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# 1. Introduction

This Pollution Incident Response Management Plan (PIRMP) has been prepared to describe the processes required to prepare and respond to a pollution incident at Gregadoo Waste Management Centre (GWMC) owned and operated by Wagga Wagga City Council (WWCC) under Environmental Protection Licence (EPL)-6671.

The Protection of the Environment Legislation Amendment Act 2011 (POELA Act) introduced several changes to the way pollution incidents are reported, managed and communicated to the community.

The Act includes a new requirement under Part 5.7A of the Protection of the Environment Operations Act 1997 (POEO Act) to prepare, keep, test and implement a pollution incident response management plan.

## 2. Objectives

The objectives of these plans are to:

- Ensure comprehensive and timely communication about a pollution incident to;
  - Staff at the premises (GWMC)
  - Environment Protection Authority (EPA)
  - NSW Ministry of Health
  - Work Cover NSW
  - Fire and Rescue NSW
  - People outside the facility who may be affected by the impacts of the pollution incident
- Minimise and control the risk of a pollution incident at the facility by requiring identification of risks and the development of planned actions to minimise and manage those risks.
- Ensure that the plan is properly implemented by trained staff, identifying persons responsible for implementing it, and ensuring that the plan is regularly tested for accuracy, and suitability.

Beyond meeting the legislative requirements; the purpose of the plan is to reduce the risk of an environmental pollution incident occurring and given the residual risk that will always be present help to coordinate an appropriate and timely response should such an incident occur.

# 3. Legislative requirements

The specific requirements for pollution incident response management plans are set out in Part 5.7A of the POEO Act and the Protection of the Environment Operations (General) Regulation 2009 (POEO (G) Regulation). In summary, this provision requires the following:

- All holders of environment protection licences must prepare a pollution incident response management plan (section 153A, POEO Act).
- The plan must include the information detailed in the POEO Act (section 153C) and be in the form required by the POEO (G) Regulation (clause 98B).
- Licensees must keep the plan at the premises to which the environment protection licence relates or, in the case of traceable waste transporters and mobile plant, where the relevant activity takes place (section 153D, POEO Act).
- Licensees must test the plan in accordance with the POEO (G) Regulation (clause 98E).

## 4. Definition of a pollution incident

The definition of a pollution incident is:

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

A pollution incident is required to be notified if there is a risk of 'material harm to the environment', which is defined in section 147 of the POEO Act as:

- a)** Harm to the environment is material if:
  - i. it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
  - i. 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.

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

There are new associated offences, for individuals and corporations, for not preparing a plan, not keeping the plan at the premises to which it relates, not testing the plan in accordance with the Regulations and not implementing the plan in the case of an incident.

# 5. Pollution incident response procedure

Whoever is aware of the pollution incident must immediately contact the individuals responsible for managing the incident response and the relevant authorities. The person(s) who may be aware of an incident are:

- Employee of WWCC
- Agent of WWCC (Contractor)
- Employer or principal (WWCC)
- Occupier of the premises or
- Person carrying out an activity (Not being a WWCC employee or contractor)

The position title and 24 hour contact details of individuals responsible for managing the incident response and notifying the relevant authorities are in appendix 1.

In the event of that the weighbridge operator, Team leader-solid waste and GWMC Facility Manager cannot be contacted, WWCC employee or agent of council (Contractor) shall manage the incident response and notify the relevant authorities. If the incident presents an immediate threat to human health, environment or property then initially contact the following GWMC officers as appropriate.

1. Staff and Contractors are to inform the assistant Team Leader immediately.
2. In the absence of the Assistant Team leader - Staff and Contractors are to inform the Team Leader (Solid waste).

3. In the absence of Team Leader staff and contractors are to inform the GWMC Facility Manager.

**The Team leader – (Solid waste)** must then perform the following actions;

1. Investigate to determine the legitimacy and extent of the incident.
2. Organise equipment and resources to ensure the area is safe and controlled e.g. isolate area (evacuate / barriers), traffic diversion (barriers / signage) etc. If the incident is a spill it must be prevented from entering the waterways or storm water drains.
3. Determine roles and responsibilities and obtain the required assistance.
4. In the event of a significant incident inform the GWMC Facility Manager who will attend the site and provide coordination assistance.
5. Call 000, if the incident presents an immediate threat to human health or property, fire rescue NSW, NSW Police and the NSW ambulance service are the first responders, as they are responsible for controlling and containing incidents. Liaise with these agencies and act on any instructions given once they arrive on-site.
6. Report ALL environmental incidents on the 24 hr Wagga Wagga City Council customer Hotline Ph: 1300 292 442

7. Follow pollution incident reporting procedures on section 6 of this document.
8. Delegate the role of informing the neighbours via door knocking or by phone call.
9. If an area or site evacuation is required follow the "Gregadoo Waste Management Centre Emergency Evacuation Plan".
10. Conduct an investigation into the incident, debrief staff and recommend actions to reduce the risk of the incident occurring again within 2 weeks.
11. This plan must be reviewed within one month of a pollution incident occurring.

## 6. Pollution incident reporting procedure

1. Team leader must report ALL environmental incidents in the form annexed to this plan.
2. GWMC Facility Manager will determine if the incident meets the definition of a “Pollution Incident” outlined in the POEO Act Amendments and described in section 4 of this document.
3. If it is considered a ‘Pollution Incident’ it will be reported to the following Authorities;

Order	Emergency Service	Phone
1	Police / Fire / Ambulance	000
2	EPA Environment Line	131 555
3	Ministry of Health via the Public Health Unit –Albury Office (After Hours -ask for On-Call Public Health Officer)	02 60808100 A/H-02 60808900
4	Work Cover	13 10 50

*NOTE: In the event that the Team leader or GWMC Facility Manager is not available, Staff will need to report environmental pollution incidents directly to the above Services*



# 7. Pollution incident information that must be recorded

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

# 8. GWMC- risk assessment

## 8.1 Water pollution Management

### 8.1.1 Description and likelihood of Hazards

The environmental goals of water pollution management are:

- Preventing water pollution by leachate and sediments
- Detecting water pollution and
- Remediating water pollution.

### 8.1.2 Pre-emptive actions

The following management methods are used to prevent pollution of water by leachate and sediments:

- leachate barrier system
- leachate collection system
- Swale and table drains
- Surface water and sedimentation dams and
- Leachate surface and ground water monitoring.

The leachate barrier and collection systems are generally constructed in accordance with the EPA's Environmental Guidelines: Solid waste Landfills, Second Edition 2016.

The following methods shall be applied for early detection of ground water and surface water pollution:

- Ground water monitoring network
- Ground water monitoring programme
- Ground water assessment programme and
- Surface water monitoring programme

The objectives of the ground water and surface water

assessment programs are to identify a failure of leachate barrier system, and demonstrate that surface water is not contaminated by landfill operation.

Groundwater shall be monitored and constituent concentrations shall be established for comparison with the concentrations specified in the EPL. If changes in concentration levels for any of the indicator parameters are detected, then the affected ground water monitoring wells shall be sampled. Anomalies after re sampling shall be notified to the EPA. The ground water wells and surface water sampling points across GWMC are strategically located to ensure early detection, through regular sampling and monitoring of movement of ground water and surface water contamination.

The purpose of ground water remediation is to set in place actions to be employed if ground water or sub-soil contamination is confirmed by the early detection of ground water pollution. The ground water contamination remediation plan shall describe the process to protect the ground water resource from further contamination and nominate a means to return the ground water to the original quality down hydraulic gradient from the land filling operation. DM McMahon Pty Ltd will be appointed by WWCC immediately to assess the ground water contamination and prepare actions to remediate the ground water to its original quality.

### 8.1.3 Inventory of pollutants

The purpose of recording the wastes received (Pollutants) is to:

- Quantify waste received
- Record the quantities, types and source and waste received and
- Estimate the potential leachate generation.

The objective of quantifying the waste received at GWMC is to accurately obtain data on the waste quantities, types and source for reporting future planning purposes.

The objectives of recording the quantities, types and sources of waste received at the GWMC are to enable the effective monitoring of incoming waste, estimate the potential leachate generation from waste received and to aid in regulatory reporting requirements. Inventory of pollutants at GWMC are in Appendix 3

### 8.1.4 Safety equipment

Personal Protective Equipment (PPE) shall be worn at all times by GWMC staff to ensure potential contact with leachate and sediments is minimised when carrying out inspections of the leachate and drainage systems. Safety equipment used at site is in Appendix 2

## 8.2 Air pollution management

### 8.2.1 Description and likelihood of Hazards

Generation of nuisance odour, dust and vapours that may impact residents/commercial establishments close

to the facility. The Environmental goals for air pollution management are:

- Preventing landfill gas emission
- Detecting landfill gas emission
- Remediating landfill gas emission
- Prevention /remediation of dust emission
- Preventing fires.

### **8.2.2 Pre-emptive actions**

The management techniques used to prevent and control of odours are:

- Aeration of the leachate ponds are required to maintain ponds in aerobic condition.
- Treat all leachate from the process prior to short term storage and reuse in order to avoid odour associated with high Biological Oxygen Demand (BOD) in stale leachate.
- Each day waste will be covered on the same day with mulch or soil.
- Area of tipping face is minimised limiting the amount of exposed putrescible wastes.

### **8.2.3 Landfill gas emission**

Landfill cell stages shall have a highly impermeable clay cap designed to minimise landfill gas emissions and surface water infiltration. Any accumulated landfill gas shall be effectively contained between gas drainage and sealing layers, due to the clay capping and over time landfill gas should move laterally through these layers.

As the quantities of landfill gas fluctuate over a period, options or combination of options may be used. Ongoing monitoring of landfill gas volumes and additional disposal methods may be necessary if there is a large build up of gas.

The following methods shall be applied for detection of landfill gas.

- Surface gas emissions monitoring. The monitoring objective is to demonstrate the effectiveness of the capping design and construction.
- Gas accumulation monitoring. The monitoring objective is to monitor gas build up which may have the potential to be detrimental.

If the concentration of methane gas (Landfill gas) is detected to be greater than 1.25% (v/v) during the surface monitoring, the EPA and all relevant authorities shall be notified immediately. A written report shall be provided to EPA within the stipulated period in the EPL.

### **8.2.4 Fire prevention**

The objectives of fire prevention are to:

- Minimise emissions to the atmosphere
- Increase the safety of staff of GWMC.

The following minimum control measures shall be addressed to prevent fires;

- Signs shall be erected and displayed at GWMC advising customers that liquid and hazardous wastes are not permitted to be disposed at the site. The weighbridge operator shall also advise customers and

carryout visual inspection of all loads.

- Stockpile of approved combustible wastes (tyres, used oil and green waste) shall be in piles and in windrows no longer than 3 meters and away from working and public areas.
- Landfill cell construction, compaction and covering of waste shall use materials not conducive to a landfill fire.
- All empty drums accepted at GWMC shall be washed, cleaned and punctured in order to not contain any residual chemicals or fuels.
- All fuels and flammable solvents used for operational purposes shall be stored in suitably ventilated and secure storage area.
- Waste oil shall be stored within a dedicated area and signs must be erected

# 9. Actions to be taken during or immediately after an incident

## 9.1 Water pollution (Leachate)

In the event of a potential failure of GWMC's landfill cell's leachate barrier system the following actions shall be taken during or after identifying the pollutant incident:

- Isolate the area and ensure there is no access.
- A ground water monitoring program shall be established to determine the extent of the failure.
- The ground water shall be monitored and constituent concentration shall be established. Analytical tests must be carried out by NATA accredited laboratory.
- Any significant change in concentration levels of any parameters over two consecutive reporting periods (quarterly/annually) is detected, and then the affected ground water monitoring wells shall be re-sampled as soon as possible. Anomalies after re-sampling shall be notified to the EPA.

In the event of potential surface water contamination the following actions shall be taken during or immediately after identifying the pollution incident:

- Isolate the area and ensure that there is no access.
- Notify EPA immediately as required by EPL.
- A written report to the EPA, detailing the nature and source of the contamination, and any actions taken, and future actions that will be carried out to prevent recurrence.

## 9.2 Air pollution

In the event of a potential failure of GWMC landfill's final capping system (Gas collection) the following actions

shall be taken during or immediately after identifying the gas leak:

- Inform Australian Gas Limited immediately(AGL)
- Isolate area and ensure that there is no access.
- Surface gas monitoring of final capped landfill cell surfaces and surrounding buildings shall be carried out as per requirement of EPL 6671.
- If the concentrations of gas exceed the allowable limit of methane at any point on the landfill cell surface and surrounding buildings, following action shall be taken.
  - Repair or replace the final capping material and layer
  - Continue, ongoing inspection, maintenance, testing and monitoring of entire gas collection system.

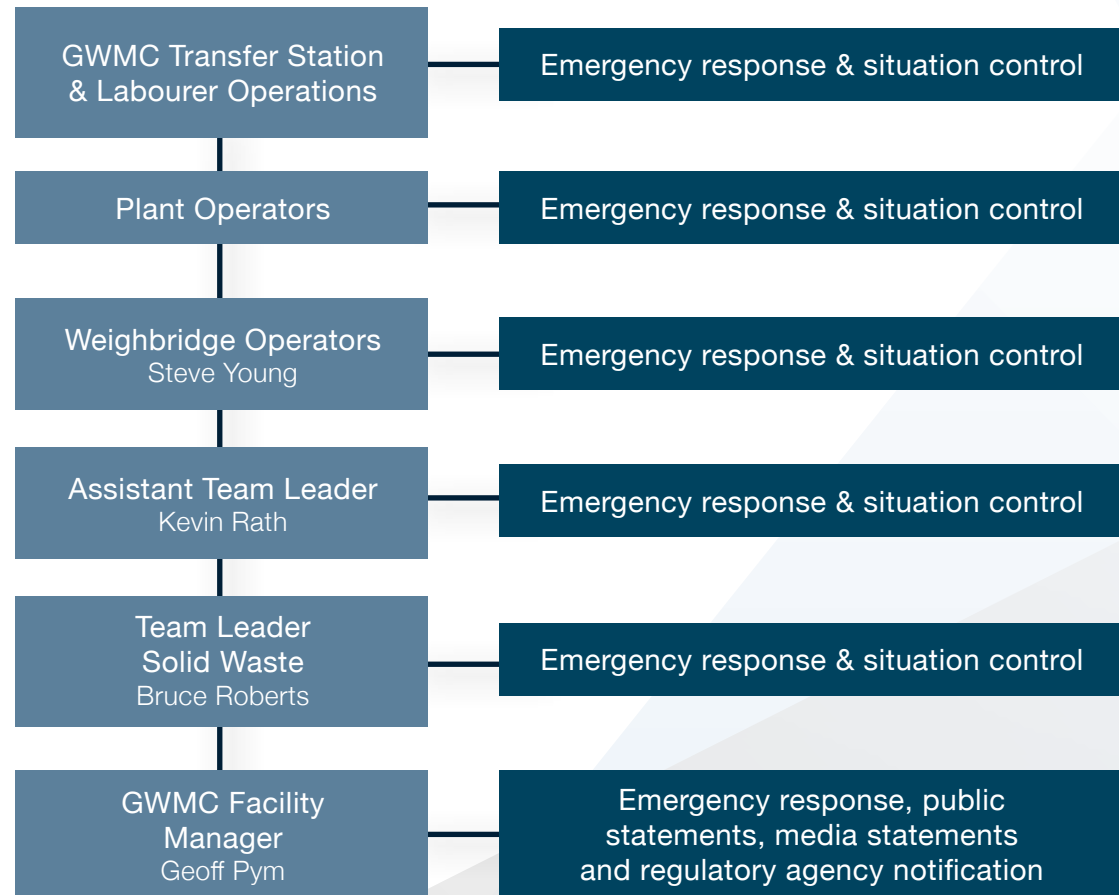
# 10. Identification of Key Persons

A list identifying key WWCC staffs that is responsible for incident management is described in the decision flow chart below.

The following people have a duty to notify a pollution incident occurring in the course of an activity that causes or threatens material harm to the environment:

- the person carrying on the activity
- an employee or contractor carrying on the activity
- an employer carrying on the activity
- The occupier of the premises where the incident occurs.

The flow chart below shows key WWCC officers and their responsibilities in the event of a pollution incident at GWMC.



# 11. Forms of the Plan

A written copy of the plan must be kept on-site at the Gregadoo Waste Management Centre and be able to be provided to an authorised EPA Officer on request. Electronic versions are also available on the Intranet. As per *POEO Act 1997 – Section 153D – Keeping of the Plan*.

# 12. Relationship with other Emergency Evacuation Plans

In the event of an environmental pollution incident staff must follow this Pollution Incident Response Management Plan. However, should an incident require the evacuation of staff the existing Emergency Evacuation Plan procedure must be followed.

It must be noted that Wagga Wagga City Council must still meet its obligations under the “Pollution Incident Response Management Plan” even in the event of an emergency evacuation.

## 13. Training

Regular tool box meetings discuss the training requirements for the staff. Training is also provided for the use of the plan to ensure that all staff are aware of the content, processes and requirements of the plan and competently implement if necessary. People and Culture division of corporate directorate of council maintains

relevant operator training and certification records. WWCC has formal training to enhance and improve job knowledge, skills and abilities of staff.

The plan will be tested randomly by dummy runs to check the effectiveness of the plan. Testing records will be maintained in the PIRMP testing register.

## 14. Communicating with Neighbours

A list identifying immediate neighbours of GWMC who must be notified during a pollution incident is annexed to this document. (See annexure 10)

In the event of a pollution incident at GWMC, Impacts on the community are variable and depend on location, volume of spills or other factors such as wind direction and velocity. Communication methods will be used on a case by case basis and in all situations Wagga Wagga City Council will attempt to provide early warnings to directly affected neighbours by the mechanism described below. Early warnings are to include details of what the imminent incident is and how those affected can prepare

and respond to the incident. The notification shall provide specific information to the neighbouring properties and local community so it can minimise the risk of harm. Information could include instructions to avoid the use of water in the creek or rivers affected or likely to be affected by a pollutant discharge

This plan will include allocating appropriate responsible person to notify and co-ordinate with affected community members. In the event of pollution incident Wagga Wagga City Council attempt to provide early warning to directly affected neighbours by following mechanisms as appropriate.

- Telephone calls or door knocking (where appropriate)
- Mail box drops
- Warning signs
- Local media source(radio/newspapers)
- Wagga Wagga City Council webpage updates and media releases;
- WWCC website address is [www.wagga.nsw.gov.au](http://www.wagga.nsw.gov.au)

# 15. Relationship with on-site lease holders

GWMC has an external company which lease an area of land within the facility, that being CarbonMate. CarbonMate, who operate the composting facility on site, maintain their own Environmental Protection Licence (EPL).

WWCC also lease part of GWMC land to a nearby farmer for grazing sheep and cattle.

In the event of pollution incident or emergency, CarbonMate must:

- Be informed of the incident and if necessary to follow the "Gregadoo Waste Management Centre Emergency Evacuation Plan".
- Follow their own Incident response and Emergency plans on their site
- Inform GWMC Facility Manager or his delegated officer immediately of any incident on their site.
- If a site evacuation is required, follow GWMC emergency evacuation plan and follow the instruction given by GWMC Facility Manager or his delegated officer.

*CarbonMate within GWMC shall be provided a copy of this PIRMP and involved with the training/testing of the plan particularly in relations to emergency response procedures.*



appendix

## APPENDIX 1: Pollution Incident Response Plan Details

Facility Name and Address	
<b>Gregadoo Waste Management Centre</b> <b>132, Ashford's road -Wagga Wagga - NSW 2650 - Ph: 0427 258 920/1300 292 442 / 6926 9166</b>	
Date of the Plan:	Review Plan by:
August 2017	August 2018
Date Plan Tested:	Re-test Plan by:
15/October/2015	15 October 2018
Plan Written by:	Plan Approved by:
Geoff Pym GWMC Facility Manager	

Wagga Wagga Council Contacts			
Title	Name	Office Phone	Mobile/Contact
Weighbridge phone	Weighbridge		(02) 6926 9166 0427 258 920
Plant operator	Rick Harvey		0407 931 166
Plant operator	Ian Brown		(02) 6921 2448
General Labourer	Peter Heritage		
Weighbridge Operator	Steve Young		0429 372 694
RRR Shop Operator	Boyd Kendall		0428 285 734
Assistant Team Leader	Kevin Rath		0427 601 685
Team Leader	Bruce Roberts		0429 320 788
GWMC Facility Manager	Geoff Pym		0429 505 746

On-Site Companies – Contact List			
Title	Name	Office Phone	Mobile/Contact
SUEZ Environmental services	Geoff Smallman Adrian Southwell	(02) 6921 4627	0412 047 475 0401 980 436
CarbonMate	Charlie Bannatyne	(02) 6922 3344	0427 223 344
Run Energy	Technician		0448 519 991 0431 701 327
Cleanaway	Stephen Stapleton	(02) 6925 3555	0447 750 169
Earth moving	Duncan McCallum	-	0427 930 415
Smallman Bros.	Chris Smallman		0417 263 481
Veolia	Glenn Quade		0437 603 917

Reporting / Emergency Contacts	Phone
WWCC Incident / Accident Reporting	For Internal Use Only (safety team)
Police / Fire / Ambulance	000
EPA Environment Line	131 555
Ministry of Health via Public Health Unit – Albury Officer (On-PHO)	02 6080 8100
Work cover	13 10 50
Wagga Wagga Base Hospital	02 6938 6666
Wagga Wagga Fire Brigade	02 6921 5322

## APPENDIX 2: On-site Incident Management Resources

No.	Equipment	Location
1	Safety Shower x 2	Plant Shed and Transfer Station
2	Eye Wash Stations x 2	Plant Shed Transfer Station
3	First Aid Kits x 5	Plant Shed Transfer station Main office RRR Shop
4	2-Way Radio / Mobiles Phones	Held in Front End loader, Tana Compactor, RRR Shop Truck, Water Cart Truck, John Deere Tractor, Ford Utility, Holden Utility vehicle Weighbridge Transfer station operator Main Site Office (2 mobiles)
5	Email / Phone	Main Site Office Geoff Pym, Weighbridge, Bruce Roberts and Kevin Rath
6	Spill Kit x 2	Weigh Bridge and Plant Shed
7	Clean Sweep Absorbent Material	Main office in 25kg Bags

No.	Equipment	Location
8	Fire Extinguishers x 17	Main office x1, Nissan x1, Holden x1, Ford x1, John Deere x1 Weighbridge x1, Slasher x1, Tana x1, Water Cart x1, Transfer station x1, RRR Shop x1, Diesel generator x1 Plant shed x2, Styrene shed x2 Gas Flare (kept under lock) x1
9	Fire Hoses	Transfer station
10	10000 L Mobile Water Tank	Gregadoo Waste Management site
11	Traffic Control / Signage	Main entrance and site wide.

## APPENDIX 3: Inventory of Pollutants / Chemicals

Trade Name	Substance	Solid/Liquid/Gas or Powder	Container Size	Max Quantity	Location
Round up	Weed control	Liquid	20 Lt	20L	Plant Shed
Insect Killer	Pesticide	Liquid	350g	350g	Plant shed
Unleaded petrol	Fuel	Liquid	200 Lt	200 Lt	Plant shed
2-Stroke oil	Oil	Liquid	5 Lt	5 Lt	Plant Shed
Diesel	Fuel	Liquid	5000 Lt	4500 Lt	Plant Shed
Engine & gear oil, coolant	Oil and Fuel Contractor	Liquids	5 to 20 Lt		Plant Shed
Used Motor Oil	Engine Oil	Liquid	1000 L	1000 L	Transfer station shed
LPG Gas Bottles	Liquid Petroleum Gas	Liquid / Gas	1-45kg		Open Compound Fenced area
Car batteries	Lead acid batteries	Solid / Liquid	25 to 50kg		Transfer Station shed

## APPENDIX 4: Leachate Pond Storage Volumes

Substance	Pond No.	Liquid	Max Quantity
Leachate	Pond 1	Liquid	8,600m <sup>3</sup>
Leachate	Pond 2	Liquid	9,000m <sup>3</sup>
Leachate	Pond 3	Liquid	14,000m <sup>3</sup>
<b>Leachate</b>		<b>Liquid</b>	

## APPENDIX 5: Map One - Location of GWMC

The Facility comprises Lots 57, 58, 59, 62, 63 and 97 of DP757246 & Lots 1&2 DP 580226, 132 Ashfords Road Gregadoo and totals approximately 197ha in area. GWMC is located approximately 3 km to the South of Lake Albert and accessed via Mitchell and Ashford road.

The GWMC operating hours are from 7am to 4:30pm daily with the exception of Christmas Day, New Years day, Boxing Day, Good Friday and Easter Sunday.

The location of the Facility is shown in Figure 1.

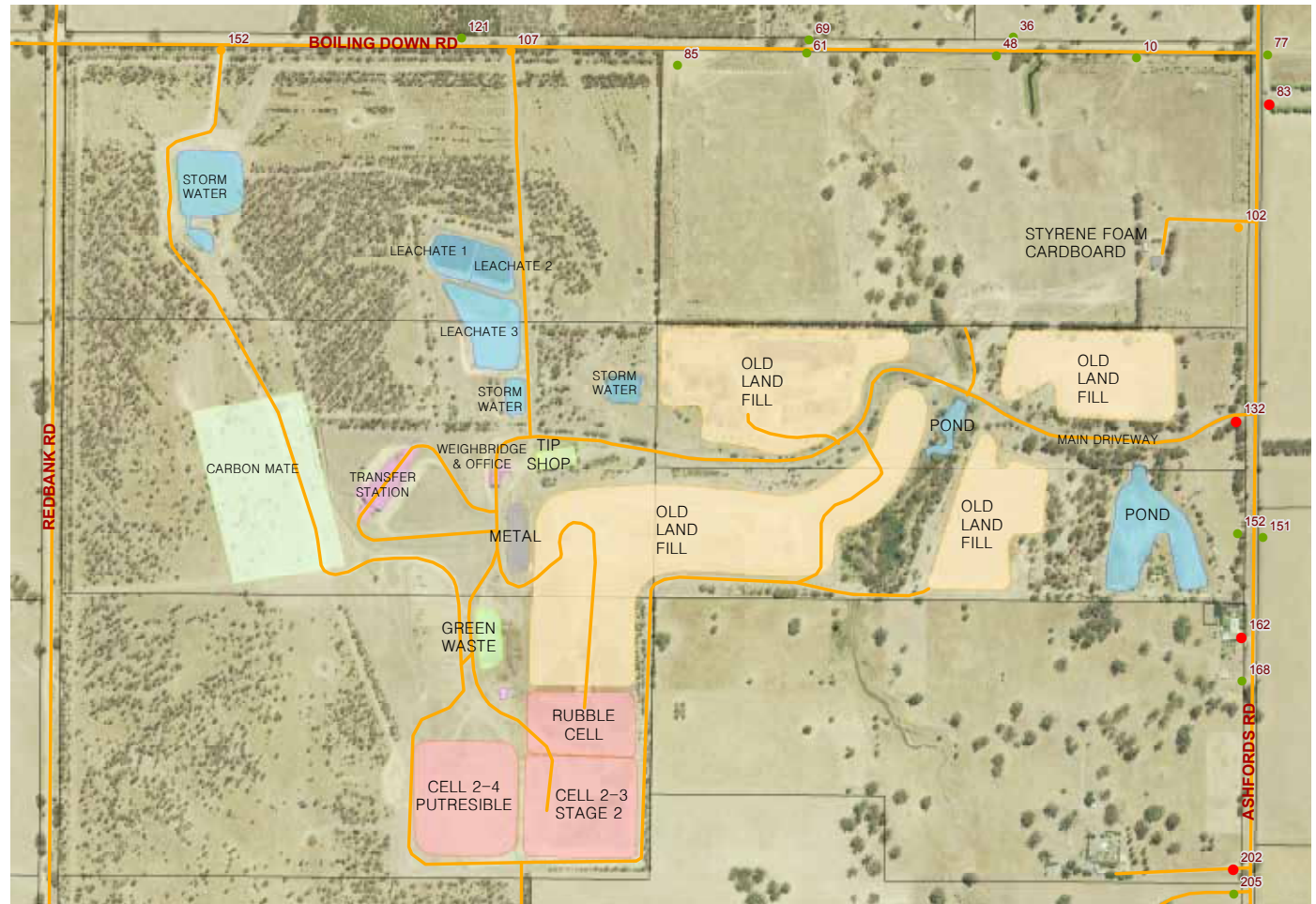
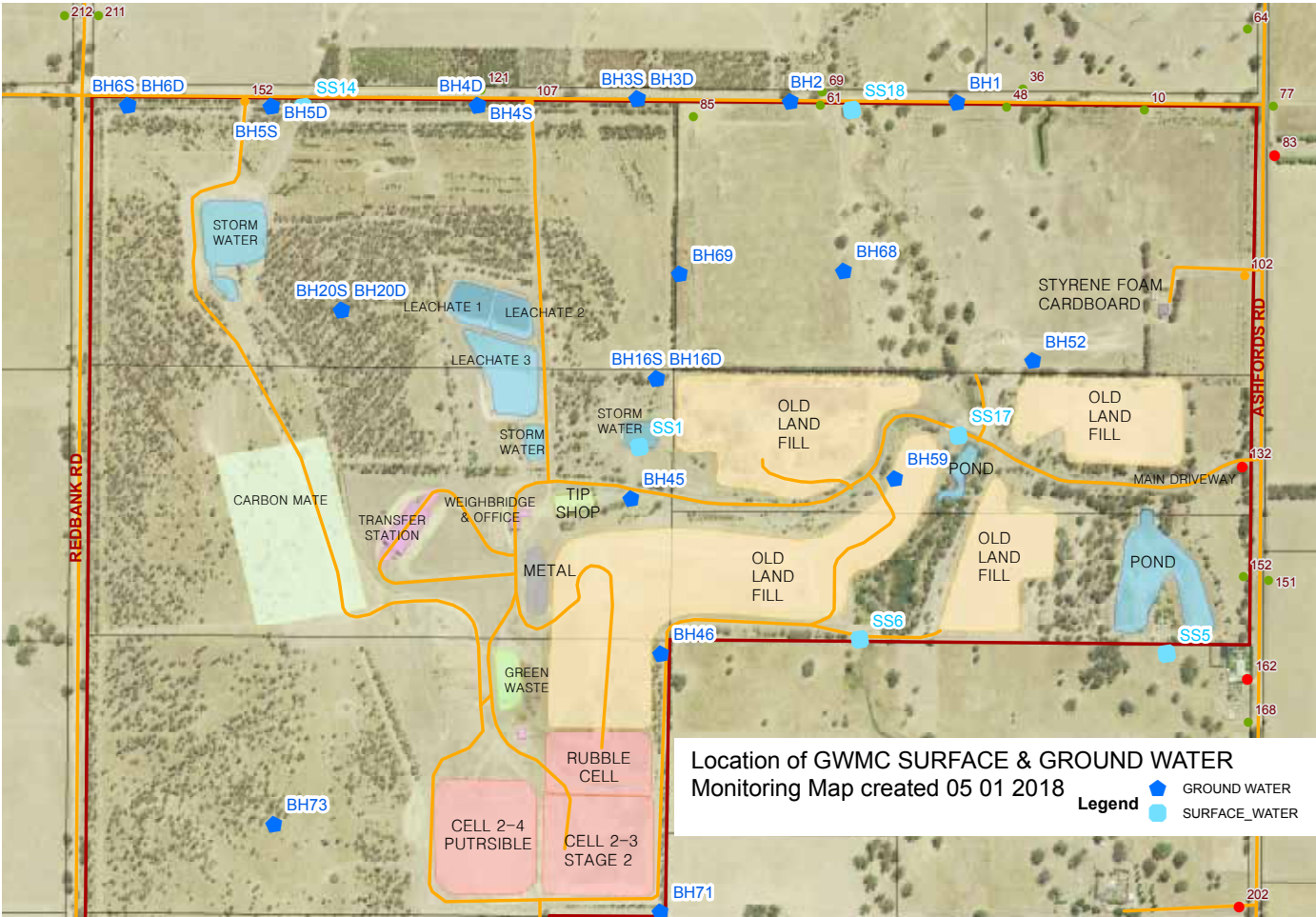


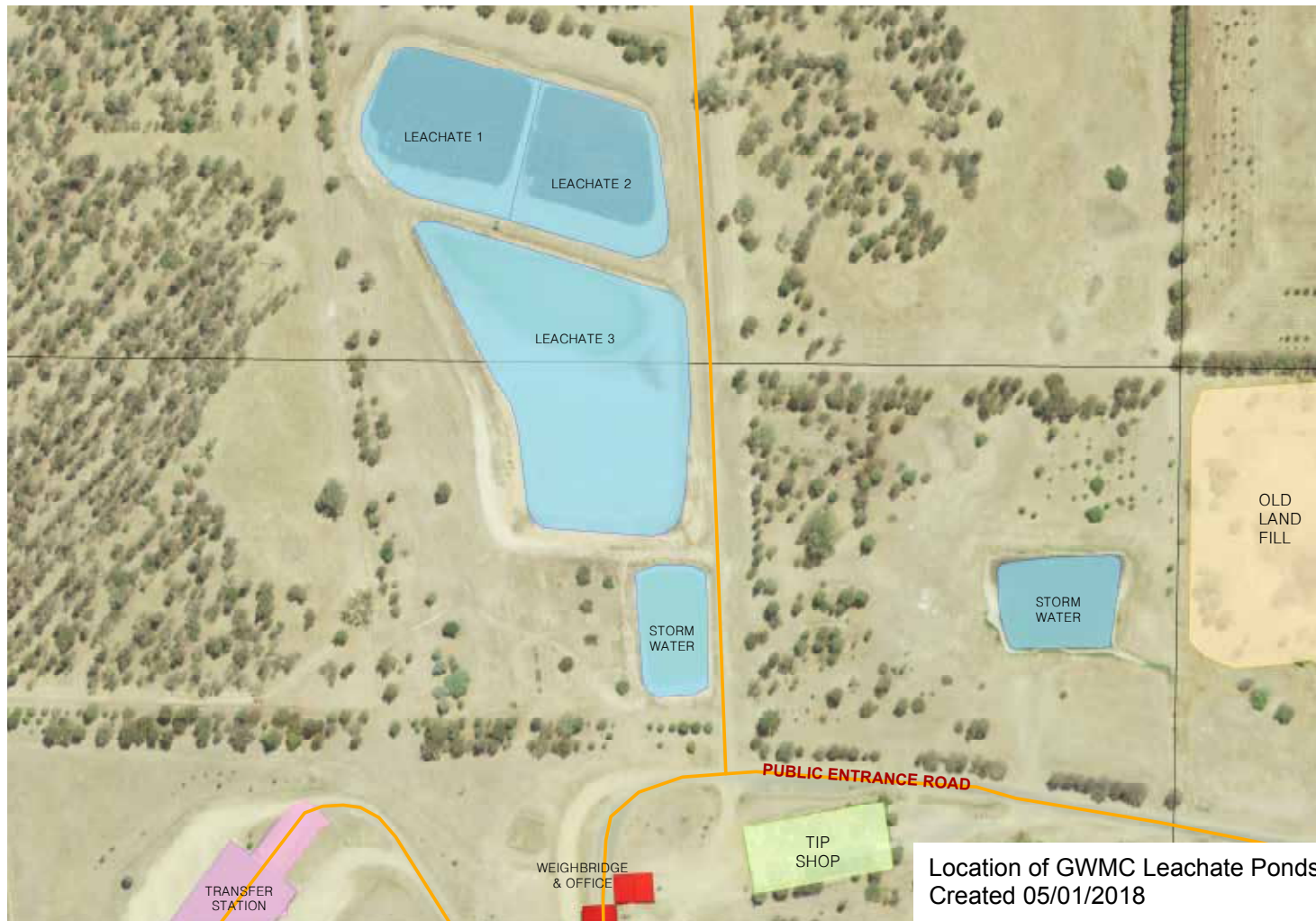
Figure 1



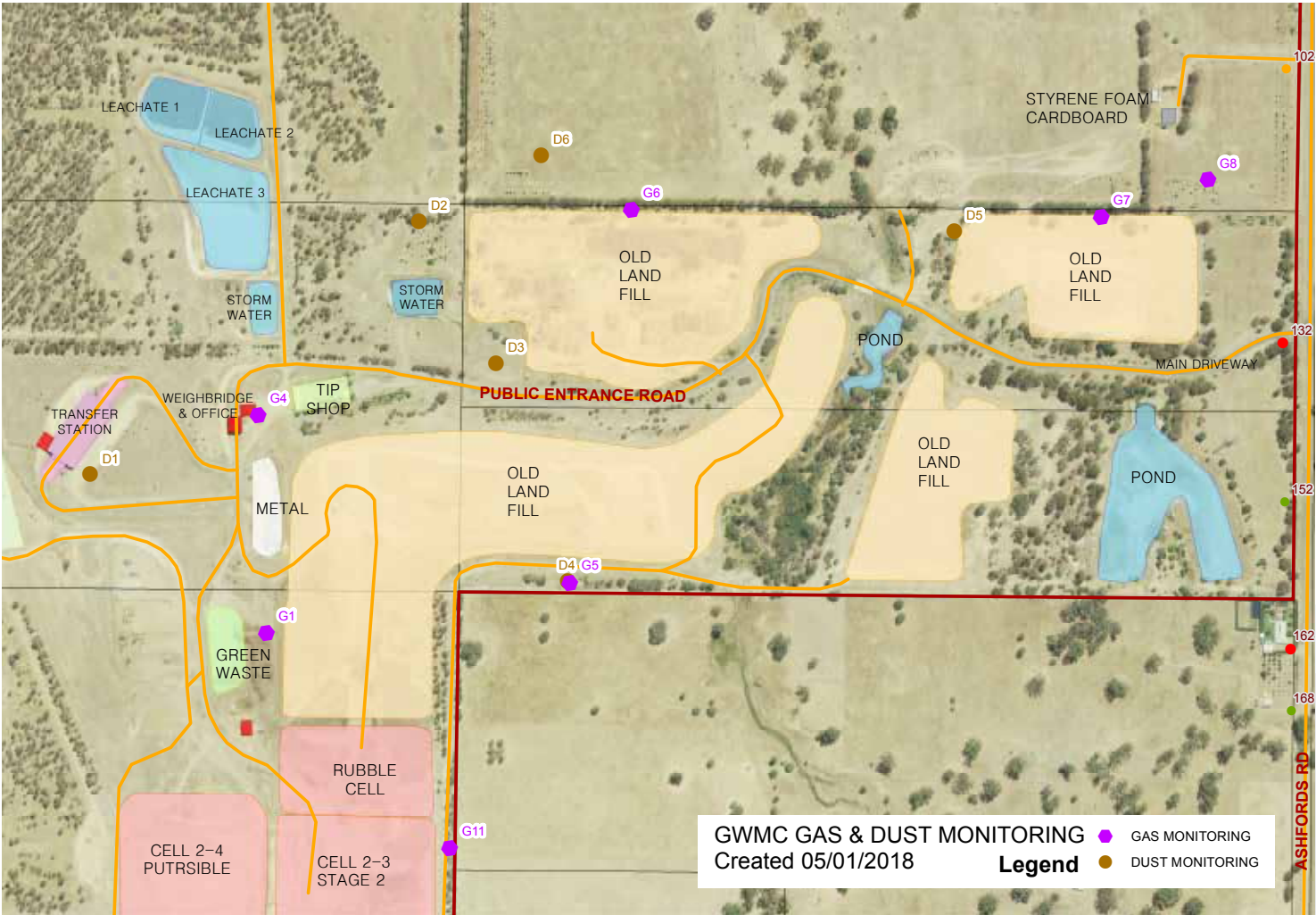
# APPENDIX 6: Map Two - Location of GWMC Surface water monitoring points and boreholes



## APPENDIX 7: Map Three – Location of GWMC Leachate Ponds



APPENDIX 8: Map Four – GWMC Landfill Dust & Gas monitoring points





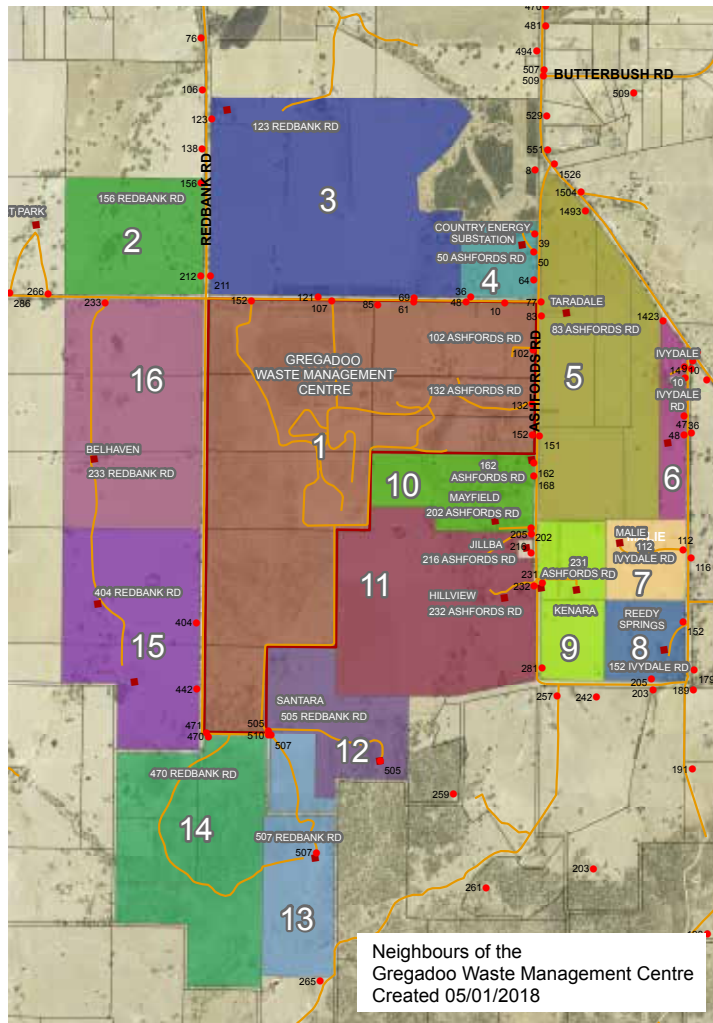
## APPENDIX 9: Environment Protection Licence Monitoring Points – Location Table

EPL MONITORING POINTS (2016) - LOCATION					
Type	Name	EPA ID	Easting	Northing	Elevation
GW	BH1	38	535520.36	6104456.22	228.02
GW	BH16	23	534989.65	6104097.65	233.15
GW	BH2	39	535262.50	6104496.49	227.34
GW	BH20	44	534517.62	6104278.56	231.76
GW	BH3S	40	535025.28	6104536.94	227.28
GW	BH4	41	534776.55	6104563.69	228.12
GW	BH45	15	534922.31	6103918.82	237.02
GW	BH46	16	534931.95	6103671.10	242.31
GW	BH5	42	534456.15	6104609.75	226.85
GW	BH52	95	535576.98	6104037.34	234.21
GW	BH59	78	535335.36	6103887.08	240.17
GW	BH6	43	534234.59	6104646.01	227.34
GW	BH68	35	535305.25	6104221.41	231.69
GW	BH69	36	535050.47	6104254.28	230.84
GW	BH71	79	534870.68	6103270.51	247.89
GW	BH73	81	534292.62	6103497.48	242.59
DUST	D1	89	534570.82	6103876.05	237.62
DUST	D2	90	534965.89	6104094.72	233.15
DUST	D3	91	535025.87	6103929.66	237.43

Type	Name	EPA ID	Easting	Northing	Elevation
DUST	D4	92	535067.72	6103682.98	242.65
DUST	D5	93	535540.88	6103996.78	234.84
DUST	D6	94	535108.40	6104146.45	233.08
GAS	G1	62	6103677.26	6103677.26	241.48
GAS	G10	85	6103286.38	6103286.38	247.72
GAS	G11	86	6103415.50	6103415.50	245.60
GAS	G4	65	6103912.40	6103912.40	237.78
GAS	G5	66	6103681.75	6103681.75	242.53
GAS	G6	67	6104072.72	6104072.72	234.73
GAS	G7	68	6103988.72	6103988.72	235.34
GAS	G8	69	6104011.20	6104011.20	236.18
SURFACE	SS1	47	534947.07	6103995.87	234.59
SURFACE	SS14	60	534505.92	6104601.24	226.00
SURFACE	SS17	87	535444.30	6103938.30	235.55
SURFACE	SS18	88	535355.37	6104467.70	224.41
SURFACE	SS5	51	535715.81	6103551.29	240.67
SURFACE	SS6	52	535243.13	6103645.32	238.90

## APPENDIX 10: Map Five – GWMC Neighbourhood

(Refer to contact details in appendix 11)



# APPENDIX 11: GWMC Emergency Evacuation Plan



Emergency Contacts	Phone
Police / Fire / Ambulance	000
Wagga Wagga City Council	1300 292 442
Poisons Information	13 11 26

Fire Emergency	
<b>R</b>	Remove people from the danger area. Safety to self, scene and survivors
<b>A</b>	ALERT all occupants and ensure an alarm has been raised. TO RAISE AN ALARM CALL 000
<b>C</b>	CONFINE the smoke and fire. Keep doors and windows closed to restrict the spread of the fire. Attempt to extinguish the fire if trained and if safe to do so.
<b>E</b>	EVACUATE the building on the first sign of smoke and fire.

## APPENDIX 12: Hazards and Risk Matrix

Potential Hazard	Likelihood of Hazard	Circumstances that could or would increase likelihood	Pre-emptive Actions to reduce hazard	Corrective Actions
<b>Leachate</b>				
Bleed through cell wall	Unlikely	Excessive period of rain	<ul style="list-style-type: none"> <li>Leachate management procedure in place</li> <li>Barrier and collection system in place</li> <li>Cell floor / walls built to EPL requirements.</li> <li>Design filling plan to direct surface water away from the tipping face.</li> <li>Ensure leachate can penetrate through compacted waste to the leachate collection system e.g. remove intermediate capping between layers.</li> </ul>	<p><b>Stop the flow by;</b></p> <ul style="list-style-type: none"> <li>Place clay bund wall in the flow path of the leachate.</li> <li>Pump leachate to the leachate collection system, alternatively arrange for a tanker to cart the leachate to the treatment plant.</li> </ul> <p><b>Repatch the wall by;</b></p> <ul style="list-style-type: none"> <li>Excavate and drain leachate from bleed area, remove wet material and repair leak with suitable material.</li> <li>Monitor area to ensure the repair has been successful.</li> </ul>
Pond Overflow	Unlikely	Excessive period of rain	<ul style="list-style-type: none"> <li>Leachate management procedure in place</li> <li>If the pond is nearing capacity arrange to either;               <ol style="list-style-type: none"> <li>1) Transfer to another pond</li> <li>2) Irrigate onto either Areas 1, 2 or 3 – must not exceed the absorption capacity of these areas</li> <li>3) Arrange leachate to be tankered off-site</li> </ol> </li> </ul> <p>All pump readings must be recorded on the 'Leachate Transfer recording form' and filed in the Leachate record folder.</p>	<p>In the event of a leachate pond overflow (e.g. significant rainfall event):</p> <ul style="list-style-type: none"> <li>Attempt to control the overflow by placing a bund around the edge of the dam or in the flow path of the leachate overflow.</li> <li>Pump leachate to alternative dam with sufficient capacity</li> <li>Arrange tanker to transfer leachate off site.</li> </ul>



Potential Hazard	Likelihood of Hazard	Circumstances that could or would increase likelihood	Pre-emptive Actions to reduce hazard	Corrective Actions
<b>Leachate</b>				
Groundwater Contamination	Possible	Excessive period of rain	<ul style="list-style-type: none"> <li>Leachate management procedure in place</li> <li>Quarterly Groundwater monitoring system in place</li> <li>Barrier and collection system in place</li> <li>Cell floor / walls built to EPL requirements.</li> </ul>	<ul style="list-style-type: none"> <li>Check leachate levels in waste cells to ensure levels are acceptable. Transfer leachate to leachate ponds if necessary.</li> <li>Try to determine the source of the contamination and eliminate.</li> <li>Seek expert advice</li> </ul>
<b>Gas</b>				
Emissions	Almost Certain	During summer/warm periods.	<ul style="list-style-type: none"> <li>Cells are all covered with capping material as per EPL requirements</li> <li>Monthly surface gas monitoring</li> <li>Quarterly sub-surface gas monitoring</li> <li>Remediation procedures in place</li> </ul>	<ul style="list-style-type: none"> <li>Follow Safe Work Method Statements (SWMS) – Sealing Landfill Gas Leaks at GWMC</li> </ul>
Gas Collection System Leak	Unlikely	Excavation works in the vicinity	<ul style="list-style-type: none"> <li>All gas infrastructure has been surveyed and is outlined in the Site Utilities Plan</li> <li>Consult Site Utility Plan prior to any work commencing</li> <li>Gas Extraction System operates under negative pressure</li> <li>AGL Construct system according to legislative requirements</li> </ul>	Contact AGL immediately to; <ul style="list-style-type: none"> <li>Shut down the Gas Extraction system</li> <li>Carry out repairs</li> </ul>
Explosion	Rare	A build up of gas in a confined space  Rapture of gas pipe / creation of a spark	<ul style="list-style-type: none"> <li>Gas Extraction and remediation system</li> <li>Monthly surface gas monitoring</li> <li>Quarterly sub-surface gas monitoring</li> <li>Remediation procedures in place.</li> </ul>	Contact the Team leader who will coordinate the incident response / evacuation

Chemicals				
Spill	Unlikely	Container damaged Illegal dumping by Customer	<ul style="list-style-type: none"> <li>Waste Screeners checking customer loads</li> <li>SWMS to control spill</li> </ul>	<ul style="list-style-type: none"> <li>Contact the Team leader who will coordinate incident response.</li> </ul>
Exposure	Unlikely	Container damaged Illegal dumping by Customer Staff not wearing PPE	<ul style="list-style-type: none"> <li>SWMS Dealing with Unknown Chemicals"</li> <li>MSDS in Site Office</li> <li>Eye Wash Station / Safety Shower / PPE</li> </ul>	<ul style="list-style-type: none"> <li>Contact the Team leader who will coordinate incident response.</li> </ul>
Fire	Unlikely	Container damaged Illegal dumping by Customer	<ul style="list-style-type: none"> <li>Chemicals removed from waste and placed and stored in purpose built chemical storage shed</li> <li>SWMS Dealing with Unknown Chemicals</li> <li>Chemicals collected regularly by contractor</li> <li>Staff trained in dealing with hazardous chemicals</li> <li>Fire Extinguishers</li> </ul>	<ul style="list-style-type: none"> <li>Contact the Team leader who will coordinate incident response.</li> </ul>
Dust				
Emission	Almost Certain	During dry periods.	<ul style="list-style-type: none"> <li>Dust control systems are in Place</li> <li>Dust suppression on unsealed roads.</li> </ul>	<ul style="list-style-type: none"> <li>Regular cleaning of the site haulage and access roads.</li> </ul>
Mud Tracking	Likely	Wet Weather	<ul style="list-style-type: none"> <li>Sediment Management Procedure in Place</li> <li>Water Cart regularly wash down roads / vehicles in wet weather</li> <li>Shaker Grids / Wheel Wash</li> </ul>	<ul style="list-style-type: none"> <li>Roads are washed down as required</li> <li>Place gravel on roads to reduce mud</li> </ul>
Odour				
Affecting neighbours	Possible	Fire Wet Weather Lack of cover material	<ul style="list-style-type: none"> <li>Follow EPL odour requirements</li> <li>Tip face covered daily</li> </ul>	<ul style="list-style-type: none"> <li>Contact the Team leader who will coordinate a response.</li> </ul>

## Noise

Affecting Neighbours	Possible	Heavy machinery period of increased activity	<ul style="list-style-type: none"> <li>• Follow EPL noise limit requirements</li> <li>• Machinery meets requirements</li> </ul>	<ul style="list-style-type: none"> <li>• Immediately cease the noise generating activity</li> </ul>
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## Asbestos

Exposure	Possible		<ul style="list-style-type: none"> <li>• SWMS Receiver and Disposal of Asbestos</li> <li>• SWMS Removal and Cleanup of Illegally Dumped Asbestos</li> <li>• Guidelines for customers relating to asbestos booking and presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Follow the SWMS.</li> </ul>
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## APPENDIX 13: Testing of the Plan

This plan must be tested once every 12 months. The information provided must be up to date and it must be demonstrated that it is capable of being implemented in a workable and effective manner if requested by the EPA. Testing of the plan is to include both desktop simulations and practical exercises and training drills.

Testing must cover all components of the plan including the effectiveness of training.

*As per POEO Act 1997 – Section 153E – Testing of the Plan*

**GWMC Staff:** The following staffs have read this plan and agree to follow the procedures set out in this management plan in the event of a pollution incident.

Development of the PIRMP		Dissemination and Acknowledgement by staff I have read and tested these procedures and understand the plans requirements.			
Team Members		Position	Name	Signature	Date
Sharni Hands	GWMC	Labourer	Sharni Hands		2.3.18.
	GWMC	OPP/TRANS/weigh	James Scott		2.3.18
	GWMC	Waste Mngt Officer	Neelay Rang		02.03.18
Geoff Pym	GWMC	FACILITY MANAGER	Geoffrey Pym		02-03-18

questions? comments?  
contact us.

Wagga Wagga City Council  
Gregadoo Waste Management Centre  
Pollution Incident Response Management Plan 2017

Wagga Wagga City Council  
PO Box 20  
Cnr Baylis & Morrow Sts  
Wagga Wagga NSW

Ph: 1300 292 442  
Fax: (02) 6926 9199

Email: **[council@wagga.nsw.gov.au](mailto:council@wagga.nsw.gov.au)**

Follow **@WaggaCouncil** on Twitter to get the news,  
events and emergency information straight from the source.

**[wagga.nsw.gov.au](http://wagga.nsw.gov.au)**