

Pollution Incident Response Management Plan


Bettergrow Pty Ltd

EPL 7654

74 Lemington Road

Ravensworth NSW

Document Control

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				Name/Position	Signature
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6	18/06/21	Jacqui Blomberg Environmental Manager	<ul style="list-style-type: none"> • Annual review • Desktop simulation (diesel spill) • Update contact details • Restructure of PIRMP 	Jacqui Blomberg Environmental Manager	

A Pollution Incident Response Management Plan (PIRMP) must be prepared for all Projects based in NSW that hold an Environmental Protection Licence (EPL), or for any project if directed to prepare one by the EPA. This PIRMP has been prepared for the Bettergrow Pty Ltd composting facility at 74 Lemington Road Ravensworth NSW.

It is a requirement under Clause 98D of the Protection of the Environment Operation Amendment Regulations 2012 that this PIRMP be made publicly available within 14 days after it is prepared on a publicly accessible (Company) website or, if there is no such website, by providing a copy of the plan, without charge, to any person who makes a written request for a copy.

The objectives of this PIRMP are to:

- Ensure comprehensive and timely communication about a pollution incident to staff at the premises, the Environment Protection Authority, Singleton Council and other relevant authorities specified in the POEO Act, and people outside the project who may be affected by the impacts of a pollution incident (i.e. local community including businesses);
- Minimise and control the risk of a pollution incident associated with the operation of the facility by identifying risk and the development of actions to minimise and manage those risks; and
- Ensure that the PIRMP is properly implemented by trained staff, identifying persons responsible for enacting it and ensuring that the plan is regularly tested for accuracy, currency and suitability.

1) External Notification Protocol

The following authorities must be contacted in the order below immediately for pollution incidents that threaten or cause material harm to the environment.

Table 1 External Notification Protocol

Authority	Phone Number
Emergency Services – Fire and Rescue NSW Police NSW Ambulance Service	000*
*Only ring 000 if the incident presents an immediate threat to human health or property and requires Emergency Services. If the incident does not require an initial combat agency or once the 000 call has been made, notify as listed below	
EPA Pollution Hotline	131 555
Ministry of Health – Singleton Hospital	02 6571 9222
SafeWork NSW	131 050
Local Authority – Singleton Council	02 6578 7290
Fire and Rescue – Station 444 Singleton Fire Station	02 6572 1495

When notifying authorities that a pollution incident has occurred, the following information must be provided:

1. The time, date, nature, duration and location of the incident
2. The location of the place where pollution is occurring or is 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.

If information required in items 3, 4 and 5 are not known when the initial notification is made but becomes known afterwards, that information must be provided to the authority immediately after it becomes known.

2) Community Notification and Action Protocol

Notification to any residents, businesses or other premises that may be affected by the pollution incident may include the following:

1. Details of the pollution incident and extent of impact (as known at the time)
2. Safety warnings and recommendations to prevent/minimise impacts, if required
3. Potential impacts on the operation of local businesses, if required

In the event of a pollution incident which has the potential to impact the local community, the Site Manager will notify the Environmental & Regulatory Compliance Manager who will determine if community notification is required. Appendix 1 provides contact details of those businesses immediately surrounding the facility and includes emergency contact details for quick reference in the event of an incident. The nearest residential receiver (the village of Camberwell) is approximately 6.8km south of the site. The closest natural water course, Bayswater Creek, is over 500m west of the site.

The following table lists the mechanisms to be followed in the event that a pollution incident has the potential to impact the surrounding community in order to minimise the risk of harm.

Table 2 Community Notification and Action Protocol

Pollution Incident Scenario	Potential Impacts	What to do (response)	Who to Notify	When to notify	Communication Mechanism
Off-site odour emissions	Amenity Air quality Complaints	Dose stockpile/window or detention basin (offensive area) with BioAktiv For detention basin also check aerator is operating	Singleton Council Adjacent businesses	Immediately after controlling emission where community impacted - including adjacent businesses	Telephone
Off-site dust emissions	Air quality Amenity Complaints	Use dust suppression immediately to control source NOTE water used for dust suppression on compost hardstand/windrows can be sourced from the leachate detention basin. ALL OTHER dust suppression water must be sourced from the southern void water body	Singleton Council Adjacent businesses	Immediately after controlling emission where community impacted - including adjacent businesses	Telephone
Uncontrolled release of leachate	Contamination of surface water or groundwater	Check bunding and flow paths integrity and immediately repair with clay. Clean out swales if necessary Clean out excess sediment from basin	Singleton Council Adjacent businesses	Immediately after controlling/ containing release	Telephone
Smoke from smouldering stockpile/fire	Air quality Amenity Complaints	Dig out hot spot with excavator and spray with water to cool down	FRNSW if fire cannot be contained Singleton Council Adjacent businesses	Immediately where community impacted - including adjacent businesses	Telephone

3) Definition of a Pollution Incident

A pollution incident that requires notification to authorities is defined in section 147 of the Protection of the Environment Operations Act 1997 as:

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

Note: anyone on site can activate the PIRMP though external notification is the responsibility of Management

4) Hazard Identification and Pre-emptive Measures

The **Compost Management Plan** and the detailed **Surface and Groundwater Management Plan** associated with Bettergrow Ravensworth facility identifies environmental aspects and impacts of the site including potential hazards and management measures to be employed relevant to pollution including water, waste and air quality. Table 3 lists the main potential hazards and Table 4 provides a risk assessment of these hazards and includes applicable pre-emptive measures and controls.

Refer to the **Workplace Procedures** and **Emergency Procedures** located in the Site Office for actions and arrangements to minimise the risk of harm to any persons on the premise should an incident occur. This includes immediate actions to be taken in the event of an emergency or an environmental incident, and important contact details including those for adjacent businesses to the facility.

Table 3 Hazard Identification

Aspect	Hazards
Water	Storage of fuel, oils and chemicals Refuelling activities Sediment laden water Leachate Fire water Poor management/maintenance of site surface water/stormwater system
Waste	<u>Spill/Accident during transport</u> Loss of material being transported to site for reuse See Appendix 4 for Road Transport – Waste material for beneficial reuse – What to do in an Emergency <u>Liquid waste:</u> Fuels, oils, greases, engine coolant <u>Hazardous waste:</u> Lubricants Cleaning agents/detergents <u>Non-Complying Waste:</u> Non-recyclable and other putrescible general solid waste Spoil, concrete, rubble Plastics
Air	Dust Odour Fire

Table 4 Risk Assessment

Hazard	Impact (Human Health &/or Environment)	Inherited Risk Level	Pre-Emptive Measures & Control	Residual Risk Level
Sediment laden water leaving site, including mud tracking onto public roadways	Environment	12 HIGH	- site wheel wash - grass lined swales with check dams and/or rip rap - minimise sediment retention onsite by directing waters to respective sediment detention basins - three 'chain of pond' basins on site	5 LOW
Pollution of waterway from hydrocarbon spills from machinery/refuelling/fuel storage (hazardous/liquid waste)	Human Health &/or Environment	14 HIGH	- plant hazard assessment conducted - regular plant checks - site plans identifying fuel storage area - minimal fuel/oils/greases/engine coolant etc. stored on site - adequately stocked spill kits - Emergency Evacuation Plan - Workplace and Emergency Procedures	5 LOW
Pollution of waterway from leachate	Human Health &/or Environment	21 EXTREME	- Daily reuse of leachate on compost windrows - Leachate detention basin maintained for 1 in 25 year 24 hour rainfall event - three 'chain of pond' basins on site	9 MEDIUM
Pollution of waterway from fire water	Environment	14 HIGH	- fire water directed to basins via perimeter swale system	5 LOW
Air pollution from fire smoke	Human Health &/or Environment	14 HIGH	- windrows monitored for smoulder - windrows regularly turned each day - if hot spot identified is dug with excavator and cooled with water	5 LOW

Non-complying material brought onto site	Human Health &/or Environment	13 HIGH	<ul style="list-style-type: none"> - clear identification of acceptable and non-acceptable/non-complying waste - contractual requirement with suppliers - employee training including site induction 	5 LOW
Generation of dust from mobile equipment/vehicles	Human Health &/or Environment	14 HIGH	<ul style="list-style-type: none"> - traffic movements restricted to 15km/hr on site - dust suppression on site - trucks leaving site to have loads covered - trucks leaving site to exit over wheel wash 	5 LOW

Table 5 Risk Assessment Matrix

		POTENTIAL CONSEQUENCE					
		INSIGNIFICANT	MINOR	MODERATE	MAJOR	DISASTROUS	
CATEGORY OF HARM	HEALTH & SAFETY →	<ul style="list-style-type: none"> Temporary discomfort or pain 	<ul style="list-style-type: none"> First aid treatment 	<ul style="list-style-type: none"> Medical treatment Lost work time 	<ul style="list-style-type: none"> Serious injury (e.g. amputation, admittance to hospital, permanent loss of body function) 	<ul style="list-style-type: none"> Fatality 	
	ENVIRONMENT →	<ul style="list-style-type: none"> No adverse impact (e.g. appearance issue only) 	<ul style="list-style-type: none"> Impact contained to site with simple clean-up process 	<ul style="list-style-type: none"> Impact contained to site requiring specialist clean-up 	<i>Hazard may be "Significant"</i>		
	BUSINESS CONTINUITY →	<ul style="list-style-type: none"> Process disruption, no impact on customer 	<ul style="list-style-type: none"> Process disruption with minor customer impact (e.g. late delivery) 	<ul style="list-style-type: none"> Damage to non-critical process (e.g. can transfer work to another process) Customer inconvenienced (e.g. customer suffers a loss) 	<ul style="list-style-type: none"> Loss of key processes Structural damage to facilities Loss of key supplier or customer Financial loss >\$500k AD 	<ul style="list-style-type: none"> Environmental impact of regional or national significance Long term damage 	
	REPUTATION →	<ul style="list-style-type: none"> Public concern limited to individuals No broader political concern or media coverage 	<ul style="list-style-type: none"> Local community concern, political enquiry or media coverage 	<ul style="list-style-type: none"> Regional public concern, political enquiry or media coverage 	<ul style="list-style-type: none"> National public concern, political enquiry or media coverage Reduced ability to obtain capital or insurance 	<ul style="list-style-type: none"> International public concern, political enquiry or media coverage Reduced company or brand market value 	
	REGULATORY COMPLIANCE →	<ul style="list-style-type: none"> No requirement to report to authority 	<ul style="list-style-type: none"> Mandatory reporting but authority unlikely to take any action 	<ul style="list-style-type: none"> Authority likely to give informal warning 	<ul style="list-style-type: none"> Authority likely to give formal warning or on the spot fine Litigation/ prosecution possible 	<ul style="list-style-type: none"> Litigation/ prosecution likely 	
LIKELIHOOD	ALMOST CERTAIN >99% probability, or is expected to occur in most circumstances, or could occur within days to weeks, or will occur repeatedly without corrective action	11 HIGH	16 HIGH	20 EXTREME	23 EXTREME	25 EXTREME	
	LIKELY 50-99% probability, or will probably occur in most circumstances, or could occur within weeks to months	7 MEDIUM	12 HIGH	17 HIGH	21 EXTREME	24 EXTREME	
	POSSIBLE 20-50% probability, or should occur at some time, or could occur within months to years	4 LOW	8 MEDIUM	13 HIGH	18 EXTREME	22 EXTREME	
	UNLIKELY 1-20% probability, or could occur but would not be expected, or could occur in years to decades	2 LOW	5 LOW	9 MEDIUM	14 HIGH	19 EXTREME	
	EXTREMELY UNLIKELY <1% probability, or may occur but only in exceptional circumstances, or only occur as a 100 year event	1 LOW	3 LOW	6 MEDIUM	10 HIGH	15 HIGH	
LOW	Manage by routine procedures	MEDIUM	Manage by SOP/JSA	HIGH	Manage by policy and specific training (critical standards)	EXTREME	Detailed research and management planning is required at a senior level (i.e. Do we really need to have this risk and if so how is it best managed)

5) Contact Details and Notification Protocol

Appendix A contains an emergency phone list including services/utilities, adjacent neighbours and employees relevant to Bettergrow. Table 6 below provides information for key personal who are responsible for managing the response on site, and those who are authorised to notify the relevant authorities as noted in Table 1 External Notification Protocol.

Table 6 Contact Details & Level of Authority

Name	Position	Phone Number	Notify Authorities (Y/N)
Jeffery Lennox	Operations Manager	0409 212 573	*Y
Roger Crisp	Biosolids Manager	0427 210 070	*Y
Todd Wurth	Site Manager	0467 019 670	*Y
Jacqueline Blomberg	Environmental Manager	0436 609 556	*Y
Victor Bendevski	Environment and Regulatory Compliance (ERC)	0410 327 635	Y

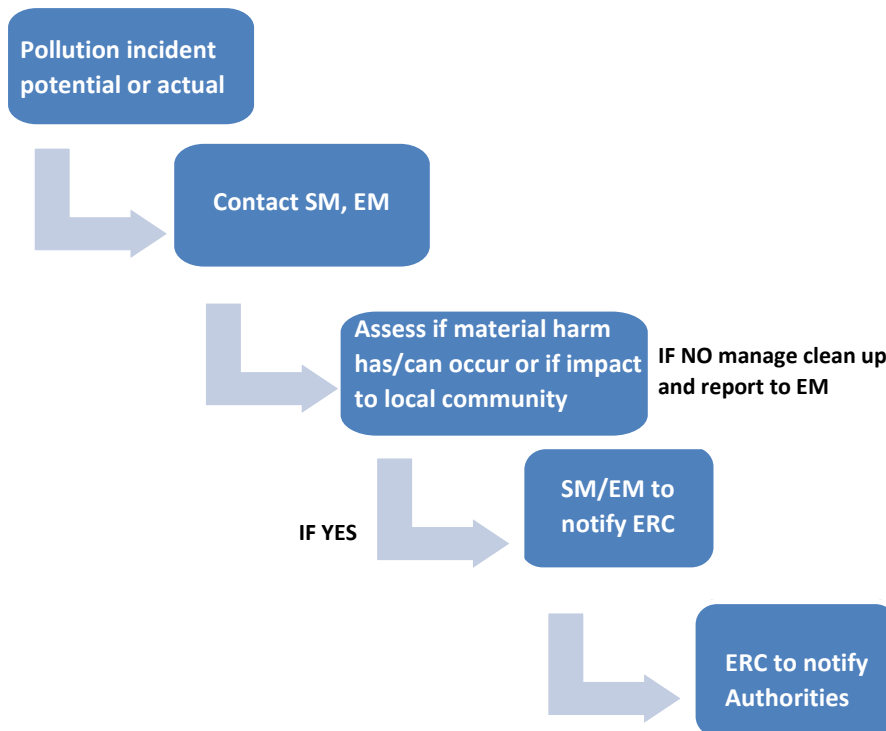
*after discussing with ERC

In the event that a potential pollution incident has occurred, the person who discovered this is to take charge until relieved by a more senior employee or emergency services personnel and follow the Pollution Incident Internal Notification protocol as shown below in Figure 1.

Mechanisms used to communicate with the public to provide, where possible, early warning of and following a pollution event that has the potential to impact the surrounding community can be found above in Section 2 and Table 2. These mechanisms will also be used to regularly update those affected by an incident.

Figure 1 Pollution Incident Internal Notification

(SM Site Manager, EM Environmental Manager, ERC Environmental and Regulatory Compliance)



6) Inventory

Table 7 Pollution Inventory of potential onsite pollutants

Product	Location on site	Max Quantity on site	Type of containment	SDS Y/N	Hazardous Y/N
Petrol (jerry cans)	Site shed	2x20L	Enclosed site shed	Y	Y
Petrol (fuel pod)	Site shed	400L	Enclosed site shed	Y	Y
Castrol Premium HD grease	Site shed	20x450g	Enclosed site shed	Y	N
Diggers degreaser	Site shed	5L	Enclosed site shed	Y	Y
WD-40	Site shed	375ml can	Enclosed site shed	Y	Y
Green Lube EP2 grease	Site shed	20x450g	Enclosed site shed	Y	Y
Havoline 10W-30	Site shed	5L	Enclosed site shed	Y	N
Valvoline Ultramax 46	Site shed	20L	Enclosed site shed	Y	N
Valvoline Valplex EP grease	Site shed	20x450g	Enclosed site shed	Y	N
Dewatered sludge (biosolids)	Hardstand compost area	*CMP waste receival record	Hardstand pad and swale system	Y	N

*Compost Management Plan

7) Safety Equipment

A description of safety equipment used to minimise or prevent the risks to human health and the environment, and to contain or control a pollution incident is outlined within the **Standard Operating Procedure Production of Biosolids Based Compost, Workplace Procedures** and **Emergency Procedures**. The Site Plan (Appendix 4) shows the locations of safety response equipment which includes spill kits, fire hose reels and fire extinguishers. The site also has a dedicated water cart for use. The Site Plan is displayed on the site Safety Notice Board.

Spill kits will be maintained at all times and will include:

- Absorbent pads, pillows, mini-booms & granular absorbent material
- Nitrile gloves
- Disposal bags and ties
- Instruction card

Hardcopies of Safety Data Sheets (SDS) and Chemical Risk Assessments are stored in the site office with softcopies maintained locally on the Company's electronic information system.

8) Maps

Appendix 3 Regional Context shows the location of the premise, surrounding land uses and local water course which could be impacted in the event of a pollution incident.

Appendix 4 Site Plan shows the location of the potential pollutants on site, stormwater swales, site safety equipment and Bettergrow emergency assembly area.

Appendix 5 shows the site stormwater flow direction.

Maps are displayed on the site Safety Notice Board.

9) Training

Details regarding the nature and objectives of any staff competence, training and awareness are outlined in the **Compost Management Plan**, Staff Training section. Several forms of environmental training will be provided. Training records are maintained on site and on the Company's electronic information management system.

Examples of training include:

- Site induction, including environmental roles and responsibilities;
- Toolbox talks & Standard Operating Procedures;
- 1st Response Incident/Accident; and
- Work Method Statements/Job Safety Analysis

10) Testing & Review

The testing of this plan shall be carried out in such a manner as to ensure that the information included in this plan is accurate and up to date, and the plan is capable of being implemented in a workable and effective manner. Any such test is to be carried out:

- Routinely at least every 12 months
- And Within one month of any pollution incident occurring to assess, whether the information included in the plan is accurate and up to date

Testing of the PIRMP will cover components of the plan, including the effectiveness of training and will involve desktop simulation and practical exercise.

Appendix 1 Emergency Contact List

EMERGENCY ADDRESS: 74 LEMINGTON ROAD, RAVENSWORTH	
Fire/Ambulance/Police	000
EPA Pollution Hotline	131 555
Ministry of Health – Singleton Hospital	02 6571 9222
SafeWork NSW	131 050
Local Authority – Singleton Council	02 6578 7290
Fire and Rescue – Station 444 Singleton Fire Station	02 6572 1495
RMS (for traffic incidents/road condition reporting)	131 700
Matthew Parkinson – AGL	0407 819 236
AGL Site Emergency Coordinator	02 6542 0555
Jeffery Lennox – Bettergrow Operations Manager	0409 212 573
Roger Crisp – Biosolids Manager	0427 210 070
Todd Wurth – Site Manager	0467 019 670
Jacqueline Blomberg – Environmental Manager	0436 609 556
Victor Bendeovski – Environment & Regulatory Compliance	0410 327 635
John Borg – Managing Director	0412 433 587

Appendix 2 Road Transport – Waste material for beneficial reuse – What to do in an Emergency

In the event of an incident or accident which occurs on a public roadway the below actions are to be followed by the drivers of Bettergrow vehicles

Accident

- **You must stop if you are involved in an accident.**
- **Stay calm. Switch off the ignition and activate hazard lights**
- **Check to see if anyone is injured and assist where necessary. Keep yourself and others out of harm's way.**
- **Dial 000 if there are personal injuries**
- **Contact Bettergrow management**
- **Police must be notified if there is personal injury or damage to property or livestock if the owners are not present**
- **Exchange details with the other driver**

Spill

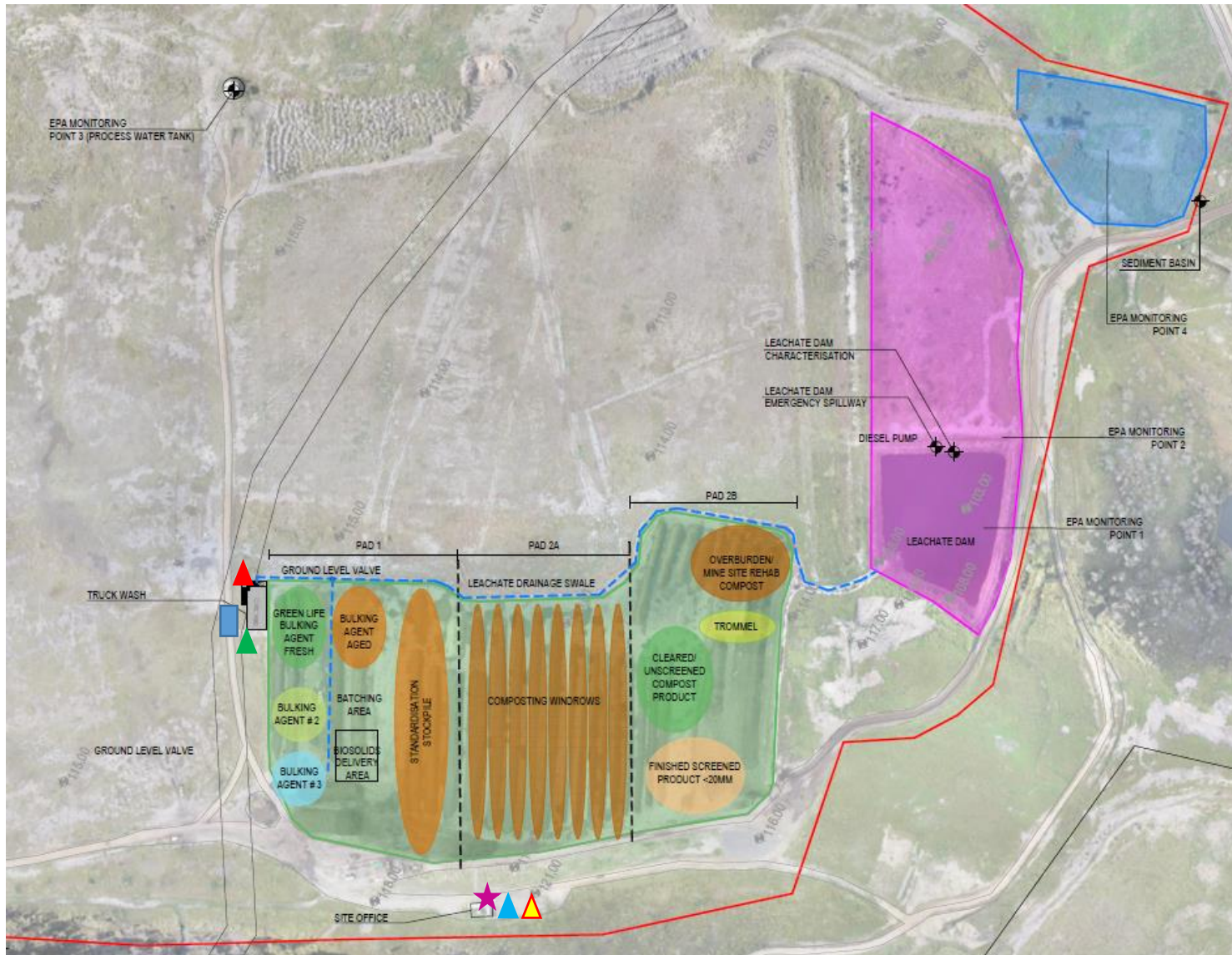
- **Attempt to position the vehicle to minimise environmental harm (If safe to do so).**
- **Attempt to stop the spill, use the spill kit supplied**
- **Contact Bettergrow Management**
- **Contact RMS if road crew needed for clean-up**
- **If a major spill occurs, contact the EPA on 131 555**
- **Remove all material used in spill clean-up and dispose of correctly**

**** An Incident report MUST be completed as soon as the driver reports back to the office****

Appendix 3 Regional Context



Appendix 4 Site Plan



LEGEND

- ▲ Fire hose reels
 - ▲ Spill kit
 - Fuel container/storage area
 - ▲ First aid kit in Site Office
 - ▲ Portable fire extinguisher in Site Office
- NOTE portable fire extinguishers also on site Plant
- ★ Bettergrow Emergency Assembly Point

Appendix 5 Stormwater Flow Diagram

