped regional ecosystem under the *Vegetation Management Act 1999*, and is identified as non-remnant vegetation, cultivated or build environment.

### **2.3. Operations Description**

The site operates Monday to Sunday 7:30 am to 4:45 pm, including public holidays. The site is staffed during all hours of operation. The site is closed on Christmas Day. Access out of hours is not permitted.

The site has a staffed weighbridge that logs all waste introduced to the site into the Mandalay system. The weighbridge operators log the types of waste and for commercial customers, the weight of the waste. A Weighbridge Safety Plan has been developed for weighbridge operation and is presented in Appendix B. Customers are directed to the relevant disposal bay for their waste type. Waste is compacted daily and covered weekly.

The following waste types are accepted at the site:

- green waste
- clean steel
- clean e-waste
- clean cardboard
- shredded tyres – must have transport certificate
- animal carcasses
- batteries wet/dry including car batteries
- fridges/freezers
- metal – ferrous non-ferrous

The following wastes are not accepted at the site:

- whole tyres
- paint
- hydrocarbons or flammable liquids
- medical waste
- liquid waste

Contaminated waste proposed to be disposed of at the site by commercial customers, must be accompanied by chemical analysis, identifying the contaminant concentrations within the material. Acceptance criteria have been developed for contaminated materials, based on the Model Operating Conditions for ERA 60 – Waste Disposal and are presented in Appendix D. Prior to acceptance, an assessment of the contaminant analysis must be undertaken to determine if the waste contains contaminants above the acceptance criteria. Should the analysis indicate contamination levels above the acceptance criteria, the waste must not be accepted.

## 2.4. Recycling

Plans are in place for the construction of a Recycling Transfer Station at the facility which will allow for the recovery of the following waste streams:

- Clean ferrous and non-ferrous metals
- e-Waste
- Batteries
- Printer Cartridges
- Mobile Phones
- Cardboard and paper
- Glass
- Aluminium/tin cans
- Engine Oil – domestic
- Gas bottles – (household, 8.5kg)
- Recoverable household items for reuse including
  - Building and landscaping supplies
  - Furniture
  - Tools
  - Exercise equipment
  - Pushbikes
  - Gardening equipment

#### **2.4.1. National Television and Computer Recycling Scheme (NCTCRS)**

Local government does not have any obligations under the Regulations and the NCTCRS does not change state, territory or local government responsibilities in relation to regulating waste. However, there may be opportunities for councils to participate in the NCTCRS. For example, councils may choose to enter into partnerships or commercial arrangements with the administrators of a co-regulatory arrangement to collect televisions and computers on behalf of the co-regulatory arrangement. The co-regulatory arrangement will then arrange for them to be recycled.

The NCTCRS scheme may provide an opportunity for MICC to participate in television and computer recycling.

#### **2.4.2. Australian Battery Recycling Initiative**

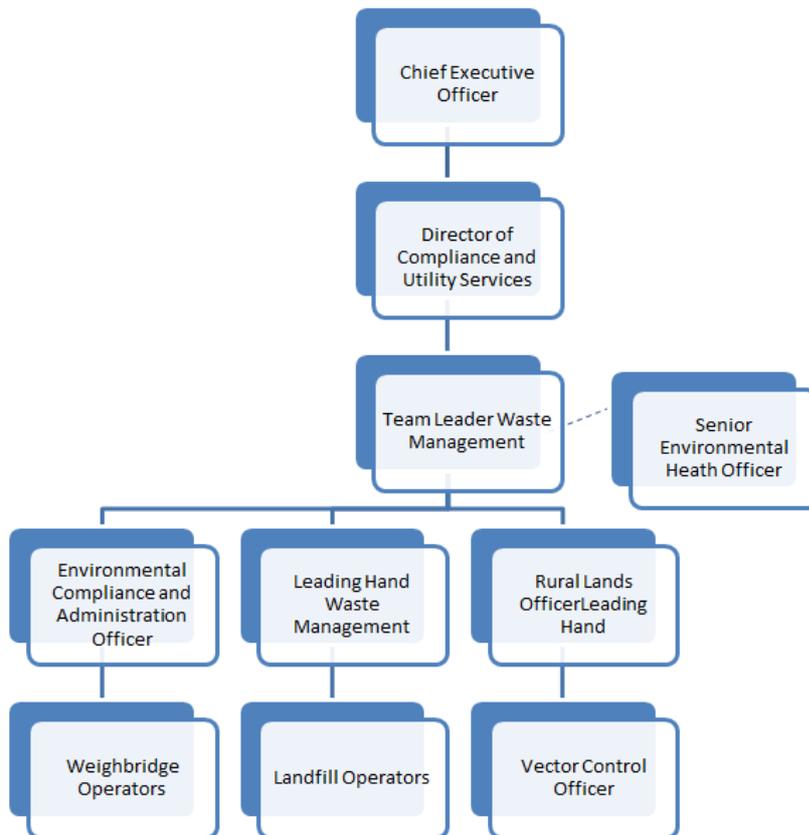
The Australian Battery Recycling Initiative (ABRI) has been formed by a group of battery manufacturers, recyclers, retailers, government bodies and environment groups to promote the collection, recycling and safe disposal of all batteries. The ABRI identifies a number of opportunities for battery recycling.

### 3. Roles and Responsibilities

#### 3.1. Organisational Structure

Figure 4 depicts the organisational structure of the MICC Waste Management Department and others responsible for waste management activities.

**Waste Management Organisational Chart**



The Senior Environmental Health Officer provides Environmental advice to the Waste Management Department and assist with reporting.

**Figure 4 Waste Management Organisational Structure**

#### 3.2. External Stakeholders

Stakeholders relevant to the activities at the site include:

- non-commercial customers
- commercial customers
- recycling partners
- Department of Environment and Heritage Protection (DEHP) - regulator
- neighbours
- general public

### 3.3. Communication and Notifications

#### 3.3.1. Internal Communication

Internal communication follows the organisational structure.

- Mandalay related communication – Weighbridge Operators to notify Environmental Compliance and Administration Officer of site operation communication. Landfill Operators and Weighbridge Operators notify Team Leader Waste Management, Team Leader Waste Management briefs Director of Compliance and Utility Services.
- Environmental communication – All staff report environmental matters to the Team Leader Waste Management and Environmental Compliance and Administration Officer who will liaise with the Senior Environmental Health Officer

#### 3.3.2. External Communication

External reporting includes:

- reporting of waste returns to DEHP (mandatory requirement: quarterly)
- annual reporting under the development permit approving the ERA to DEHP
- environmental incidents resulting in potential or actual material or serious harm

Table 1 details the reporting requirements.

**Table 1 Reporting Requirements**

Legislation	Requirement	Details	Responsibility
<i>Waste Reduction and Recycling Act 2011 and Regulation 2011</i>	Quarterly submission of waste data returns, reporting of waste, stockpile movements and other waste movements. (Note: Mandatory reporting is quarterly)	Waste Tonnage Data from Mandalay is copied to the EHP QWOLS website.	Environmental Compliance and Administration Officer
<i>Integrated Planning Act 1997</i>	Under the approval conditions for the ERA's for the site, waste records on the source, volume and composition of all waste materials accepted to the site must be reported to annually.	Annual report must be submitted the DEHP by 31 August each year.	Environmental Compliance and Administration Officer

Legislation	Requirement	Details	Responsibility
<i>Environmental Protection Act 1994</i>	<p>Duty to notify actual or potential serious and material harm</p> <p>Duty to notify serious and material harm to owner or occupier of affected land.</p> <p>Annual reporting as required by Items Waste 1 5, Development Permit: IPDE00281905J12</p>	<p>Pollution Line pollutionline@ehp.qld.gov.au 1300 130 372</p> <p>Owner occupier notification as applicable.</p>	<p>Environmental Compliance and Administration Officer and Senior Environmental Health Officer</p>
<i>Nature Conservation Act 1992</i>	Regulated fauna injured or harmed	<p>Pollution Line pollutionline@ehp.qld.gov.au 1300 130 372</p>	Rural Lands Officer
<i>Vegetation Management Act 1999</i>	Clearing of regulated vegetation without an approval.	<p>Pollution Line pollutionline@ehp.qld.gov.au 1300 130 372</p>	Rural Lands Officer
<i>Biosecurity Act 2014</i>	Duty to notify an inspector of a notifiable incident.	Department of Agriculture and Fisheries Ph: 13 25 23	Rural Lands Officer / Senior Environmental Health Officer

### 3.3.3. Complaint Response

Complaints are handled initially by the Customer Service Team. All complaints are logged in Dataworks and notification of the complaint is forwarded to the Team Leader Waste Management, Leading Hand Waste Management and the Environmental Compliance and Administration Officer. Once the complaint has been addressed, the Leading Hand Waste Management enters the action taken into Dataworks to close off the complaint.

### 3.4. Staff Training

All new MICC staff undergo an induction process for general council policies and procedures. Induction specific to the site is undertaken by the Team Leader Waste Management. Site specific induction is undertaken onsite and is of a mentoring nature.

On-going training is undertaken on a needs basis, for example training in new equipment or procedures. Records of training are identified in Table 2.

### 3.5. Record Keeping

Records are kept in MICC's Dataworks system. Table 2 provides a summary of record keeping and responsibilities for record types associated with the Refuse Facility.

**Table 2 Record Keeping Summary**

Record Type	Responsible Person	Location	Details
Waste volumes and types	Environmental Compliance and Administration Officer	Mandalay Pre-Mandalay paper files in head office	Reported to DEHP
Induction and training	Human Resources	Dataworks	
Groundwater quality monitoring	Laboratory Technician/Rural Lands Officer	Lab reports - Dataworks Hardcopy - STP	
Complaints and follow up reports	Customer Service – lodging complaint Leading Hand Waste Management – complaint follow up and completion.	Dataworks	Complaints are logged into Dataworks, Leading Hand Waste Management prepares report and lodges it into Dataworks.
Incidents	Employee – lodging the incident Team Leader – incident forward to WHSO	H:\Safety Management System (SMS)	The incident must be reported and this form is to be signed by a Team Leader and given to the Safety Coordinator within 72 hours.
Approvals and regulator notices	Senior Environmental Health Officer	Dataworks	Annual reporting
Monthly reports	Environmental Compliance and Administration Officer – Compilation Director of Compliance and Utility Services – Approves for submission.	Dataworks	Monthly reports to Council.

## 4. Environmental Issues and Impacts

### 4.1. Environmental Aspects and Impacts

Environmental aspects for the site have been summarised in Table 3.

**Table 3 Aspects, Impacts and Control Measures**

Aspect	Impact	Control Measure
Emissions to air	Environmental nuisance – odour, dust, etc.	<ul style="list-style-type: none"> <li>• Compact waste daily</li> <li>• Cover waste weekly</li> <li>• Immediate cover of contaminated waste and carcasses</li> <li>• Dust suppression daily and as needed</li> <li>• Site located away from populated areas, natural geological barrier</li> </ul>
Releases to water	Pollution of waterways	<ul style="list-style-type: none"> <li>• Gravity fed leachate collection</li> <li>• Evaporation of leachate</li> </ul>
Releases to land	Pollution of soils and surrounding areas	<ul style="list-style-type: none"> <li>• Compact waste daily</li> <li>• Cover waste weekly</li> <li>• Litter fences</li> <li>• Buffers to neighbouring sites</li> <li>• Waste acceptance procedures</li> </ul>
Use of raw materials and natural resources	Depletion of natural resources	<ul style="list-style-type: none"> <li>• Sourcing of fill/cover materials from onsite or from municipal works</li> </ul>
Use of energy	Depletion of fossil fuels	<ul style="list-style-type: none"> <li>• Maintenance of vehicles and site equipment</li> </ul>
Energy emitted e.g. heat, radiation, vibration	Environmental nuisance	<ul style="list-style-type: none"> <li>• Site located away from populated areas, natural geological barrier</li> </ul>
Waste and by-products	Premature exhaustion of landfill areas	<ul style="list-style-type: none"> <li>• Investigate options for increased waste diversion through recycling</li> </ul>
Physical attributes e.g. size, shape, colour, appearance	Poor amenity	<ul style="list-style-type: none"> <li>• Site located away from populated areas, natural geological barrier</li> <li>• Rehabilitation/regeneration works on southern boundary</li> </ul>

### 4.2. Conducting Environmental Impact Assessments

Environmental Impact Assessments (EIAs) will be undertaken prior to a significant change in operations or following a major environmental incident.

### 4.3. Monitoring

Routine monitoring is undertaken on the site to measure environmental performance as identified in Section 5 of this document. Table 4 provides a summary of environmental monitoring onsite. Monitoring locations are presented in Appendix A.

**Table 4 Monitoring Summary**

Monitoring Type	Frequency	Location	Responsibility	Record Keeping
Site Condition – litter, security, pest species, etc. End of day site inspection.	Daily	All Areas	Landfill Operators Weighbridge Operators Caretaker	Note items for action in site diary.
Spill kit contents.	Monthly	Weighbridge	Environmental Compliance and Administration Officer	Note results of inspection in site diary.
Groundwater	Quarterly	Monitoring Bores	Rural Lands Officer and Laboratory Technician	Results stored in Dataworks
Perimeter fence, firebreak and general site condition.	Weekly	Site Perimeters	Team Leader Waste Management	Note items for action in site diary.

#### 4.3.1. Groundwater Monitoring

Table 5 identifies the locations of the groundwater bores. A bore layout plan is presented in Appendix A.

**Table 5 Groundwater Monitoring Bore Locations**

Reference Number	Location	GPS Location
Bore 1	South end of stormwater dam	S 20°42.412 E 139°31.210
Bore 2	North end of stormwater dam	S 20°42.319 E 139°31.267
Bore 3	North of second dam	S 20°42.177 E 139°31.194
Bore 4	Roadway near dozer access road	S 20°42.312 E 139°31.185
Bore 5	North of tyre bay in gully	S 20°42.436 E 139°31.337
Bore 6	Tyre bay/east fence	S 20°42.599 E 139°31.384
Bore 7	Southern fence	S 20°42.689 E 139°31.208
Bore 8	Depot Creek/horse paddock	S 20°42.097 E 139°30.702
Bore 9	North east corner	S 20°42.200 E 139°31.597
Bore 10	Basket ball/horse paddock	S 20°42.278 E 139°30.451
Bore 11	Soccer field	S 20°42.348 E 139°30.764

Table 6 identifies the parameters that have been selected for water quality monitoring. The approval conditions state that an assessment of whether there is a statistically significant adverse change from the background values for mandatory parameters at locations hydraulically down gradient of the landfill unit must be undertaken. The assessment of groundwater monitoring data has been included as an improvement (Table 7).

**Table 6 Ground Water Quality Monitoring Summary**

Parameter	Unit	Details
Ammonia (NH <sub>3</sub> )	mg/L	Mandatory
Chemical Oxygen Demand (COD)	mg/L	Mandatory
Chloride (Cl <sup>-</sup> )	mg/L	Mandatory
Dissolved Oxygen (DO)	mg/L	Mandatory
Electrical Conductance (EC)	µS/cm	Mandatory
Iron (Fe)	mg/L	
Lead (Pb)	mg/L	Mandatory
Manganese	mg/L	Mandatory
pH		Mandatory
Polycyclic Aromatic Hydrocarbons (PAH)	µg/L	Bores 7, 8, 10 & 11 only
<b>Total Petrol Hydrocarbons (TPH)</b>		
C6 – C9 Fraction	µg/L	Bores 7, 8, 10 & 11 only
C10 – C14 Fraction	µg/L	Bores 7, 8, 10 & 11 only
C15 – C28 Fraction	µg/L	Bores 7, 8, 10 & 11 only
C29 – C36 Fraction	µg/L	Bores 7, 8, 10 & 11 only
∧ C10 – C36 Fraction	µg/L	Bores 7, 8, 10 & 11 only

#### 4.4. Calibration

The weighbridge is calibrated annually serviced at biannual intervals by Australasia Scales.

All water quality samples are sent to an external laboratory for analysis, no onsite equipment is used for water quality monitoring.

## 5. Operational Plan

### 5.1. Site Control

**Policy - MICC will control the site at all times and meet duty of care to visitors and personnel onsite.**

#### **Responsibility**

- Director of Compliance and Utility Services – provide resources for the operation of the site
- Team Leader Waste Management – oversee and supervise site activities, manage security
- Environmental Compliance and Administration Officer – oversee weighbridge activities, manage Mandalay system
- Weighbridge Operators - log customers/site visitors into Mandalay, end of day inspection
- Landfill Operators – oversee visitor activities whilst on site, end of day inspection
- Onsite caretaker – general surveillance

Performance Criteria	Control Measures	Monitoring	Limits	Corrective Action	Reporting	Record Keeping
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Performance Criteria	Control Measures	Monitoring	Limits	Corrective Action	Reporting	Record Keeping
Site is manned by 2 x staff members at all times whilst the site is operating.	Visitors to the site are processed through the weighbridge, which is the single entry point for the site.  Site inspection is conducted prior to shutdown to ensure no public remain on site.  Onsite caretaker.	Visual monitoring by operators during daily tasks.  End of day site inspection.	Unauthorised access to the site.	Notify Team Leader Waste Management and follow directions.	Environmental Compliance and Administration Officer reviews Mandalay records when preparing reports.	Waste volumes and types – Mandalay.
Weighbridge activities are undertaken in a safe manner.	Weighbridge Safety Plan (Appendix B)	N/A	N/A	N/A	Appendix B	Significant incidents recorded in site diary and reported to the Team Leader Waste Management and Environmental Compliance and Administration Officer.
All staff sign in and sign out.	All staff log in and log out at depot.	Team Leader Waste Management reviews timesheets.	Staff fail to sign on and off.	Review procedures and undertake training with relevant staff, where required.	Significant issues included in monthly report to Council where relevant.	Staff movement – timesheets.

<b>Performance Criteria</b>	<b>Control Measures</b>	<b>Monitoring</b>	<b>Limits</b>	<b>Corrective Action</b>	<b>Reporting</b>	<b>Record Keeping</b>
Measures must be taken to prevent unauthorised access to the site.	Electronic Lockable gate. Fencing. Onsite caretaker.	End of day site inspection. Security cameras are installed on site.	Evidence of vandalism or unauthorised entry to the site.	Review of security breaches.	Security breaches or vandalism reported in Waste Management's monthly report to Council.	Operational issues, environmental incidents, spills, security issues - site diary.
The site must be maintained in a proper and efficient condition.	All waste is compacted daily and covered weekly to reduce litter.  Litter mesh fences are located in strategic areas on the site.  Emu parades are undertaken when required.	Visual monitoring by operators during daily tasks.	Noticeable increase in litter about the site.	Emu parades to collect litter when required.  Repairs to any damaged fences.	Significant issues included in monthly report to Council, where relevant.	Operational issues, environmental incidents, spills, security issues - site diary.

<b>Performance Criteria</b>	<b>Control Measures</b>	<b>Monitoring</b>	<b>Limits</b>	<b>Corrective Action</b>	<b>Reporting</b>	<b>Record Keeping</b>
Signage is provided at relevant locations and is maintained in a proper condition.	<p>Signage at site entry identifies conditions of entry.</p> <p>Speed limits are displayed on sign at site entry.</p> <p>Locations of waste disposal bays indicated on signs.</p>	Visual monitoring by operators during daily tasks.	Damaged or missing site signage.	Restore and rectify issues.	Notify Team Leader Waste Management where new signage is required or additional assistance is required.	Operational issues, environmental incidents, spills, security issues recorded site diary.

## 5.2. Waste Management

**Policy – MICC will ensure that only permitted waste is disposed of at the landfill**

### Responsibility

- Team Leader Waste Management – oversee site activities, ensures disposal bays meet the requirements for special burial and contaminated waste disposal
- Environmental Compliance and Administration Officer – management of Mandalay, liaise with commercial customers to assess waste acceptance criteria, quarterly reporting to DEHP, oversee weighbridge activities
- Weighbridge Operators – monitor and log all waste accepted to the site. Ensure non-acceptable waste types are not accepted, including liquid waste.
- Landfill Operators – monitor landfill areas to ensure appropriate disposal of waste types, cover special burials immediately

Performance Criteria	Control Measures	Monitoring	Limits	Corrective Action	Reporting	Record Keeping
The volume, source and composition of all waste accepted into the site is recorded	Residential (non-commercial) customers are weighed and processed on entry. There are set prices for cars and cars with trailers.  Commercial customers are weighed on entry and exit and the fee, based on the weight is collected upon exit.	Weighbridge Operators monitor all waste brought into the site.	Failure to record wastes at weighbridge .  Misinformation given by customers regarding load composition.	Review processes and ensure all wastes are recorded.	Quarterly waste data returns report to DEHP – Environmental Compliance and Administration Officer  Annual report to DEHP by 31 August each year – Environmental Compliance and Administration Officer	Mandalay stores waste type, sources, volumes and composition.

Performance Criteria	Control Measures	Monitoring	Limits	Corrective Action	Reporting	Record Keeping
<p>All trackable waste has a waste tracking certificate.</p> <p>Note: Trackable wastes are identified in Appendix C.</p>	<p>All weighbridge Operators ensure that all sections of the Waste Tracking Certificates are completed accurately.</p> <p>Mandalay system stores all records of waste accepted to site.</p>	<p>Environmental Compliance and Administration Officer reviews records monthly.</p>	<p>Trackable waste is presented without a certificate.</p>	<p>Do not accept waste, record details in site diary, notify Team Leader Waste Management (if required).</p>	<p>Records of source, volume and composition of all waste materials kept, maintained and reported to the administering authority by 31 August each year.</p> <p>Process for trackable waste reporting is identified in Appendix D.</p>	<p>Mandalay stores information on trackable waste.</p>

Performance Criteria	Control Measures	Monitoring	Limits	Corrective Action	Reporting	Record Keeping
<p>All waste likely to cause environmental harm when placed in an exposed position must be handled and disposed of as a special burial.</p>	<p>Special burial is undertaken in the designated areas for the following:</p> <ul style="list-style-type: none"> <li>Asbestos</li> <li>contaminated soil</li> <li>animal carcasses</li> <li>confidential documents</li> <li>shredded tyres</li> </ul> <p>MICC must be notified 24 hours prior to disposal to ensure that operators are onsite to cover materials immediately after disposal. Visitors are not authorised to access these areas, unless previous notification has been made.</p> <p>All special burials are to be covered immediately by Landfill operators.</p> <p>Asbestos Identification and Management Procedure in Appendix E.</p>	<p>Weighbridge Operators monitor all waste brought into the site.</p> <p>Landfill operators monitor waste cells during daily tasks.</p>	<p>Any instance of unauthorised disposal or asbestos, contaminate d soils or animal carcasses that have not been covered immediately.</p>	<p>Cover immediately .</p> <p>Implement Asbestos Identification and Management Procedure in Appendix E.</p>	<p>Notify Team Leader Waste Management and/or Environmental Compliance and Administration Officer.</p>	<p>Record details in site diary</p>

Performance Criteria	Control Measures	Monitoring	Limits	Corrective Action	Reporting	Record Keeping
<p>The following materials are not accepted into the site:</p> <ul style="list-style-type: none"> <li>• liquid or semi liquid waste</li> <li>• hot ash</li> <li>• smouldering or aflame material</li> <li>• ignitable, corrosive, reactive or toxic (other than from a domestic premises)</li> <li>• radioactive waste</li> <li>• explosives</li> <li>• ammunition</li> <li>• Contaminated waste over the acceptance criteria (Appendix F)</li> <li>• whole scrap tyres.</li> </ul>	<p>Oversight at the weighbridge.</p> <p>Waste acceptance criteria for clay-lined landfill identified in Appendix F can be used as an interim guide until specific criteria can be developed for MICC.</p>	<p>Weighbridge Operators monitor all waste brought into the site.</p>	<p>Unacceptable and unauthorised waste is disposed of at site.</p> <p>Waste exceeding the waste acceptance criteria is presented for disposal.</p>	<p>Do not accept unacceptable waste or waste exceeding waste acceptance criteria.</p> <p>Notify Team Leader Waste Management and follow directions (Waste acceptance procedures and criteria identified in Appendix F).</p>	<p>Notify Team Leader Waste Management.</p>	<p>Record details in site diary.</p>

### 5.3. Fire Management

**Policy - MICC will implement appropriate measures to prevent fires and to adequately manage any fires that occur**

**Responsibility**

- Team Leader Waste Management - weekly inspection of perimeter fences and firebreak, oversee fire management
- Landfill Operators – continuous surveillance during hours of operation, monitor equipment condition, manage fires
- Weighbridge Operators – monitor waste coming into the site

Performance Criteria	Control Measures	Monitoring	Limits	Corrective Action	Reporting	Record Keeping
Clear access to the water supply for fire-fighting vehicles must be provided at all times.	Internal haul roads.	Landfill operators visually monitor haul road condition during daily tasks.	Haul road is blocked.	Take action to clear haul roads.	Notify Team Leader Waste Management.	Record details in site diary.
An effective firebreak must be provided and maintained.	A firebreak is maintained around the perimeter of the site.	Weekly inspection of firebreak.	Vegetation or debris encroaching on firebreak.	Onsite staff to maintain firebreak under the direction of Team Leader Waste Management.	Notify Team Leader Waste Management.	Record details in site diary.

Performance Criteria	Control Measures	Monitoring	Limits	Corrective Action	Reporting	Record Keeping
Measures to prevent fires must be in place at the site.	<p>Bays in cells are covered to the ground.</p> <p>Hot coals, hot ash or materials that are smouldering or aflame are not accepted.</p> <p>All coals are diverted away from general waste.</p> <p>Hydrocarbons and flammable liquids are not accepted.</p> <p>Site security.</p>	Landfill operators visually monitor the site during daily tasks.	<p>Smouldering or aflame materials presented at weighbridge.</p> <p>Smouldering or aflame materials identified on site.</p>	<p>Do not accept smouldering, aflame or flammable materials.</p> <p>Take actions to extinguish smouldering or aflame material.</p>	Notify Team Leader Waste Management.	Record details in site diary.

<b>Performance Criteria</b>	<b>Control Measures</b>	<b>Monitoring</b>	<b>Limits</b>	<b>Corrective Action</b>	<b>Reporting</b>	<b>Record Keeping</b>
Measures to manage fires must be in place at the site.	Onsite operators to fight small fires with onsite fire-fighting equipment.  Larger fires may require assistance and equipment from Works Department.	n/a	n/a	n/a	Significant issues included in monthly report to Council, where relevant.	n/a
Sufficient fire fighting equipment must be available on site to manage fires.	Water truck with water cannon. Effluent water truck fill station. Machinery for covering fires. Clean fill for covering fires.	Weekly inspection of equipment and pre-starts completed.	Damaged or non-operational equipment.	Rectify and repair.  Ensure backup equipment is readily available.	Notify Team Leader Waste Management of damaged or non-operational equipment.	Record details of damaged or non-operational equipment in site diary.

## 5.4. Land Management

**Policy - MICC will put in place appropriate measures to manage emissions to air and minimise pollution**

### Responsibility

- Team Leader Waste Management - deliver spill kit training, advise and lead spill clean up
- Environmental Compliance and Administration Officer – monitor and maintain spill kit
- Weighbridge Operators – manage spills in landfill area

Performance Criteria	Control Measures	Monitoring	Limits	Corrective Action	Reporting	Record Keeping
Spill kit, personal protective equipment and instructions must be kept on site.	Spill kit located in amenities block at weighbridge. Spill kit instructions in Appendix G. Spill kit instructions displayed in weighbridge and with spill kit.	Monthly inspection of spill kit to ensure it is complete.	Missing or damaged items from the spill kit.	Restock spill kit.	n/a	n/a
All weighbridge staff must be trained in the use of the spill kit.	Human Resources to deliver spill kit orientation and training to all new and existing weighbridge staff.	Review of training records during annual performance review.	All landfill staff receive annual spill kit training.	Deliver spill kit training annually.	n/a	Training to be recorded in HR files

Performance Criteria	Control Measures	Monitoring	Limits	Corrective Action	Reporting	Record Keeping
<p>Measures must be in place to manage spills on the site.</p>	<p>Spill kit and site machinery.</p>	<p>Continuous observation during daily duties.</p>	<p>Evidence of spill onsite.</p>	<p>Spills on non-sealed areas of the landfill:</p> <ul style="list-style-type: none"> <li>• contained (if required) using earth bunding or</li> <li>• cleaned up using onsite machinery. Materials collected as part of the clean up are disposed in the contaminated materials bay.</li> </ul> <p>Spills on sealed surfaces such as weighbridge:</p> <ul style="list-style-type: none"> <li>• small spills are managed using spill kit</li> <li>• large or toxic spills – evacuate area, notify Team Leader Waste Management and follow instructions.</li> </ul> <p>Spill clean up disposed of in contaminated soil bay.</p>	<p>Notify Team Leader Waste Management.</p> <p>Any instance of environmental harm must be reported to DEHP.</p>	<p>Spills recorded in site diary.</p>

## 5.5. Air Management

**Policy - MICC will take measures to reduce emissions to air**

<b>Responsibility</b>	Team Leader Waste Management to ensure operational activities reduce emissions to air
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Performance Criteria	Control Measures	Monitoring	Limits	Corrective Action	Reporting	Record Keeping
The release of noxious or offensive odours or any other noxious or offensive airborne contamination resulting from the site must not cause nuisance to any sensitive or commercial place.	<p>Natural geological barrier between landfill and residential areas to the west of the site.</p> <p>Waste is compacted daily and covered weekly.</p> <p>Animal burials are covered daily or immediately after burial.</p>	<p>Visual inspection by site operators.</p> <p>Complaints process.</p>	One legitimate complaint relating to air emissions emanating from the site.	Investigate source of air emission and options for improvement.	Instances of environmental nuisance recorded in monthly reports to Council.	Complaints and complaint reports recorded in Dataworks.

<b>Performance Criteria</b>	<b>Control Measures</b>	<b>Monitoring</b>	<b>Limits</b>	<b>Corrective Action</b>	<b>Reporting</b>	<b>Record Keeping</b>
The release of dust or particulate matter resulting from the site activities must not cause an environmental nuisance at any sensitive or commercial place.	Water truck is used on all internal roads daily to reduce dust. Should conditions increase dust generation onsite, additional rounds of the water truck.	Visual inspection by site operators. Complaints process.	One legitimate complaint relating to air emissions emanating from the site.	Investigate source of air emission and options for improvement.	Instances of environmental nuisance recorded in monthly reports to Council.	Complaints and complaint reports recorded in Dataworks.
The release of landfill gas must not cause environmental harm.	Cover waste weekly. Cap disused bays with soil to facilitate passive methane oxidation.	Visual inspection by site operators. Complaints process.	One legitimate complaint relating to air emissions emanating from the site.	Investigate source of air emission and options for improvement.	Instances of environmental nuisance recorded in monthly reports to Council.	Complaints and complaint reports recorded in Dataworks.

## 5.6. Noise Management

**Policy - MICC will ensure processes are in place to mitigate noise nuisance that may arise from the site.**

**Responsibility**

Director of Compliance and Utility Services, Team Leader Waste Management

Performance Criteria	Control Measures	Monitoring	Limits	Corrective Action	Reporting	Record Keeping
Noise from the site must not cause an environmental nuisance to a sensitive or commercial place.	Limit earthworks to hours of operation.  Maintain existing buffer and natural geographical formation mitigating noise migration to town.	Complaints process.	One legitimate complaint relating to noise emanating from the site.	Investigate source of noise and options for improvement.	Noise complaints to be included in monthly reports to Council.	Complaints and reports logged in Dataworks.

## 5.7. Water Management

### Policy - MICC will undertake water management onsite to reduce emissions to water and groundwater

#### Responsibility

- Team Leader Waste Management – ensure processes are in place to manage water
- Landfill Operators – implement water manage processes under the direction of Team Leader Waste Management
- Chemist – Water Quality Monitoring, review and record lab reports
- Senior Environmental Health Officer – advise on environmental issues and compliance, report actual or potential harm to DEHP

Performance Criteria	Control Measures	Monitoring	Limits	Corrective Action	Reporting	Record Keeping
Erosion and sediment control (ESCP) installed and maintained to minimise erosion and the release of sediment.	ESCP measures installed in areas where erosion is likely to occur.	Landfill Operators - visual monitoring during daily duties.	No evidence of environmental harm within the site or emanating from the site during and after rainfall events.	Restore damaged ESCP measures  Rehabilitate natural areas affected by erosion or sediment transport.	Landfill Operators – notify Team Leader Waste Management of ESCP issues.  Requirement to report environmental harm as per Table 1.	Records of any complaints recorded in Dataworks.

Performance Criteria	Control Measures	Monitoring	Limits	Corrective Action	Reporting	Record Keeping
<p>No release of contaminants from the site to any waters or the bed or banks of any waters.</p>	<p>Stormwater flows within the site gravity flow to central leachate dam for evaporation.</p> <p>During periods of heavy rainfall, utilise earthen bunds and drains to divert landfill stormwater to leachate dam and external flows to northern stormwater dam.</p>	<p>Quarterly monitoring in leachate dam.</p>	<p>Significant statistical difference from the baseline readings (see Improvement Plan)</p>	<p>Investigate sources of contamination.</p> <p>Review options for remediation and rectification.</p>	<p>Landfill Operators – notify Team Leader Waste Management of ESCP issues.</p> <p>Requirement to report environmental harm as identified in Table 1.</p>	<p>Water quality monitoring results recorded in Dataworks.</p>

<b>Performance Criteria</b>	<b>Control Measures</b>	<b>Monitoring</b>	<b>Limits</b>	<b>Corrective Action</b>	<b>Reporting</b>	<b>Record Keeping</b>
No release of stormwater runoff that has been in contact with any contaminants.	Stormwater flows from outside the landfill area directed via bunding to northern stormwater dam.	Surface water monitoring is undertaken in the leachate and stormwater dams.  Locations shown in Appendix A.	Significant statistical difference from the baseline readings (see Improvement Plan)	Inspect integrity of bunding and stormwater diversion measures.  Review options for remediation and rectification.	Landfill Operators – notify Team Leader Waste Management of ESCP issues.  Requirement to report environmental harm as identified in Table 1.	Water quality monitoring results recorded in Dataworks.
The release of contaminants to groundwater must not cause environmental harm.	Leachate gravity feeds to the central leachate dam for evaporation.	Groundwater monitoring three times per year at 11 bores.  Parameters in Table 6; bore plan in Appendix A.	Significant statistical difference from the baseline readings (see Improvement Plan)	Investigate sources of contamination.  Review options for remediation and rectification.	Landfill Operators – notify Team Leader Waste Management of ESCP issues.  Requirement to report environmental harm as identified in Table 1.	Water quality monitoring results recorded in Dataworks.

<b>Performance Criteria</b>	<b>Control Measures</b>	<b>Monitoring</b>	<b>Limits</b>	<b>Corrective Action</b>	<b>Reporting</b>	<b>Record Keeping</b>
No statistically significant adverse changes over back ground values at locations hydraulically down gradient of the landfill unit.	Trending of groundwater quality monitoring.	Team Leader Waste Management to review trending after each monitoring event.	Significant statistical difference from the baseline readings (see Improvement Plan)	Investigate sources of contamination. Review options for remediation and rectification.	Landfill Operators – notify Team Leader Waste Management of ESCP issues. Requirement to report environmental harm as identified in Table 1.	Records of contaminant releases to groundwater.

## 5.8. Fauna and Flora Management

**Policy - To implement appropriate measures to prevent impacts to fauna and flora and reduce the impacts of pest species.**

### Responsibility

- Rural Lands Officer - Feral animals, injured wildlife, declared weeds, biosecurity
- Vermin Control - mosquitoes, flies and other vectors management
- Onsite staff – deployments of fly control, onsite activities (compaction/covering of wastes) to reduce impacts, visual inspections and notifications

Performance Criteria	Control Measures	Monitoring	Limits	Corrective Action	Reporting	Record Keeping
No increase in pest species and vermin.	Onsite baiting with Quickbayt to control flies and maggots. Immediate covering of animal carcasses. Daily compaction and weekly covering of all rubbish. Rubber jaw traps for dingoes and wild dogs when required. Spraying of weeds. Pest Management Plan.	Visual inspection by site operators.	Increase in vermin or insects on site. Noxious weed identified on site.	Inspect control measure to ensure they are working properly, rectify any issues. Notify Vector Control Officer of increases in vermin and insects. Notify Rural Lands Officer of noxious weeds.	Notify Vector Control of increases in vermin and insects. Notify Rural Lands Officer of noxious weeds.	Record actions in site diary.

<b>Performance Criteria</b>	<b>Control Measures</b>	<b>Monitoring</b>	<b>Limits</b>	<b>Corrective Action</b>	<b>Reporting</b>	<b>Record Keeping</b>
Measures are in place to manage fauna and flora on site.	Fences exclude access to areas of vegetation to prevent damage by unapproved access.	Visual inspection by site operators.	Injured wildlife identified.	Notify Rural Lands Officer of injured wildlife and follow direction.	Notify DEHP of actual or potential environmental harm, if relevant.  Notify DAF of actual or potential biosecurity incidents, if relevant.	Record in site diary.

## 6. Performance Review and Continual Improvement

### 6.1. Review

Regular review of this Site Based Management Plan will be undertaken annually, in conjunction with the preparation of the annual report to DEHP. The annual review will include:

- review of environmental aspects, impacts and control measures
- review of incidents, causes and outcomes
- review of monitoring plan, results, limits and corrective actions
- review of roles and responsibilities
- review of reporting
- review of improvement plan progress

The outcomes of the review should be recorded in Dataworks. If the review identifies areas of the SBMP that require updating, this should be completed in a timely manner and relevant staff made aware of the changes.

### 6.2. Improvement Plan

An Improvement Plan is part of the SBMP to ensure continual improvement of the landfill operations. The plan addresses the need to undertake improvements that were identified during the development of this plan, and comparison of existing practices in comparison to relevant guidelines.

The Improvement Plan contains improvements that are required in the next 12 – 18 months (2016-2017) and will be updated annually based on internal and external audit results, plan reviews, non-conformances, incident and emergency feedback and future risk assessment reviews.

**Table 7 Improvement Plan**

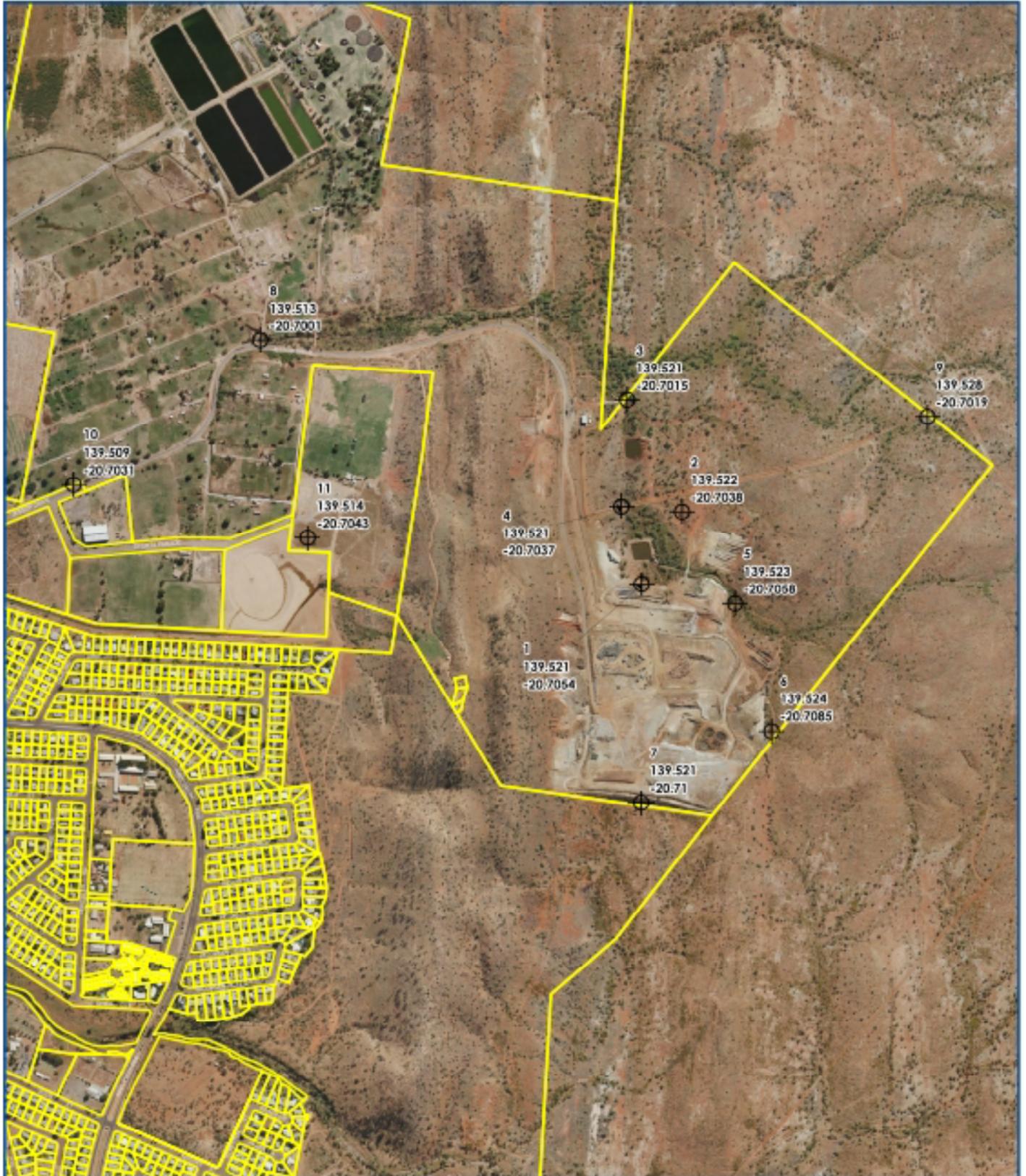
Reference	Item	Timeframe	Responsibility
IMP-1	Carry out recycling transfer station project as per proposal	December 2017	Team Leader Waste Management and Environmental Compliance and Administration Officer
IMP-2	Trending of water quality data and assessment of statistically significant changes from baseline levels	January 2018	Environmental Compliance and Administration Officer

*Site Based Management Plan - Mount Isa City Council Refuse Facility*

<b>Reference</b>	<b>Item</b>	<b>Timeframe</b>	<b>Responsibility</b>
IMP-3	Staff training on Site Based Management Plan and Environmental Responsibilities	December 2017	Team Leader Waste Management and Environmental Compliance and Administration Officer
IMP-4	Installation of emergency button at weighbridge	December 2017	Director of Compliance and Utility Services

## Appendix A – Groundwater Monitoring Bores

### Groundwater Monitoring Bore Map



## **Appendix B – Weighbridge Safety Plan**

**Weighbridge Safety Plan – See attached document**

## Appendix C – Trackable Waste Codes

### Trackable Wastes and Codes

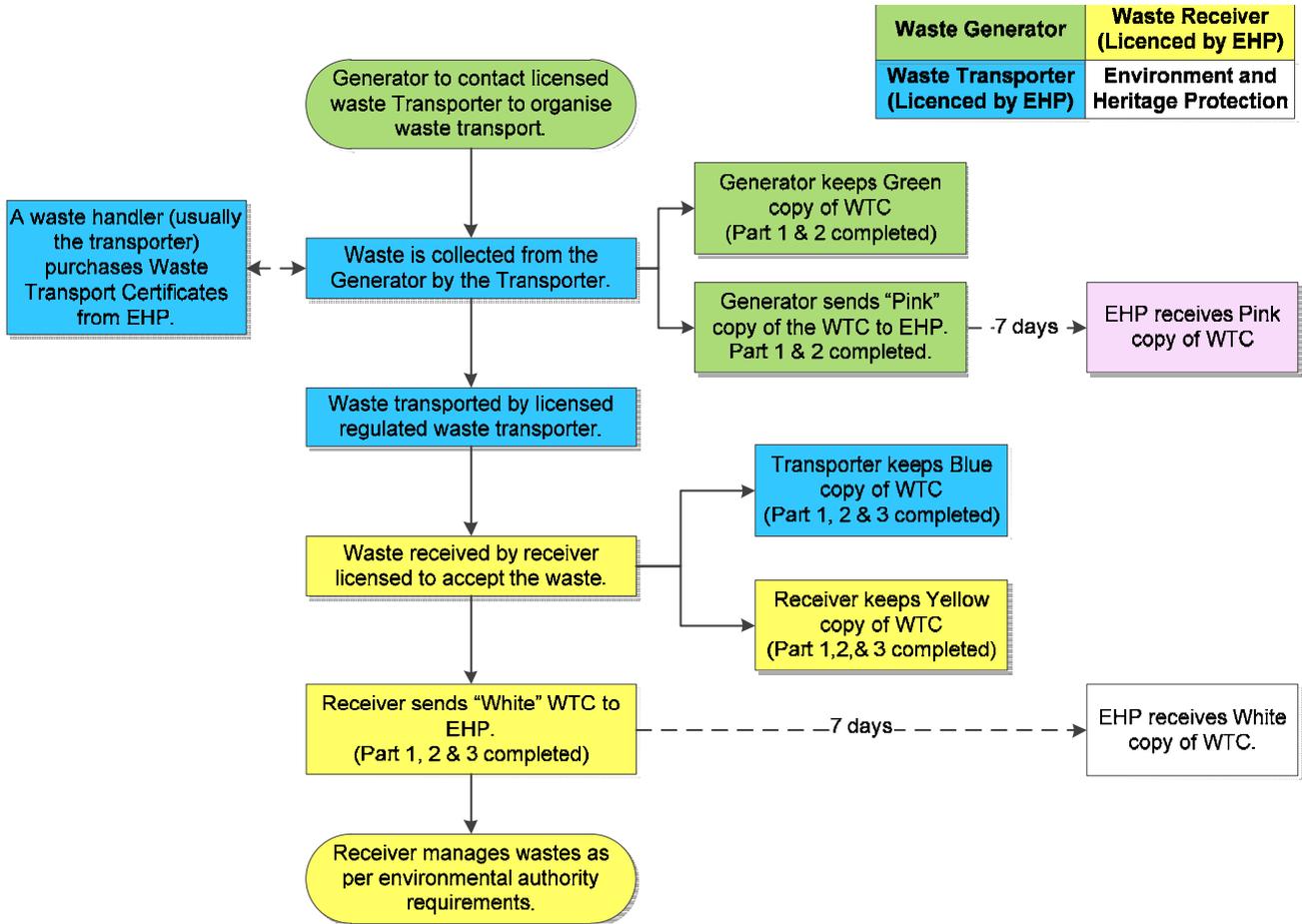
Schedule 1 Trackable waste	
Type of waste	Waste code
Acidic solutions and acids in solid form	B100
Animal effluent and residues, including abattoir effluent and poultry and fish processing wastes	K100
Antimony and antimony compounds	D170
Arsenic and arsenic compounds	D130
Asbestos	N220
Barium compounds, other than barium sulphate	D290
Basic (alkaline) solutions and bases (alkalis) in solid form	C100
Beryllium and beryllium compounds	D160
Boron compounds	D310
Cadmium and cadmium compounds	D150
Chemical waste arising from a research and development or teaching activity, including new or unidentified material and material whose effects on human health or the environment are not known	T100
Chlorates	D350
Chromium compounds (hexavalent and trivalent)	D140
Clinical and related waste	R100*
Copper compounds	D190
Cyanides (inorganic)	A130
Cyanides (organic)	M210
Encapsulated, chemically-fixed, solidified or polymerised wastes	N160*
Ethers	G100
Filter cake, other than filter cake waste generated from the treatment of raw water for the supply of drinking water	N190
Fire debris and fire wash waters	N140*

<b>Schedule 1 Trackable waste</b>	
Flash	N150
Grease trap waste	K110
Halogenated organic solvents	G150
Highly odorous organic chemicals, including mercaptans and acrylates	M260
Inorganic fluorine compounds, other than calcium fluoride	D110
Inorganic sulfides	D330
Isocyanate compounds	M220
Liquid food processing waste	K200
Lead and lead compounds	D220
Material containing polychlorinated biphenyls (PCBs), polychlorinated naphthalenes (PCNs), polychlorinated terphenyls (PCTs) or polybrominated biphenyls (PBBs)	M100
Mercury and mercury compounds	D120
Metal carbonyls	D100
Mineral oils	J100
Nickel compounds	D210
Non-toxic salts	D300
Oil and water mixtures or emulsions, or hydrocarbons and water mixtures or emulsions	J120
Organic phosphorous compounds	H110
Organic solvents, other than halogenated solvents	G110
Organohalogen compounds, other than another substance stated in this schedule	M160
Perchlorates	D340
Pharmaceuticals, drugs and medicines	R120*
Phenols and phenol compounds, including chlorophenols	M150
Phosphorus compounds, other than mineral phosphates	D360
Polychlorinated dibenzo-furan (any congener)	M170
Polychlorinated dibenzo-p-dioxin (any congener)	M180

<b>Schedule 1 Trackable waste</b>	
Residues from industrial waste treatment or disposal operations	N205
Selenium and selenium compounds	D240
Sewage sludge and residues, including night soil and septic tank sludge	K130
Surface active agents (surfactants) containing principally organic constituents, whether or not also containing metals and other inorganic materials	M250
Tannery wastes, including leather dust, ash, sludges and flours	K140
Tarry residues arising from refining, distillation and any pyrolytic treatment	J160
Tellurium and tellurium compounds	D250
Thallium and thallium compounds	D180
Triethylamine catalysts for setting foundry sands	M230
Tyres	T140
Vanadium compounds	D270
Waste containing peroxides other than hydrogen peroxide	E100
Waste from a heat treatment or tempering operation that uses cyanides	A110
Waste from surface treatment of metals or plastics	A100
Waste from the manufacture, formulation or use of—	
Biocides or phytopharmaceuticals	H100
Inks, dyes, pigments, paints, lacquers or varnish	F100
Organic solvents	G160
Photographic chemicals or processing materials	T120
Resins, latex, plasticisers, glues or other adhesives	F110
Wood-preserving chemicals	H170
Waste from the manufacture or preparation of pharmaceutical products	R140
Waste of an explosive nature, other than an explosive within the meaning of the <i>Explosives Act 1999</i>	E120
Wool scouring wastes	K190
Zinc compounds	D230

## Appendix D – Waste Tracking Reporting Process

### Waste Tracking Reporting Process



## **Appendix E – Asbestos Identification and Management**

**Asbestos Identification and Management Procedure – See Attached**

## Appendix F – Waste Acceptance

### Waste Acceptance Criteria

Contaminant	Maximum contaminant level for clay lined landfills (mg/kg)
<b>Monocyclic aromatic hydrocarbons (MAH)</b>	
Benzene	10
Ethyl Benzene	500
Toluene	300
Xylene	250
Total MAH	500
<b>Polycyclic aromatic hydrocarbons (PAH)</b>	
Total PAH	500
<b>Phenolic contaminants</b>	
<i>Non halogenated compounds</i>	
Phenol	100
m-cresol	250
o-cresol	250
p-cresol	250
Total non halogenated phenol	250
<i>Halogenated phenol</i>	
Chlorophenol	1
Pentachlorophenol	5
Trichlorophenol	5
Total halogenated phenol	5
<b>Chlorinated Hydrocarbons</b>	
<i>Chlorinated aliphatic compounds</i>	
Carbon tetrachloride	5
1,2 Dichloroethane	10
1,1 Dichloroethene	1
Tetrachloroethene	50
<i>Chlorinated aromatic compounds</i>	
Chlorobenzene	100
Hexachlorobenzene	1
Total chlorinated aliphatic compounds	100
Non scheduled solid polychlorinated biphenyls (PCBs)	2
<b>Pesticides</b>	
Total organochlorine	5
Total herbicides	25
Total carbamates	25
Total organophosphorus	10
<b>Petroleum hydrocarbons</b>	
Total petroleum hydrocarbons (C <sub>6</sub> -C <sub>9</sub> )	500
Total petroleum hydrocarbons (C <sub>10</sub> -C <sub>14</sub> )	5,000
Total petroleum hydrocarbons (C <sub>15</sub> -C <sub>28</sub> )	10,000
Total petroleum hydrocarbons (C <sub>29</sub> -C <sub>36</sub> )	10,000

## Appendix G – Spill Kits

### Spill Kit Instructions

Initially make an assessment of severity – seek advice from Team Leader Waste Management. For severe spills on the weighbridge, evacuate area and wait for advice and instruction.



#### 1.0 - PPE

use personal protective equipment at all times

- gloves
- boots
- eye protection

#### 2.0 Absorbent Snakes or Booms

- use booms or snakes to contain the spill
- place the boom/snake at the forward edge of the spilled fluid in the direction it is moving



#### 3.0 Mop-up

- use absorbent pads, rags and sawdust to mop up the spill
- remove all contaminated spill kit equipment



#### 4.0 Top-up Spill Kit

reorder new equipment to ensure spill kit is complete



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