

# POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN (PIRMP)

# GIRRAWEEN





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#### **1 TESTING AND REVISION LOG**

PIRMP Testin	g Log		
Date Tested	Method of Testing (Desktop or practical drill)	Tested by	Position
11/08/2020	Desktop drill	Dean Connelly	Girraween Supervisor
11/08/2021	Desktop drill	Peter Mills	Operations Manager
01/06/2022	Desktop drill	Peter Mills	Operations Manager
03/05/2023	Desktop drill	Peter Mills	Operations Manager
22/04/2024	Desktop drill	Adam Springfield	Operations Manager

Environment	Environmental Management Plan Revision Log					
Rev No         Date         Revision Details         Author         Reviewer						
01	11/08/2020	Review and update content	Alycia Campbell	Dean Connelly		
02	11/08/2021	Review and update content	Alycia Campbell	Peter Mills		
03	01/06/2022	Review content	Alycia O'Brien	Peter Mills		
04	03/05/2023	Review content	Alycia O'Brien	Ewen McKenzie		
05	22/04/2024	Reviewed Content	Ewen McKenzie	Adam Springfield		



#### **2 INTRODUCTION**

This Pollution Incident Response Management Plan (PIRMP) has been developed in accordance with the requirements in Part 5.7A of the Protection of the Environment Operations Act 1997 (the POEO Act) and the POEO Regulations.

The elements of the plan that relate to risk and hazard identification as well as the development, maintenance and review of protocols and controls have been addressed by the Operations Manager and WHS Advisor. These PIRMP elements are now embedded in the company's Quality, Environmental and Safety Management systems.

Benedict's system of consultation, being predominantly site toolbox meetings, is the principal forum to implement further practical refinement, testing and clarification of these plans in response to the requirement of the legislation.

One of the most important elements introduced by the legislation is the requirement to report pollution incidents to appropriate authorities and the community. This legislation was enacted in response to Orica chemical plant incidents at Kooragang Island where chemical and gas leaks occurred in 2011 and impacted residential areas.

#### **3 OBJECTIVES**

The objectives of this plan are to:

- Ensure comprehensive and timely communication about a pollution incident to:
  - Staff at the premises
  - Environment Protection Authority (EPA)
  - Local council
  - NSW Ministry of Health
  - WorkCover 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, or implementing and ensuring that the plan is regularly tested for accuracy, currency and suitability.

The definition of '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
  - (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.



#### So what needs to be reported?

Based on the legislative definitions, staff are advised, the following pollution incidents must be reported:

A leak, spill, or emission (say gas or fumes from a fire) which is not trivial (i.e. not of small value or importance – must be over \$10,000) and involves actual potential harm to the environment or human health.

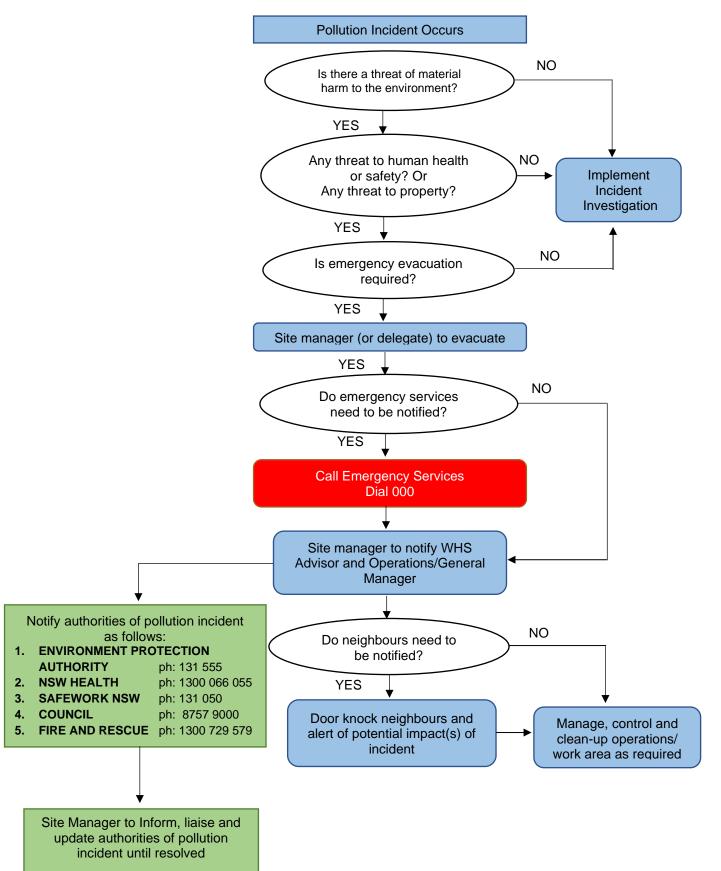
In relation to our operations, these pollution incidents are most likely to result from large fuel spills or acts of vandalism/arson to our equipment. If there is doubt, contact your site manager immediately. Immediately means immediately, promptly and without delay.

These examples are provided as a guide:

Scenario	Likely Status
Jerry can of fuel spilling	Not reportable
Jerry can of fuel spilling and starting large fire	Reportable – assuming that fire causes damage in excess of \$10,000 e.g. destroys a piece of plant
5,000 litre diesel fuel spill from storage tank that is contained within safety	Not reportable provided no discharge from bund and spill is contained
5,000 litre diesel fuel spill from storage tank that is NOT contained within safety bund	Reportable, damage is in excess of \$10,000 and clean-up costs need to also be included.
Vehicle hydraulic hose leak or failure resulting in small spill	Not reportable provided there is no escape to waterways



#### **4 INITIAL RESPONSE PROCEDURE FLOWCHART**



**5 SITE CONTACT/ORGANISATIONAL CHART** 





#### 6 DESCRIPTION AND LIKELIHOOD OF ENVIRONMENTAL HAZARDS

Identifying the key environmental management issues relating to the operation of the facility is critical to the preservation of human health and the protection of the environment.

There are four (4) key sources of potential environmental hazards where risk associated with activities being undertaken at the premises must be managed (see below):

- Water Contamination
- Noise Pollution
- Air Pollution
- Fire potential

#### 6.1 LIKELIHOOD

Site personnel must be aware there are certain circumstances or events that could or would increase the likelihood of a hazard occurring. When the following conditions arise extra precautions may be necessary on site.

#### Water contamination:

- Periods of prolonged wet weather may increase the likelihood of water contamination of the surrounding local amenities

#### Air Pollution/Dust emissions:

- Hot, dry, windy conditions
- Disturbance of fine, dry material
- High levels of traffic on unsealed roads or dusty roads with no dust suppression

#### Fire Potential:

- Hot, prolonged dry, windy conditions with low humidity
- Stockpiles of recyclable waste may spontaneously combust
- Hot works on site for maintenance activities

The potential environmental hazards above have been risk assessed and are included on the site's Environmental Risk Register which is attached in Appendix A. Figure 1 below shows the site's proximity to sensitive receivers.

#### 6.2 SITE MAPS

It is a requirement of the PIRMP to contain detailed and up to date maps and diagrams which assist proper planning and emergency response.

The PIRMP must include a map (or set of maps) showing the:

- Location of the premises	See Figure 1: Site Location and Proximity to Sensitive Receivers
<ul> <li>Surrounding area likely to be affected by a pollution incident</li> </ul>	See Figure 1: Site Location and Proximity to Sensitive Receivers
<ul> <li>Location of potential pollutants on the premises (including underground tanks)</li> </ul>	See Appendix B – Bulk fuels and combustibles location map and;
	Appendix C – Emergency evacuation maps detailing the location of safety equipment, pollution control and pollution response equipment on the premises
<ul> <li>Location of any stormwater drains on the premises</li> </ul>	See Figure 2: Site Stormwater Directional Flows



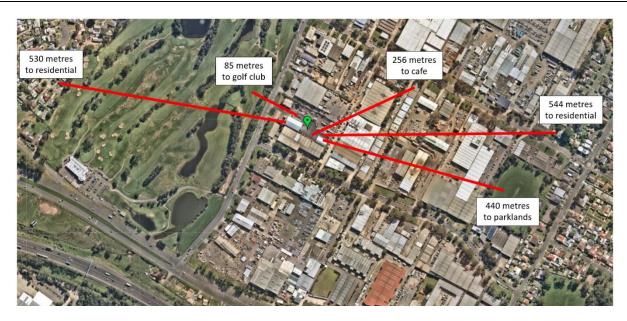


Figure 1: Site Location and Proximity to Sensitive Receivers

#### **6.3 WATER CONTAMINATION**

The primary objective of water contamination management at the premises is to ensure that stormwater gathered by the facility shall not adversely affect the site or its surrounds (local amenity).

Stormwater gathered on site shall be managed to ensure it is not contaminated by pollutants or leachate and is free of sediment.

The following main hazards exist at the premises in relation to water contamination:

- Storage of chemicals/hydrocarbons
- Storage of waste materials

Figure 2 below illustrates the general stormwater flows on site.





Figure 2: Site Surface Stormwater Directional Flows

#### **6.3.1 INVENTORY OF POTENTIAL WATER POLLUTANTS**

Table 1 below details chemicals/hydrocarbons with the potential to pollutant which are stored or held at the premises together with their storage capacities:

Pollutant	Maximum Quantity	Storage Method	Location
Diesel Fuel	5000L	Aboveground Self-Bunded tank	Small shed in NW corner
			of site
Engine Oil	< 500L	Minimal quantities/drums stored on portable	Small shed in NW corner
Hydraulic Oil	< 500L	pallet style bunds.	of site
Mixed Waste	30 000T pa	Unprocessed and Un-recyclable waste stockpiles	Inside storage shed

#### Table 1: Potential Water Pollutants

Appendix A shows the storage locations of the diesel fuel and oils/lubricants throughout the site.

The waste stored on site is comprised solely of non-putrescible waste, predominantly from building and demolition as well as commercial and industrial sources. Whilst the total authorised amount of processed and unprocessed waste allowed to be held on site at any time is 30 000 tonnes, the waste stored inside the main shed (4,000 tonnes) has not been included in Table 1 above.

#### **6.4 NOISE POLLUTION**

The aim of noise pollution management at the premises is to ensure noise generated by the facility does not adversely affect the site or its surrounds. Potential sources of noise pollution include:

- Operation of mobile plant equipment
- Operation of fixed plant equipment
- Maintenance activities



#### 6.5 AIR POLLUTION

Air pollution management initiatives at the premises are designed to ensure air quality (dust and odour) generated by the facility does not adversely affect the site or its surrounds. Potential sources of air borne dust include product stockpiles, site roadways, processing plant and loading/unloading of trucks.

Sources of potential odour are essentially limited to waste stockpiles. In the case of this site, due to the fact no putrescible waste is accepted for processing/disposal, sources of odour would be limited to small amounts of vegetation matter that might be co-mingled in a load of mixed waste.

#### 6.6 FIRE POTENTIAL

Fire management initiatives at the premises are designed to minimise the risk of fire damage to the facility and its surrounds. The facility is regularly assessed for fire risk levels and preventative/minimisation activities implemented as required.

#### 6.6.1 INVENTORY OF FUELS AND COMBUSTIBLES

Table 2 below list details of the fuels and flammables held on the premises and their storage capacities. The location of these fuels/combustibles is shown in Appendix B:

Fuel/Combustible	Maximum Quantity	Storage Method	Location
Diesel Fuel	5000L	Aboveground Self-Bunded tank	Small shed in NW corner

Table 2: Fuels and Combustibles Inventory

#### 7 PRE-EMPTIVE ACTIONS TO MITIGATE ENVIRONMENTAL HAZARDS

There are four (4) key sources of potential environmental hazards where risk associated with activities being undertaken at the premises must be managed (see below):

- Water Contamination
- Noise Pollution
- Air Pollution
- Fire potential

#### 7.1 WATER CONTAMINATION MITIGATION STRATEGIES

All hydrocarbon (fuel) sources that could potentially contaminate the waterways are kept in bunded areas to prevent spillages from reaching discharge points. Bunded areas are inspected regularly to ensure they are free of debris, spills or water to enable maximum capacity to capture any potential spills. The potential for spills will be minimised by:

- Inspecting incoming waste for liquids
- Re-fueling operations of plant to be undertaken by suitably trained personnel
- Provision of spill kits and training of personnel in their use

Spill containment kits are maintained in place at each bunded area and at other locations on premises where the potential for chemical spills exists (e.g. machinery service area).



#### 7.2 NOISE POLLUTION MITIGATION STRATEGIES

Noise generated at the premises will be controlled by:

- Limiting the hours and types of operation to that which is approved
- Using stockpiles placed between machinery and boundaries as noise barriers
- Ensuring that plant and equipment are operated such that the noise centre is no higher than the solid boundary fences or stockpiles
- Limiting machinery used to that which meets noise generation guidelines for this type of operation
- The correct operation and maintenance of machinery

#### 7.3 AIR POLLUTION MITIGATION STRATEGIES

The site is monitored for dust generation particularly during busy or windy (dry) days and control activities implemented as required. Dust generated at the premises will be controlled by:

- Restricting stockpile heights in line with licence requirements to reduce the potential for dust generation
- Wetting stockpiled soils to minimise wind erosion
- Ceasing or reducing loading and unloading of stockpiles during strong wind conditions
- Spraying materials during the loading/unloading processes to suppress dust
- · Ceasing or reducing processing activities during strong wind conditions
- Spraying of materials during processing activities
- Cleaning hardstand /roads by street sweeper
- All trucks passing through the wheel wash on exit

A network of remotely controlled sprinklers is installed on site which is activated as necessary throughout the working day, to wet down stockpiles and open yard areas in an effort to minimise the generation of air borne dust on site.

Whilst the premises do not accept putrescible waste, regular site monitoring for possible sources of odour is conducted and control activities implemented as required:

• Arranging prompt and regular removal of residual waste

#### 7.4 FIRE MITIGATION STRATEGIES

The potential for fires will be minimised by:

- Accepting only permitted wastes
- Identifying, sorting and appropriately disposing of gas bottles, vehicle batteries and tyres
- Regularly removing residual waste from the site
- Conducting regular litter patrols
- Maintaining machinery/equipment in good working order to minimise the risk of sparks
- Ensuring stockpiles are sufficiently dampened (refer 6.3 Air Pollution Mitigation Strategies)

Fire fighting shall be undertaken in association with the NSW Fire Brigade. Small fires are to be extinguished utilising the fire hoses and extinguishers provided on site in the first instance by staff that are competent and confident to do so. Fire fighting capability will be maximised by:

- Maintaining appropriate fire fighting equipment/facilities in good working order
- Ensuring adequate water supply for fire fighting
- Train personnel in basic fire fighting and emergency response protocols

Appendix B shows the location of fire fighting equipment/devices throughout the premises.



#### **8 COMMUNICATING WITH NEIGHBOURS AND LOCAL COMMUNITY**

In the event of an environmental incident occurring at the site, impacts on the neighbouring business and local community will be variable and depend on location, volume of spills or other factors such as wind direction and velocity.

If an environmental incident on site is likely to impact neighbouring businesses or the local community, surrounding neighbours will usually be contacted face to face or through information left at the place of residence by a Benedict Recycling representative to notify them of the situation. This notification should include any possible impacts to the neighbour as well as the procedures that have been put in place to rectify the situation.

Communication methods will be used on a case by case basis, but in all situations Benedict Recycling will attempt to provide early warnings to those neighbours likely to be directly affected. Early warnings would typically include details of the nature of the incident and how those likely to be affected can best prepare and respond to the incident.

Ongoing communication with the neighbouring businesses/ residents will be maintained until such time as the incident is rectified.

#### 9 STAFF TRAINING

All staff undertake a company induction upon commencement of employment and a site-specific induction relevant to their particular place of work (site). In addition to inductions, all persons (employees, contractors and visitors) will receive additional training in some or all of the following as relevant to their function on site:

- Emergency exits and evacuation routes
- Emergency Assembly area
- Emergency lighting and exit signs
- Emergency rescue
- Smoke control and smoke detectors
- Fire fighting devices (hydrants, hose reels and extinguishers)
- First aid
- Shutting down plant and processes
- Hazardous substances
- Traffic flows/management plan
- Evacuation drills and debriefing

Individual staff training requirements are discussed during regular toolbox meetings.

Basic environmental training is provided to all site employees which references the purpose, use and location of this PIRMP document. This training is to be conducted annually upon review and updating of the PIRMP document and more frequently as necessary (e.g. on-boarding of a new employee).

#### **10 TESTING AND REVIEW OF PIRMP**

This PIRMP is scheduled for routine testing and reviewing on an annual basis. The annual site Licence Anniversary Notice serves as the prompt to test and review the PIRMP. In the event that a pollution incident occurs, this PIRMP must be tested and assessed for capability and effectiveness within one month of the pollution incident occurring.

The usual method of testing this PIRMP is to undertake a desktop simulation and follow-up with a briefing of outcomes at site toolbox meetings where findings and recommendations are considered. Alternatively, an environmental incident scenario may form the basis for a site evacuation drill (practical drill) whereby the PIRMP can be tested and its effectiveness/adequacy reviewed.

## Environmental Risk Register (Page 1)

BENEDICT

Environmen	Environmental Risk Register -	Sirr	awi	Girraween Recycling			8		BENEDICT
Completed by: Approved By:	A. Campbell						Date: Review Date:	Date:	8/01/2020 8/01/2021
Environmental Hazard	Description of Hazard/Incident	Consequence	Jai Ritin	ក្នុង ខ្លែរ ស្ត្រ	Control Measures/ Corrective Action	Specific PPE / Equipment / Devices available	Consequence	Residual Risk Reting	Responsible
Soil Contamination Incident - Diesel Fuel	Catastrophic failure of diesel fuel storage container/equipment resulting in major spill. e.g punctured tank, valve failure, tank overfilled.	D 2	muibeM	NA	<ul> <li>Fuel storage tank is adequately bunded.</li> <li>Traffic limitations in Fuel storage tank area of site.</li> <li>Vehioles fillinginetuelling approach tank forward facing</li> <li>Regular maintenance checks of valves.</li> <li>Fillinginetuelling procedures in place.</li> </ul>	. Tank bunding - Signage	E 2	μο	Site Manager
	Diesel spill outside of bunded area during refilling/fueling activities.	C 4	мот	N/A	- Spill kit in place.	- Spill Kit	D 4	лец, Low	Site Manager
	Diesel spill outside of bunded area from mobile plant fuel tank failure.	4	мот	N/A	<ul> <li>Site spill kit can be used or else sand/soil stockpiles nearby which can be used to contain the spill in the short term.</li> </ul>	- Spill Kit	D 4	лец, Low	Site Manager
	Diesel spill within bunded area due to c leaking/open valve.	c 5	мод үлөү	N/A	<ul> <li>Spill kit in place.</li> <li>Routine maintenance inspection of pipework/valves.</li> </ul>	- Spill Kit	D 5	моң қыәд	Site Manager
Soil Contamination Incident - Oils	Catastrophic failure of oil storage container/equipment resulting in major spill. e.g punctured tank, valve failure, tank overfilled	D 3	мот	NIA	<ul> <li>Oil storage containers are adequately bunded.</li> <li>Traffic limitations in oil storage area of site (workshop).</li> <li>Regular maintenance checks of valves.</li> </ul>	- Pallet bunding - Signage	в В	мот	Site Manager
	Oil spill outside of bunded area during delivery/decantering activities.	C 4	мот	N/A	- Spill kit in place.	- Spill Kit	D 4	лец Гом	Site Manager
	Oil spill outside of bunded area from c mobile plant, hydraulic hose failure.	4 4	γюη	N/A	<ul> <li>Site spill kit can be used or else sand/soil stockpiles nearby which can be used to contain the spill in the short term.</li> </ul>	- Spill Kit	D 4	лец ∟ом	Site Manager
	Oil spill within bunded area during delivery/decantering activities.	C 5	∧еи, гом	N/A	- Spill kit in place. - Routine maintenance inspection of pipework/valves.	- Spill Kit	2 D	∧өи, гом	Site Manager
Noise Pollution	Excessive noise generated by fixed plant and machinery. e.g shredder, wash plant	4	леу Гом	Yes	<ul> <li>Limiting the hours and types of operation to that which is approved.</li> <li>Using stockpiles placed between machinery and boundaries as noise barriers.</li> <li>Limiting machinery used that which meets noise elimiting machinery used to this type of operation.</li> <li>The correct operation and maintenance of machinery.</li> </ul>	- Hearing protection for operators	2	Very Low	Site Manager

### APPENDIX A

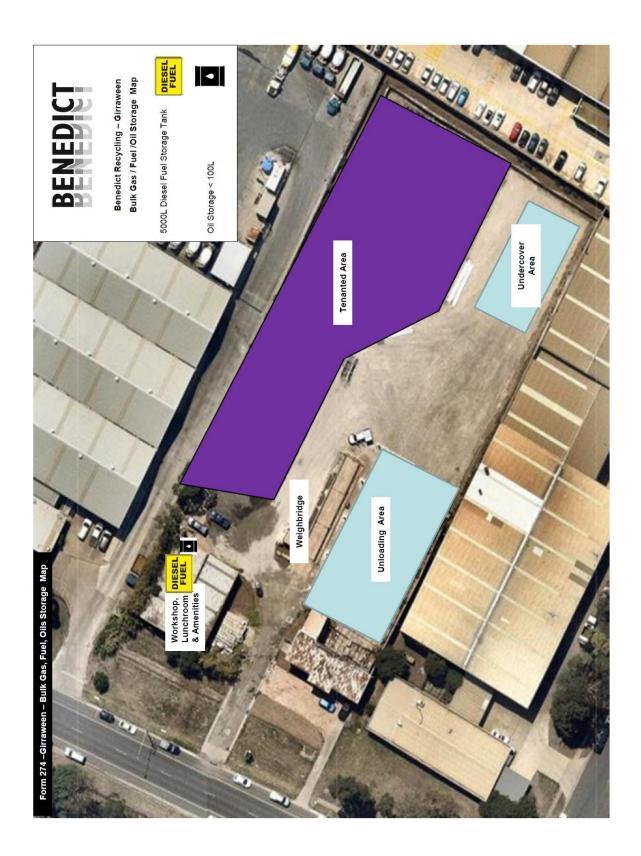
## Environmental Risk Register (Page 2)





#### APPENDIX B

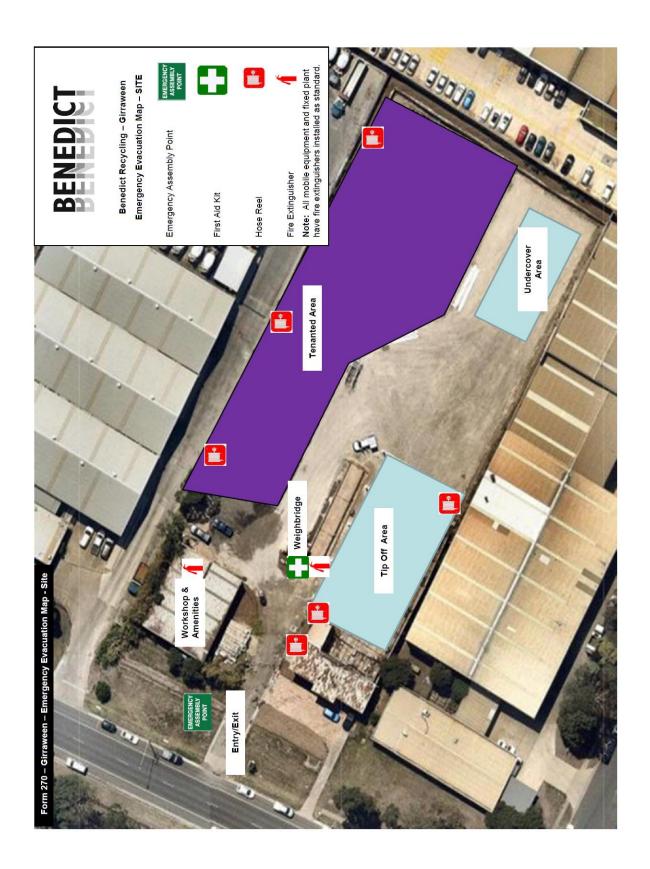
#### **Bulk Fuels and Combustibles Location Map**





#### **APPENDIX C**

## Fire Fighting Equipment Location Map





#### APPENDIX D

## Site Training Record Sheet

Training Re	cord				BE	NEE	
Training Scope:	ENVIRONMENTA	L AWAR	ENESS TRAI	NING			
Location:				Date/	s:		
Trainer:	MARK HUTCHES	ON		Durat	ion:	Total Hrs/Mins	r
Principle Areas Covered in Session/s:	NSW Legal Requi Policy, Benedict E of Pollution, Bened Management Plan	nvironme dict Envir	ental Respons ronmental Pro	ibilities	, Environme	ental Impact	s, Examples
Practical Training Provided:	N/A						
Assessment Undertaken:	Form Number:			Title			
Training Material Reference:	Form Number:			Title	Environme (Powerpoir	ntal Awaren nt presentati	ess Training on)
Material Provided to Participants:	Form Number:			Title			
Trainee/s:	Name (Print)		Signature		Name (Prin	nt)	Signature
	1.			11.			
	2.			12.			
	3.			13.			
	4.			14.			
	5.			15.			
	6.			16.			
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