



# POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN MUDGEE WASTE FACILITY

PREPARED FOR MID-WESTERN REGIONAL  
COUNCIL BY GEOLYSE IN AUGUST 2012



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## DRAWINGS

Drawing 08A-EV01 – Title Sheet, Drawing List and Site Locality

Drawing 08-EV02- Plan of Neighbours

Drawing 08-EV03 – Site Plan

Drawing 08-EV04 – Emergency Evacuation Plan

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# Foreword

This is the Supporting Statement for the Pollution Incident Response Management Plan (PIRMP). The PIRMP is a functional document. It is designed to assist personnel at the Mudgee Waste Facility (MWF) to correctly identify pollution incidents and detail the procedures for the response and reporting of a pollution incident.

The structure and scope of this Supporting Statement and PIRMP reflects the requirements of the Environmental Protection Authority's *Guidelines: Preparation of pollution incident response management plans, March 2012* and in doing so embodies the principles of best practice environmental management.

Utilization of this PIRMP aims to improve, monitor and demonstrate environmental performance. If you have any suggestions for amendments, additions or improvements, please discuss these with your supervisor.

.....  
Mid-Western Regional Council  
Manager Environmental Services

Date:

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# Introduction

## 1.1 PURPOSE

This Supporting Statement and PIRMP have been prepared in accordance with the *Protection of the Environment Legislation Amendment Act 2011 (POELA Act)* and reflects the requirements specified in the Environment Protection Authority's (EPA's) *Guidelines: Preparation of pollution incident response management plans, March 2012*.

The PIRMP details:

- Procedures for notifying a pollution incident to relevant persons;
- Actions to be taken to reduce and/or control pollution; and
- Procedures for coordinating those notified and any action taken in combating the pollution.

## 1.2 DEFINITION OF POLLUTION INCIDENT

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 1997*:

“(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.”*

## 1.3 IDENTIFIED POLLUTION INCIDENT RISKS

The primary potential hazards to human health or the environment associated with the activity undertaken at this site – i.e. 'Pollution Incidents' - include the following:

- Identifying non-domestic quantities (more than 200 millimetres per tonne or 200 grams per tonne) of hazardous substances among waste;
- Surface or subsurface fires;
- Mixing of leachate and stormwater or waste and stormwater;
- Identification of any failure of an environmental protection system;
- Identification of a significant difference in groundwater indicator parameters;
- Confirmation of surface gas at the landfill at greater than 1.25 per cent methane (volume for volume);
- Confirmation of gas accumulated in buildings at greater than 1.25 per cent methane (volume for volume);
- Acts of vandalism or target of terrorist activity; or
- Any other incident or observation that could potentially pose an immediate environmental hazard outside normal operating conditions.

# Site Overview

## 2.1 SITE OVERVIEW

The Mudgee Waste Facility (MWF or the 'facility') has been operating as a waste facility since 1986. The 24 hectare property is owned by Mid-Western Regional Council. It is estimated that the site has a 30 year lifespan.

The MWF is zoned 'SP2 Infrastructure – Waste Depot' in the *Mid-Western Regional Council's Local Environmental Plan 2012*.

The Environment Protection Authority (EPA) has issued Environment Protection Licence 6348 in accordance with *Section 5.7 of the Protection of the Environment Operations Act 1997*. The licence requires that the total quantity of waste disposed at the premises must not exceed 100,000 tonnes per annum and that the quantity of clinical waste disposed of at the site must not exceed loads of 200kg each time. Furthermore, contaminated soils storage and treatment must only be undertaken within the purpose built contaminated soil treatment area.

As a condition of the licence, a Landfill Environmental Management Plan (LEMP) was prepared, which details the procedures to manage and operate the MWF to meet the relevant Environmental Goals specified in the *Environment Protection Authority's Environmental Guidelines: Solid Waste Landfills, 1996*.

The MWF is a general Solid (Putrescible). The facility accepts solid wastes including putrescible wastes and other wastes approved by the EPA. The facility may also receive inert waste. Excluded waste types are detailed below in **Section 2.4**. EPL 6348 also allows for composting and contaminated soil treatment to be undertaken at the facility.

## 2.2 SITE CHARACTERISTICS

The MWF is located approximately 5 km north-west of Mudgee (see drawing **08A\_EV01**). It comprises DP 44920 (Lot 107).

The area surrounding the facility to the north, east and south is predominantly rural pasture land and rural residential development (hobby farms). The area directly to the west is dense woodland with some residential properties. A former quarry exists directly to the north-east. The edge of a proposed urban extension of Mudgee is located approximately 500m to the south-east, and Council's Sewage Treatment Plant (STP) is directly to the south.

The nearest residential property to the facility is located approximately 150m from the north-western corner of the boundary. Further details of neighboring properties (residential, commercial and industrial categories) are provided in drawing **08A\_EV02**.

Access to the MWF is via Hill End Road and Blain Roads both being two lane sealed roads. Within the site, sealed and formed gravel access roads lead to the various defined tipping areas and processing pads. The southern portion of the site is currently used for landfilling with public recovery shop, receival areas and Materials Recycling Facility (MRF) located close to the site entrance to the north-east.

The MWF is fenced along the main entrance and northern and eastern boundary with 1.8m chain mesh security fence. Beyond this western and southern boundaries of the site are enclosed by a 1 m stock proof fence.

Previous and current landfilling practices have altered the local topography significantly, creating numerous rises, as such, the current landfill area no longer retains the natural topography but is designed to channel surface water and minimise off-site impact of the landfill operations.

The site topography and drainage have been engineered to ensure that there is limited stormwater runoff into and out of the site, thus minimising any off-site impact. Site-generated water

is collected in the leachate and sediment ponds at the northern end of the landfill. The stormwater pond drains into a surface water channel which runs towards Hill End Road. After flowing under Hill End Road, the watercourse travels north and then east. Leachate is pumped to Sewer Treatment Plant. There are at least four farm dams along the drainage line before the closest natural watercourse, the Cudgegong River, about 3.5 km downstream. Clean stormwater generated off-site and draining from west to east is diverted along a drain at the western boundary of the premises and continues downstream in this drainage line (see drawing 08A\_EV02).

Groundwater is routinely monitored through a system of 9 piezometers at 7 locations around the landfill (see drawing 08A\_EV03).

There is no remnant natural vegetation over the site. The central capped areas of the landfill have been revegetated with a perennial grass mix. Mature native trees along the northern, eastern, western and southern boundaries act as visual and wind buffers.

## 2.3 SITE SUPERVISION AND CONTROL

The MWF is open to the public between 8:00 am and 5:30 pm weekdays and 8.00am to 5.00pm weekends. The facility is closed on Good Friday and Christmas Day, Boxing Day, New Years Day, Easter Monday and the Queen's Birthday holidays. Access to the site outside of these hours (e.g. for special circumstances and emergency waste disposal) is subject to the approval of the Manager of Environmental Services.

MWF is supervised at all times when open for the receipt of wastes. The facility is staffed by qualified and experienced personnel including a Weighbridge Operator and Landfill Operator.

Waste deposited in the active landfill cell is immediately spread and compacted, and is lightly covered with soil at the end of daily operations. The cover material is sourced from the area to the east of the existing landfill and is the location of a future landfill cell.

Lockable security gates are in place at the access points to the facility. All gates are locked outside of the specified opening hours except for when approved by the Manager of Environmental Services in special circumstances. The site is also monitored by CCTV, with one camera on the weighbridge looking towards Hill End Road, with another at the top of the landfill tip face looking onto the site buildings below, and other cameras inside and outside the recovery shop to prevent shoplifting. Security patrols are conducted, alarmed doors are checked and a site patrol conducted to prevent vandalism.

All vehicles are directed to the weighbridge upon entry to the facility and distributed appropriately according to waste type. Council maintains the sealed access road from the facility entry to the Public Reveal Station. Council staff are responsible for internal traffic control.

All light vehicles, trailers and up to two tonne loads are directed to disposal skips in the Public Reveal Station. Larger loads of waste (i.e. in excess of two tonne) are, after being weighed on the weighbridge, directed to the active landfill face and/or operating site for the waste item in question.

No members of the public are permitted to scavenge at the active tip face. Recovery of recyclable and reusable materials for the Recovery Shop is performed by Council staff or under the direct supervision of Council staff.

Any asbestos received is taken to the asbestos disposal area and immediately covered with soil. On the rare occasion contaminated soil is received, this soil is taken to the contaminated soil treatment area and aired to allow volatilization of hydrocarbons.

## 2.4 EXCLUDED WASTES

The MWF does not accept the following types of wastes:

- Liquid wastes of any description (other than commercial grease trap wastes).



- Radioactive material, sharps, cytotoxic waste, bulk blood, body fluids, recognisable body parts, infectious waste, microbiological and pathological wastes, laboratory chemicals, poisons and pharmaceutical waste;
- Any inflammable liquid material derived from grease, oil, tar, petroleum, shale or coal;
- Any sludge or material (unless proven to be innocuous or harmless) being the refuse from any industrial process carried out in any tanning or leather processing plant, any petroleum or petrochemical plant, any chemical plant, any metal treatment plant, any paint-manufacturing plant;
- Any material containing arsenic, cyanide or sulphide;
- Any toxic soluble salt of barium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, silver, zinc;
- Any pesticide or herbicide and in particular chlorinated hydrocarbons (organochlorines), fluorinated hydrocarbons, organophosphates, phenols; and
- Any soluble acid or alkali, acidic or basic compounds.

If an excluded waste was to be discovered on the site, the Manger Environmental Services, would be notified immediately. If it is considered hazardous the PIRMP will be activated. If not hazardous and contained it will be stored in the household hazardous waste storage until collection by contractor.

If the waste is leaking, the local fire brigade would be contacted and requested to bring a hazmat container for the containment of hazardous materials.

Any of the above wastes may only be disposed of at the MWF following EPA approval. Signs defining excluded wastes and penalties for the deposition of excluded wastes are prominently displayed at the point of entry to the site.

## 2.5 SITE SAFETY EQUIPMENT

The MWF maintains a water Truck with a 16000 litre tank, pump, hose and water cannon. The MRF building is protected from fire by several hose reels, fire extinguishers and hydrants.

To manage leaks, chemicals such as diesel fuel are kept on mobile self-bunded trolleys to allow their safe use in less well protected areas of the site. "Spill Sorb" or similar is present on site to manage fuel and oil spills. The used Spill Sorb is then bagged and deposited in the landfill. In the event of a chemical spill, PPE is provided for onsite staff which consists of safety goggles, respirator, asbestos kits, overalls and protective gloves.

For unknown chemical spills emergency services are to be called to contain as they have access to breathing apparatus.

# Risk Management and Pre-emptive Actions

## 3.1 INTRODUCTION

The following section outlines current operational procedures and design intended to minimise and manage risk. Members of staff working on site are responsible for being aware and notifying the Waste Supervisor of any potential pollution incidents on the premises. All management procedures detailed within the LEMP must be adhered to.

## 3.2 PRE-EMPTIVE ACTIONS

### 3.2.1 IDENTIFYING NON-DOMESTIC QUANTITIES OF HAZARDOUS SUBSTANCES

The following practices apply to screening of incoming wastes:

- Public access is only permitted during opening hours;
- Drivers are asked to describe the type of waste to be deposited on entry to the Facility;
- Inspections of waste loads are made when required;
- Drivers are directed to the correct area of the facility for disposal of specific loads (e.g. builder's wastes, greens, whitegoods, tyres, derelict cars etc.);
- Wastes are monitored and inspected as they are being discharged to ensure excluded non-approved wastes are not being disposed; and
- Wastes are monitored and inspected during spreading, compaction and covering.

The following steps are undertaken if non-domestic quantities of hazardous wastes are identified:

- If identified **at point of entry** the vehicle is refused entry and the driver provided with disposal options if known or to contact the EPA for advice on proper disposal of the hazardous waste.
- If identified **during waste deposition** the Site Operators immediately advise the customer that the waste is not acceptable and organises for the waste to be loaded back onto the vehicle, where practicable and safe to do so. The supervisor then escorts the load off-site and provides disposal options if available or advises the driver to contact the EPA for advice in the proper disposal of the excluded waste. and

If identified **during waste spreading and compaction** the Site Operators immediately notify the Supervisor or Manager who makes all practicable efforts to identify the source of the waste (e.g. labelling, waste type). If the waste is contained and can be stored it will be removed to the domestic hazardous disposal area and the supervisor will arrange a disposal contractor. If waste is not contained is safe, staff wearing PPE will attempt to contain by bunding, absorbing and the supervisor will contact the EPA regarding disposal. This identified in enclosed Site Plan **08A\_EV03**. The incident is reported as described in **Section 2.4**

### 3.2.2 SURFACE OR SUBSURFACE FIRES

The potential for fires to occur at the site are controlled by:

- A security fence to prevent unauthorised access and acts of vandalism;
- Maintaining machinery in good working order to minimise risk of sparks;
- Smothering immediately with soil or water sprayed from the water cart;
- Adequately compacting and covering waste;
- Mulched green waste has the capacity to spontaneously combust. This risk is minimised via shaping into divided windrows (i.e. small cones) to isolate/contain any fires;
- Regular litter patrols;
- Ensuring fire breaks are maintained around any temporary stockpile of combustibles;
- Access to on-site firefighting equipment; and
- Accepting only permitted wastes.

In addition to the above preventative measures, operators at the facility maintain the firefighting equipment to ensure that the on-site firefighting capability is maintained. Specifically this involves:

- Ensuring that the water cart permanently located at the facility is full at all times and that it is positioned in a readily accessible location;
- Weekly testing of the tanker pump and checks that the motor is topped with fuel and oil.

### 3.2.3 MIXING OF LEACHATE AND STORMWATER OR WASTE AND STORM WATER

The potential for the mixing of leachate and stormwater or waste and stormwater is controlled by ensuring that the level of the leachate ponds and the integrity of stormwater and leachate drains are regularly checked. A water balance/ study was carried out by Geolyse in November/ December 2016. This study was to ensure the adequacy of the both the stormwater and leachate ponds and to determine and mark within the leachate pond the level of freeboard required. If the level of a pond reaches the freeboard marker it is too high and the excess water is pumped to the sewer treatment plant to create airspace. If pumping is failing to keep up with inflows the Manager of Environmental Services should be notified immediately.

Appendix B Contains the procedure for sampling of leachate or surface waters and a chain of custody sheet should there be a discharge of leachate or unplanned discharge of stormwater.

### 3.2.4 CONFIRMATION OF GAS ACCUMULATED IN BUILDINGS

Gas accumulation monitoring of buildings is undertaken on a monthly basis. If detected at a concentration that exceeds the threshold limit the EPA is notified within 24 hours. A plan will be provided and further testing will be carried out as per the requirements of the Environmental Guidelines Solid Waste Landfills, second edition 2016.

### 3.2.5 ACTS OF VANDALISM OR TARGET OF TERRORIST ACTIVITY

The boundary road fence along Hill End Road limits unauthorised access outside operational hours. CCTV is installed and after hours security patrols are undertaken as a deterrent. All staff are required to be vigilant and aware that the site is a potential target for vandalism, particularly by arsonists

### 3.3 INVENTORY OF MAINTENANCE POLLUTANTS

The following pollutants can be stored on site in quantities required for routine maintenance necessary for operations at the facility:

#### ATTACHMENT 2 - SUMMARY OF POTENTIAL POLLUTANTS

POLLUTANT TYPE/ SUBSTANCE	SOLID, LIQUID, GAS or POWDER	QUANTITY	LOCATION (see site plan)	TYPE OF CONTAINMENT	MSDS
Leachate	Liquid	1,550,00 litres ( leachate dam primary 300 kls, secondary 250 kls and overflow 1,000,000 kls)	Leachate Dams	Primary and secondary earth formed with concrete base. Overflow concrete spillway.	NA
Used tyres	Solid	100 units	Resource Recovery Area	Hardstand	NA
Shredded green waste	Solid	3,000 cubic metres	Resource Recovery Area	Hardstand	NA
Diesel	Liquid	Up to 380 litres - 4 x 20L drums and 1 x300L fuel cell	Tip shop	Locked storage room	NA
Petrol	Liquid	Up to 20 litres	Tip Shop	Locked storage room	NA
Oil based paint	Liquid	Up to 50 litres	Tip shop	Bund	
Water based paint	Liquid	Up to 50 litres	Tip Shop	Bund	
Herbicides	Liquid	Up to 20 litres	Transfer Station	Bund and locked storage cabinet	Recorded as product comes in
Pesticides	Liquid	Up to 20 litres	Transfer Station	Bund and locked storage cabinet	Recorded as product comes in
Gas cylinders	Solid	Up to 30 units	Transfer Station	Pallet	NA
General household chemicals	Liquid or Powder	Up to 20 litres	Transfer Station	Bund and locked storage cabinet	Recorded as product comes in
Solvents	Liquid	Up to 20 litres	Transfer Station	Bund and locked storage cabinet	Recorded as product comes in
Lead Acid Batteries	Solid	Up to 100 units	Transfer Station	Bunded pallet	NA
Sediment	Suspended solid	Variable	Sedimentation retention dam	Dam	N/A

- Kamba M Herbicide
- Weedmaster Duo Herbicide
- 2T Motor Oil
- Unleaded Fuel
- Coolant
- STW ONG Hazsafe
- Quick set Concrete
- HE Liquid Detergent
- Castrol Grease
- Mortein Professional Surface Spray
- Agral Wetting and Spreading agent
- 2 stroke Fuel
- Stihl 3 Stroke Oil
- PIWE Disinfectant
- Powder Fresh Disinfectant
- Conoco Power Drive Fluid

Enclosed site plan **08A\_EV03** provides details of where these chemicals are stored on the premises as well as those on bunded pallets

### 3.4 IDENTIFIABLE WASTE POLLUTANTS

A variety of waste household pollutants can be stored on site in the Community Recycling Centre until collected by the contractor. This Community Recycling Centre was built with grant funding from the Waste Less Recycle More Scheme, the facility is approved by the EPA. The contractor supplies self-banded storage containers and Council staff are trained by the collection contractor on the correct storage of different waste types.

Household waste items stored on the premises, include gas cylinders, waste oil, batteries, fluorescent tubes, globes, smoke detectors and clinical waste (sharps).

### 3.5 POTENTIAL POLLUTION INCIDENTS

The potential main hazards to human health or the environment – i.e. 'Pollution Incidents' - associated with the activity undertaken at this site include the following:

- Identifying non-domestic quantities (more than 200 millimetres per tonne or 200 grams per tonne) of hazardous substances among waste;
- Surface or subsurface fires;
- Mixing of leachate and stormwater or waste and stormwater;
- Identification of any failure of an environmental protection system;
- Identification of a significant difference in groundwater indicator parameters;
- Confirmation of surface gas at the landfill at greater than 1 per cent methane (volume for volume);
- Confirmation of gas accumulated in buildings at greater than 1 per cent methane (volume for volume);
- Acts of vandalism or target of terrorist activity; or
- Any other incident or observation that could potentially pose an immediate environmental hazard outside normal operating conditions.

It is possible that dumping of hazardous waste may occur outside the boundary, but in close visual proximity to the MWF outside of normal operational hours. In this instance, if the pollution is a risk of material harm to the environment and/or human health then the local fire brigade should be contacted immediately. The initial response to the pollution and assessment of the situation thereafter will be managed by the local fire brigade. Refer to **Document A – Pollution Incident Decision Flow Chart** in **Appendix A** for details.

### 3.6 LIKELIHOOD, IMPACT AND CONTRIBUTING FACTORS TO POLLUTION INCIDENTS OCCURRING

Incidents can be classified as being of low, medium or high risk of occurring (likelihood) based on the past history of the facility, an assessment of management procedures, staff training and site layout.

The impact of an incident can be classed as low, medium or high based on the potential extent of off-site harm to humans and/or the environment.

The following assessment of potential pollution incidents detailed below is summarised in **Table 1.1** of **Appendix A**.



### 3.6.1 IDENTIFYING NON-DOMESTIC QUANTITIES OF HAZARDOUS SUBSTANCES

**Medium Likelihood** – Non-domestic quantities of hazardous waste could be discovered at point of entry into the site, during waste deposition, and/or during waste/recycling spreading, sorting and compaction.

**Low Impact** – The site has a protective practices visual inspections at weighbridge and tipping face, drainage, bunding and holding ponds which are likely to contain and prevent the immediate spread of hazardous substances outside of the premises.

**Contributing Factors** – Human errors made during waste screening

### 3.6.2 SURFACE OR SUBSURFACE FIRES

#### 3.6.2.1 Active Landfill, Public Reveal Areas and Recycling Facility

The MWF often deals with the sorting and deposition of combustible waste, coupled with the storage and use of some highly combustible chemicals and fuels.

**Medium Likelihood** – The likelihood of a fire within the active landfill area is relatively high, for example kerbside collection can include household fire embers and mulch can self-combust.

**Medium Impact** – It is probable that a fire of this nature could be contained due to the procedures and equipment in place. Therefore, the impact is classed as medium.

**Contributing Factors** – Factors which may increase fire risk include high winds, dry weather, prolonged periods of high temperatures and low humidity, spontaneous combustion and hot embers in waste deliveries. Human errors made during waste screening and the poor maintenance of plant and equipment which may spark a fire.

#### 3.6.2.2 Maintenance and Inactive Areas

**Low Likelihood** – The storage of potential accelerants such as maintenance chemicals and fuels is undertaken on-site, however as these are located in secure facilities and only utilised by trained staff, the risk is considered minimal.

**High Impact** – If a fire were to initiate within the chemical storage areas, or in an inactive area of the site, there is a high risk of spread off-site and to susceptible surrounding open pasture and wooded areas.

**Contributing Factors** – Factors which may increase fire risk include high winds, dry weather, prolonged periods of high temperatures and low humidity.

### 3.6.3 MIXING OF LEACHATE AND STORMWATER OR WASTE AND STORM WATER

**Low Likelihood** – the site has a protective system of compacted lining in leachate pond, in addition the leachate pond has a freeboard marker to indicate the maximum amount of leachate to hold. The site has drainage, bunding and holding ponds which contain surface water, leachate and waste. On-site roads are designed to channel and capture runoff.

**Medium Impact** – the site has a protective system of compacted lining on leachate pond, drainage, bunding and holding ponds which are likely to contain and prevent the immediate spread of surface water, leachate and waste outside of the premises. However the impact is considered to be medium due to the relative close proximity of Cudgegong River which eventually connects with drainage channels from the site. Any pollutants which reach the creek could cause harm to properties and downstream ecosystems. The level of leachate in the pond is monitored and excess leachate is discharged through the Sewer Treatment Plant, to a maximum licensed amount of 30kL per day.

**Contributing Factors** – Prolonged periods of heavy rain as well as lack of surface water pond and site maintenance may increase risk.

### 3.6.4 IDENTIFICATION OF ANY FAILURE OF AN ENVIRONMENTAL PROTECTION SYSTEM

**Low Likelihood** – the site has a protective system of compacted lining in leachate pond, drainage, bunding and holding ponds. The surface water, groundwater, accumulated gas and leachate of the premises is regularly monitored. Groundwater monitoring data is regularly assessed (at least every 5 years) for trends in contamination levels and impact on ground water quality. Trigger values have been set and monitoring results are checked against these trigger values as they are received, as per the requirements of the Environmental Guidelines Solid Waste Landfills, second edition 2016.

**Low Impact** – the site has a protective system of compacted lining in leachate pond, drainage, bunding and holding ponds and the surface water, groundwater, surface gas and leachate of the premises is regularly monitored which means any failure in this environmental protection system is likely to be identified prior to potential off-site impact.

**Contributing Factors** – Prolonged periods of heavy rain and/or a mechanical failure of the pump at the leachate pond may result in the leachate flowing directly into the adjacent creek system instead of being deposited back onto the active landfill cell, or to the Sewer Treatment Plant.

### 3.6.5 IDENTIFICATION OF A SIGNIFICANT DIFFERENCE IN GROUNDWATER INDICATOR PARAMETERS

**Low Likelihood** – the site has a protective system of compacted lining in leachate pond, drainage, bunding and holding ponds. The surface water, groundwater, surface gas and leachate of the premises is regularly monitored.

**Low Impact** – the site has a protective system of compacted lining, drainage, bunding and holding ponds. The surface water, groundwater, surface gas and leachate of the premises is regularly monitored which means any significant difference in groundwater indicator parameters is likely to be identified prior to potential off-site impact.

**Contributing Factors** – Prolonged periods of heavy rain may increase risk.

### 3.6.6 CONFIRMATION OF SURFACE GAS AT THE LANDFILL

**Low Likelihood** – the possible buildup of gas at the site is regularly monitored, by checking for accumulated gas in buildings.

**Low Impact** – the possible buildup of gas at the site is regularly monitored which means any significant gas emissions are likely to be identified well before there is a potential impact outside of the premises.

**Contributing Factors** – N/A.

### 3.6.7 CONFIRMATION OF LANDFILL GAS ACCUMULATED IN BUILDINGS

**Low Likelihood** – the possible accumulation of landfill gas in buildings at the site is regularly monitored.

**Low Impact** – the possible accumulation of landfill gas in buildings at the site is regularly monitored which means any significant methane gas emissions are likely to be identified well before there is a potential impact outside of the premises.

**Contributing Factors** – on-site buildings which have not been designed to prevent accumulation of methane gas.

### 3.6.8 ACTS OF VANDALISM OR TARGET OF TERRORIST ACTIVITY

**Low Likelihood** – The public receival area, MRF and site office are enclosed by secure fencing and monitored by CCTV, and during hours of closure the site is patrolled periodically by security guards. Although the site is of limited strategic value as a potential target for terrorism, the premises may prove attractive to arsonists as it is isolated from habited areas and deals with the sorting and deposition of combustible waste, coupled with the storage and use of often highly combustible chemicals.

**Medium Impact** – The site is surrounded by open pasture and wooded areas susceptible to fire.

**Contributing Factors** – Increased risk during hours of closure and sustained periods of hot and dry weather.

### 3.6.9 ANY OTHER INCIDENT OR OBSERVATION THAT COULD POTENTIALLY POSE AN IMMEDIATE ENVIRONMENTAL HAZARD OUTSIDE NORMAL OPERATING CONDITIONS

**Low Likelihood** – The site has significant and advanced environmental protection measures and monitoring schedules.

**Low Impact** – The site has significant and advanced environmental protection measures and monitoring schedules which are likely to identify, contain and prevent the immediate spread of environmental hazards outside of the premises even outside of normal operating conditions.

**Contributing Factors** – N/A.

# PIRMP

## 4.1 DEFINITION OF POLLUTION INCIDENT

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 1997*:

“(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.”*

## 4.2 NOTIFICATION OF POLLUTION INCIDENT

### 4.2.1 NOTIFICATION SPEED OF RESPONSE

The requirement for notification of a pollution incident has changed from 'as soon as practicable' to 'immediately'. In short, 'immediately' means 'promptly without delay', but it does not mean undertaking notification ahead of doing what is necessary to make safe.

### 4.2.2 NOTIFICATION OF RELEVANT AUTHORITIES

Where the pollution incident causes or threatens material harm to the environment or human health, all the following authorities must be notified by the Site Supervisor, Manager or other staff member should the Supervisor or Manager be unavailable:

Emergency Call Services – Emergency Hotline Number (24 hours)	* Call 000 if the incident presents an immediate threat to human health and/or property and a combat agency is required (i.e. NSW Fire and Rescue, NSW Ambulance Service, NSW Police Force) and then notify all other parties below including NSW Fire and Rescue via a local telephone number.	000
Mid-Western Regional Council	Kylie Stewart, Manager Waste & Environmental Services	0409 324 575
	Dale Hughes, Supervisor Waste	0400 768 566
	Amber Twin, Waste & Recycling Technical Officer	0419616348
<i>The Environment Protection Authority (EPA)</i>	<i>Emergency Hotline Number (24 hours)</i>	<i>131 555</i>
The Ministry of Health (via Public Health Units)	Public Health Officer on Call (24 hours)	B.H 63305880 A.H 0428 400 526
WorkCover NSW	WorkCover to be notified only for notifiable incidents. All notifications to WorkCover must be made by –	
	WHS Coordinator	0419 142 610
	Michelle George, Manager Human Resources	6378 2844
	Kylie Stewart, Manager Waste & Environmental Services	0409 324 575
Fire & Rescue NSW	Cudgegong Rural Fire Service	02 6372 4434**

\*\*If there is no immediate threat to human health and/or property i.e. a combat agency is not required, then the site supervisor is still required to follow that outlined above except for dialing 000.

A summary of the above pollution incident notification procedure is provided in **Document A** – Pollution Incident Decision Flow Chart in **Appendix A**

A copy of the pollution incident reporting form must be sent to the Bathurst EPA office once completed, normally this will be sent to the Manager or Technical Officer to sign off and forward. In addition a copy is to be filed in Council's electronic filing system, PIRMP master folder at Operations and a copy sent to Council's WHS Coordinator

#### 4.2.3 INFORMATION TO BE NOTIFIED

Under section 150 of the *POEO Act 1997*, the information about a pollution incident that must be notified is:

- The time, date, nature, duration and location of the incident;
- The location of the place where pollution is occurring or is likely to occur;
- The nature, estimated quantity or volume and the concentration of any pollutants involved, if known;
- The circumstances in which the incident occurred, including the cause of the incident, if known;
- The action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, if known; and
- Other information prescribed by the regulations.

Notification is required by the Site Supervisor or Manager or weighbridge operator immediately after a pollution incident becomes known. Any information required that is not known at the time the incident is notified must be provided when it becomes known.

A Pollution Incident Reporting Form is produced in **Appendix A** to assist in correctly recording and notifying the relevant authorities as detailed in **Section 4.2.2** above. These forms are available in triplicate in the weighbridge office and the duplicate book should be used when possible.

### 4.3 ACTIONS TO BE TAKEN DURING OR IMMEDIATELY AFTER A POLLUTION INCIDENT

- All site personnel with relevant training must make every effort to contain the pollution incident on site, without putting themselves at risk of harm.
- In the case of a fire and where safe, attempts must be made to extinguish or contain the fire immediately. This could be through the use of a fire extinguisher, fire hose, water cart or smothering with cover material.
- If the fire is after hours a plant operator is to be called to assist with spreading or covering waste as required. After hours staff contact details are provided in Appendix B.
- In the event of a chemical spill that is not contained by bunding, Spill Sorb (or similar) must be used to restrict the spread of the chemical.
- If the leachate ponds are nearing capacity, staff must initiate pumping of liquid to the Sewer Treatment Plant to retain headspace. If pollution is identified through groundwater or surface monitoring a hydrologist will be engaged to provide advice.
- In the case of a leachate discharge water samples need to be collected as per the instructions in Appendix B. Water testing bottles and necessary paperwork is kept in the weighbridge office.
- Should the facility need closing during normal operating hours, Council's media contact person must be notified. Contact Details are provided in Appendix B.
- The Mid-Western Regional Council Contact Person listed in table 4.2 is responsible for notifying the Director or Operations.



## 4.4 MINIMISING HARM TO PERSONS ON THE PREMISES

In the event of a pollution incident occurring staff will assess if there is a threat to staff, contractors and or customers on site. If there is no immediate threat the areas where the pollution incident is occurring will be isolated using traffic control. Should there be a threat to staff, contractors and or customers, the evacuation alarm in recycling will be activated and the weighbridge operator will notify waste staff by 2-way radio. The weighbridge operator will coordinate marshaling of customers and waste staff to the emergency evacuation point adjacent to the recycling amenities building (identified on **Site Plan 08A\_EV03**), after which they will be safely evacuated from site where appropriate. It is a condition of entry that in the event of an emergency, both the public and staff must adhere to directions given by the Site Supervisor.

## 4.5 EPA POWERS OF DIRECTION & NOTIFICATION OF NEIGHBOURS

Where the pollution incident causes or threatens material harm to the environment or human health, the EPA is notified in accordance with **Section 4.2**.

Once the EPA is notified, it is then for the EPA to determine whether commercial, industrial and residential neighbours of the site need to be contacted by Council and informed of the circumstances of the incident and actions being taken in response to it. If deemed necessary, the EPA then has powers to formally direct Council to notify the neighbours of the site.

Irrespective of whether the EPA directs the Council to notify neighbours and depending on the circumstances of the particular pollution incident, Council may at their own discretion voluntarily choose to notify neighbours.

Council would notify neighbours by 'door knocking' every neighbouring property identified on enclosed Site Plan **08A\_EV02**. A summary of the neighbor notification procedure is provided in **Document A – Pollution Incident Decision Flow Chart in Appendix A**.

## 4.6 IDENTIFICATION OF NEIGHBOURS

To assist the EPA in its decision on whether it needs to direct Council to notify neighbours and to assist Council in visiting all the local neighbours, an aerial plan **08A\_EV02** is enclosed which identifies the commercial, industrial and residential properties within 500m of the site boundary.

# Implementation

## 5.1 LEMP

The PIRMP forms part of the MWF *Landfill Environmental Management Plan* (LEMP). It updates **Section 9.2 'Incident Reporting'** and this Supporting Statement should be filed in the LEMP under **Appendix D**.

## 5.2 STAFF TRAINING

New members of staff at the facility should be inducted. This induction must cover the purpose, requirements and responsibilities detailed in this PIRMP.

All staff should receive sufficient training to enable them to carry out their assigned duties in a competent and safe manner. In particular:

- Staff must be capable of using the fire-fighting equipment;
- Staff must be capable of identifying excluded wastes;
- Staff must be capable of identifying potential pollution incidents; and
- Staff must be familiar with the requirements and procedures contained within this PIRMP. Staff competency will be monitored through audits, public complaints and pollution incident reports.

At least once every year staff should undertake a simulated pollution incident response exercise, including with emergency services, to familiarise site personnel with the requirements of this management plan. A register of staff training can be found in **Appendix A** and must be kept on site and updated regularly.

Regular site briefings and toolbox meetings should be held when considered appropriate to draw attention to potential pollution incidents and identify improvements to on-site safety procedures.

## 5.3 REVIEW AND UPDATE PIRMP

The PIRMP is a living document required to be reviewed and updated at least once every 12 months to ensure accuracy and effectiveness. A review must also be undertaken within one month of any pollution incident occurring.

For these reasons, document control is an important part of the environmental management system. It is critical that PIRMP storage locations are made known to all relevant staff members and that only the latest version is in use. Details of the version and date of issue are recorded on each page of the PIRMP in the bottom left hand corner.

Revised and updated versions of the PIRMP will always be issued with a covering memo summarising the changes. When a new PIRMP is received the old version is replaced in its entirety. A register for updating and testing the PIRMP can be found in **Appendix A** and must be kept on-site and updated regularly.

Five copies of any new PIRMP will need to be produced. They are to be distributed to the following:

- Manager of Environmental Services, Mid-Western Regional Council;
- Weighbridge Office, Mid-Western Regional Council;
- Waste Supervisor, Mid-Western Regional Council; and
- Technical Officer Waste and Recycling, Mid-Western Regional Council.
- Waste Facility Lunchroom

A copy must also be put on councils web page and a copy be filed in councils electronic filing system.

## References

***Environmental Guidelines: Solid Waste Landfills, January 1996-*** prepared by Environment Protection Authority

***Environmental Guidelines: Preparation of Pollution Incident Response Management Plans, March 2012*** – prepared by Environmental Protection Authority

***Environmental Protection Licence 6348, 31 May 2011*** – prepared by Environmental Protection Authority

***Mid-Western Regional Interim Local Environmental Plan 2008, August 2011*** – prepared by Mid-Western Regional Council.

***Mudgee Waste Facility Landfill Environmental Management Plan, (Draft), January 2009*** – prepared by GHD]

***Environmental Guidelines: Solid Waste Landfills, Second Edition 2016-*** prepared by Environment Protection Authority

***Environment Protection Licence 6348, May 2016*** Environment, Protection Authority

DO NOT COPY: VERSION CONTROLLED DOCUMENT

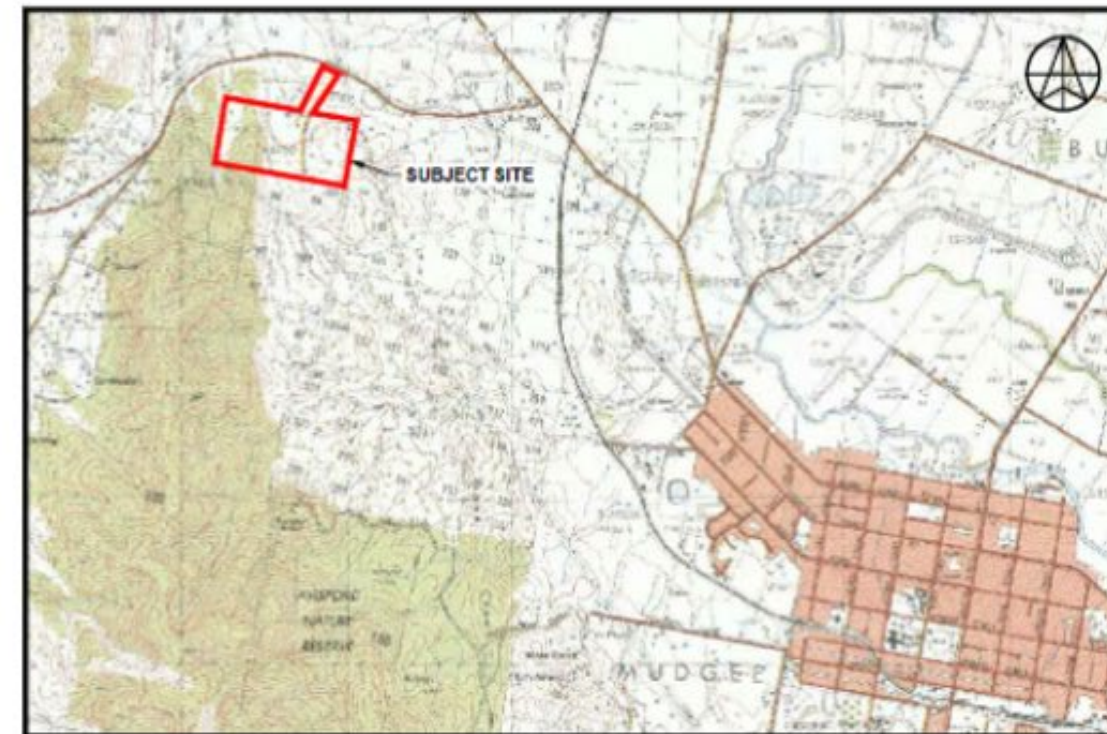
# Drawings

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# POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

## MUDGEE WASTE FACILITY NETWASTE

SCHEDULE OF DRAWINGS			
SHEET	TITLE	REV.	DATE
08A_EV01	TITLE SHEET, DRAWING LIST, AND SITE LOCALITY	A	02/08/2012
08A_EV02	PLAN OF NEIGHBOURS	A	02/08/2012
08A_EV03	SITE PLAN	A	11/11/2015
08A-	Emergency Evacuation Plan		11/11/2015



**SITE LOCALITY**  
NOT TO SCALE

**GEOLYSE**  
ORANGE  
orange@geolyse.com  
www.geolyse.com

84 PERLEY STREET  
P.O. BOX 190  
ORANGE, NSW 2800  
Ph. (02) 6360 5000  
Fx. (02) 6360 5000

No.	DATE	ISSUED TO	BY	DETAILS
A	02/08/12	LP	TS	ISSUED TO CLIENT

**POLLUTION INCIDENT  
RESPONSE MANAGEMENT PLAN  
MUDGEE WASTE FACILITY**

FILE REFERENCE: 212102\_08A\_EV01.dwg

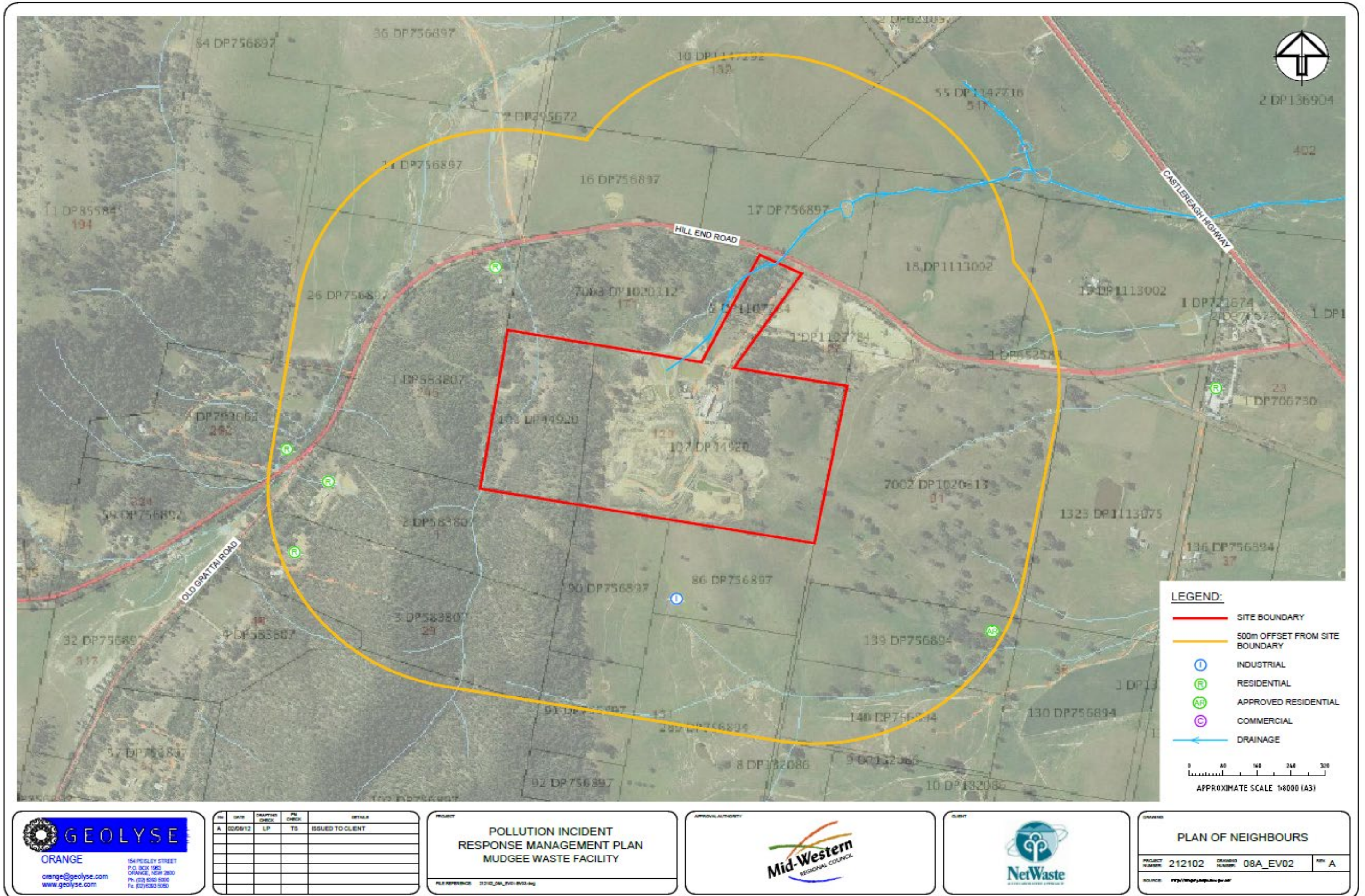
**Mid-Western**  
REGIONAL COUNCIL

**NetWaste**  
WASTE MANAGEMENT SERVICES

**TITLE SHEET, DRAWING LIST,  
AND SITE LOCALITY**

PROJECT NUMBER: 212102	DRAWING NUMBER: 08A_EV01	REV: A
SOURCE: <a href="http://www.netwaste.com.au">http://www.netwaste.com.au</a>		





**GEOLYSE**  
ORANGE  
154 PERLEY STREET  
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orange@geolyse.com  
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Ph: (02) 5340 5400  
Fx: (02) 4362 5400

No	DATE	DRAFTING CHECK	PM CHECK	DETAILS
A	02/06/12	LP	TS	ISSUED TO CLIENT

**POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN**  
**MUDGEES WASTE FACILITY**  
FILE REFERENCE: 212102\_OBA\_EV01\_BV01.dwg

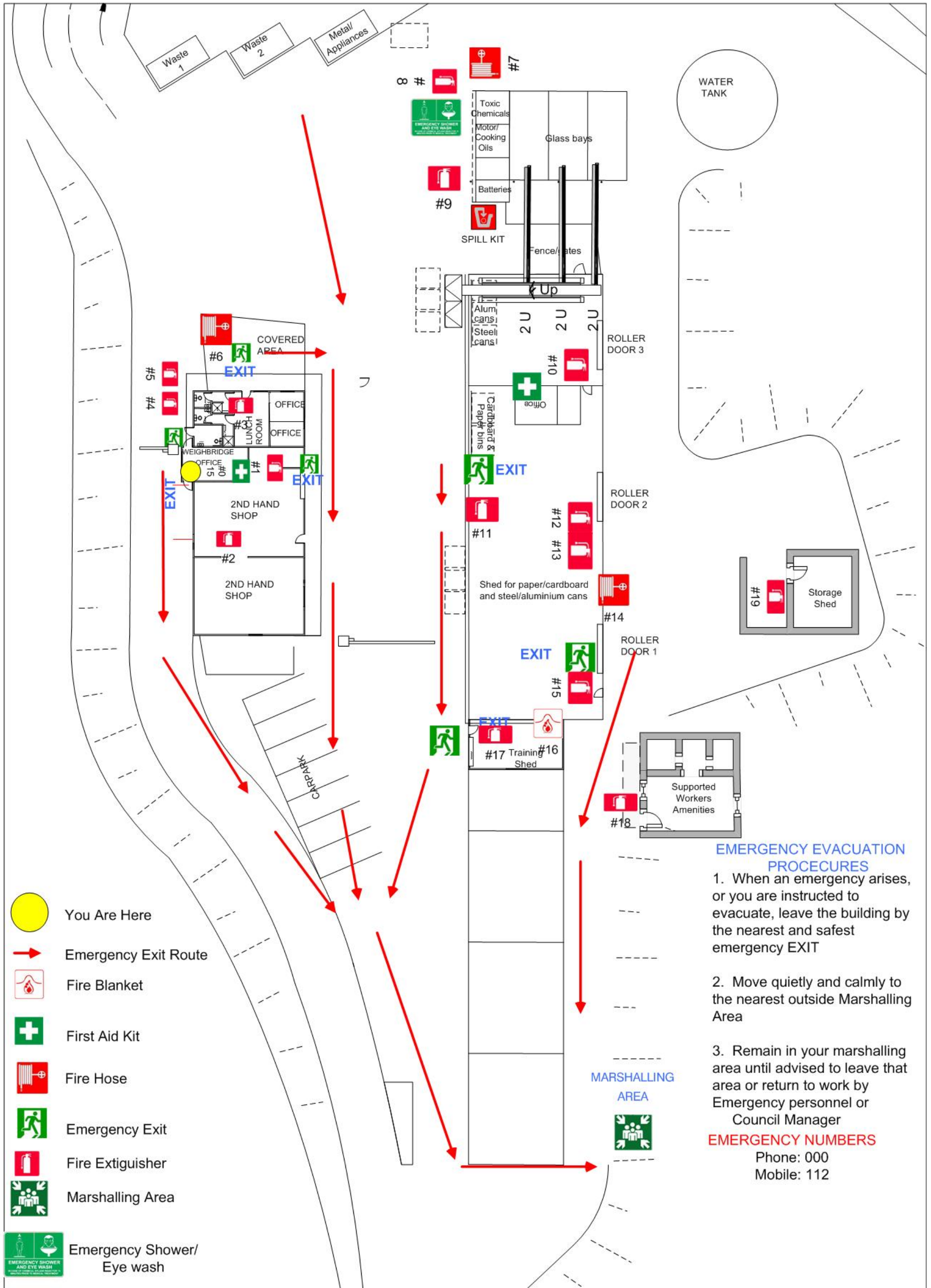
APPROVAL AUTHORITY  
**Mid-Western REGIONAL COUNCIL**

CLIENT  
**NetWaste**

DRAWING  
**PLAN OF NEIGHBOURS**  
PROJECT NUMBER: 212102 DRAWING NUMBER: OBA\_EV02 REV: A  
SOURCE: <http://www.geolyse.com.au>



# MWRC - MUDGE WASTE DEPOT & RECYCLING EVACUATION PLAN



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