

**MANUAL****ENVIRONMENTAL MANAGEMENT MANUAL****VP-EM-0201**

Process Owner: Operations Manager NSW

Status: Approved

Issued:

**29 May 2018****Distribution:**

- ☐ Document Control
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# MORGAN ASH VALES POINT



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## 1 INTRODUCTION

This Environmental Management System (EMS) has been prepared for use by Morgan Ash.

The EMS aims to address the need for environmental safeguards and the adoption of environmentally sensitive work practices during work on the Morgan Ash site.

This system will be the source document of all environmental protection issues related to the organisation and provide the facility to document the implementation and monitoring of these environmental requirements.

The environmental issues that may be required to be addressed will be determined from the list below:

- Water runoff to stormwater drains
- Waste disposal
- Noise
- Dust
- Asbestos
- Fuel & Chemicals
- Spillage of product

The Environmental Officer for Morgan Ash is: -

Name	Title	Mobile No
Paul Bollen	Operations Manager NSW	0407 667 220
Jay Gainey (Secondary Contact)	Site Supervisor	0428 618 768

In general all activities carried out on site must comply with the relevant provisions of all environmental legislation. The environmental officer shall be available to the EPA on a 24 hour basis and have authority to take any action to mitigate pollution on the site as directed by an authorised officer of the EPA.

Morgan Ash is a flyash collection and blended products facility, which nominally operates 24 hours per day, seven days per week, excluding public holidays. The facility collects fly ash from Delta electricity, classifies this ash, and stores in bulk load out silo's until required. It is then transported off site by tanker trucks.

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**29 May 2018****2 DEFINITIONS**

Environment	Surroundings in which Morgan Ash operates, including air water, land natural resources, flora , fauna, habitats, ecosystems, biodiversity, humans, (including human artifacts, culturally significant sites and social aspects) and their interaction. The environment in this context extends from within a site to the global system
EPA	Environment Protection Authority
Incident	Any event caused by Morgan Ash operations and activities that caused or may have caused adverse impact on any part of the environment, including breaches of environmental regulations. Incidents can be either of a “one off” (acute) or continuous (chronic) nature
Hazard	The intrinsic potential for an agent, activity or process to lead to an incident
Reporting Conditions	<p>R1 – Annual Return Documents The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:</p> <ul style="list-style-type: none"> <li>a) a Statement of Compliance; and</li> <li>b) a Monitoring and Complaints Summary</li> </ul> <p>At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.</p> <p>R2 – Notification of Environmental Harm R2.1 Notifications must be made by telephoning the Environment Line Service on 131 555 R2.2 The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.</p> <p><i>Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act</i></p> <p>R3 – Written Report R3.1 Where an authorized officer of the EPA suspects on reasonable grounds that:</p> <ul style="list-style-type: none"> <li>a) where this licence applies to premises, an event has occurred at the premises; or</li> <li>b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carry out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorized officer may request a written report of the event.</li> </ul> <p>R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.</p>

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R3.3 Details what information is required in the report (Refer to details in the Vales Point Environment Protection Licence).

R3.4 The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

Risk	Likelihood of an impact on people, the environment, property or a combination of these
SDS	Safety Data Sheet
N/A	Not Applicable
Non-Conformance	A situation which does not conform to the requirements of policies, standards or systems such as may be identified during audits and reviews. Also includes incidents
Material Harm to the Environment	<p>For the purpose of the legislation harm to the environment is material if:</p> <ul style="list-style-type: none"> <li>▪ It involves actual or potential harm to the health and safety of human beings or to ecosystems that is not trivial, or</li> <li>▪ 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 prescribed by the regulations), and</li> <li>▪ Loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practical measures to prevent, mitigate or make good harm to the environment</li> </ul>
Immediately	Prompt and without delay

### **3 ENVIRONMENTAL POLICY**

#### **3.1 Morgan Ash Environmental Policy**

Morgan Ash is committed to ensuring that the environment is not adversely effected by its actions and that its operations are conducted in an environmentally responsible manner. To achieve this aim the organisation will:

- Have a commitment to use the best processes feasible to minimise the environmental impact from the tasks carried out and to continuously improve the processes to further reduce pollution.
- Ensure all operations are conducted in compliance with applicable environmental legislation, licences and standards.
- Use plant and equipment where practical designed to minimise energy consumption.
- Investigate and discontinue use of, if possible, products or operations that pose unacceptable environmental risks.
- Implement means of reducing the generation of waste and the discharge of contaminants into the environment from all sites where work is carried out.
- Ensure on site work is planned to comply with any additional client environmental requirements.
- Ensure all employees, supervisors and managers work according to formal environmental practices.

It is relatively easy for environmental pollution or other adverse environmental impacts to occur at a work site – there can be spillage of product, fuel, oils, pollution of watercourses or land by these substances. The penalties for these impacts can be severe, with large fines imposed. It can also damage the reputation of Morgan Ash, and potentially reduce our success in obtaining future business. For these reasons it is imperative that all proper precautions are taken and every effort is made to reduce environmental impacts.

It is the responsibility of all persons employed by Morgan Ash to ensure that the actions they take do not in any way adversely effect the environment.

---

Paul Bollen  
Operations Manager

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Date



**3.2 Group HSE Policy****HEALTH, SAFETY AND ENVIRONMENT POLICY****Health, Safety and Environment Policy**

At Adelaide Brighton our commitment to health, safety and the environment is an essential and integral part of the way we do business. Our goal is simply

**Safe, Sustainable Production**

To achieve this we continually work on improving our safety systems and safety culture. We believe that good planning and preparation will minimise risks to health and safety.

Our risk management approach is to identify, report, and where practicable, eliminate or reduce health, safety and environmental risks and hazards, and environmental impacts from our activities, to the lowest practical levels.

All employees have a shared responsibility to ensure their own safety in the workplace as well as the safety of their fellow employees.

**Everyone is accountable for safety**

Our health, safety, environment and injury management tools and procedures are contained within our Health, Safety, Environment Management System (HSEMS). This system provides the standards and framework for management of health, safety and environment including:

- Management and employee roles and accountabilities
- Appropriate resources to ensure that our systems are maintained
- Commitment, consultation and communication
- Compliance with legislative and other requirements
- Underpinning our rail safety systems in relevant locations
- Duty of care to employees, contractors, labour hire and visitors
- Integration with other relevant policies and procedures
- Provide injured employees with the best opportunity to return to work through effective injury management
- Avoiding, reducing or controlling waste and pollutants to reduce adverse environmental impacts

This Policy applies to all Adelaide Brighton Ltd Group sites and will be reviewed in line with our standards and legislative developments.

A handwritten signature in black ink, appearing to read 'M. Brydon'.

**On behalf of the Adelaide Brighton Ltd Board**  
**Martin Brydon**  
**Chief Executive Officer**

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**29 May 2018****4 EPA LICENCE INFORMATION**

Licence Number:	5148
Licence Holder:	Adelaide Brighton Cement Limited
Type of Licence:	Scheduled Activity – Premises Based
Activities to which Licence Applies:	Scheduled Activity – Cement or Lime works – A/C/G  Fee Based Activity – Cement or Lime handling – 100,000 – 500,000t produced
Monitoring Requirements:	No monitoring requirements under licence conditions

**5 RESPONSIBILITY AND AUTHORITY**

All Morgan Ash employees have the responsibility to ensure that services provided to our customers are carried out in such a way as to minimise the effect and impact on the environment.

A proactive approach to all environmental issues is encouraged from all employees.

The following employees have essential responsibility and authority with regard to the implementation, ongoing maintenance and achievement of the Environmental Management Plan.

Operations Manager

- Ensures compliance with all environmental legislation
- Ensures environmental events are investigated and reported
- Sets monitors and achieves environmental objectives
- Ensures that all staff direct and indirect have been trained suitably in environmental matters.
- Ensures that all Environmental Management actions and monitoring is carried out
- Ensures all scheduled audits are conducted and that work practices and standards are maintained
- Ensures appropriate health screening is conducted for relevant employees
- Reports all significant environmental issues to the EPA

Environmental Officer

- Is the custodian of the EMP and ensures its effective distribution and Implementation.
- Is Morgan Ash's first point of contact with day to day regulatory bodies
- Ensures Environmental monitoring is carried out correctly
- Is responsible for reporting environmental issues internally and to the relevant regulatory bodies.
- Ensures environmental incidents are reported , investigated and followed up
- Responsible for the site environment audit program
- Ensures all efforts are made to comply with the sites environment company standards

Supervisor

- Ensures all operations are conducted in accordance with work instructions and environmental requirements.
- Ensures that operators and maintenance personnel are trained in appropriate procedures regarding environmental matters.

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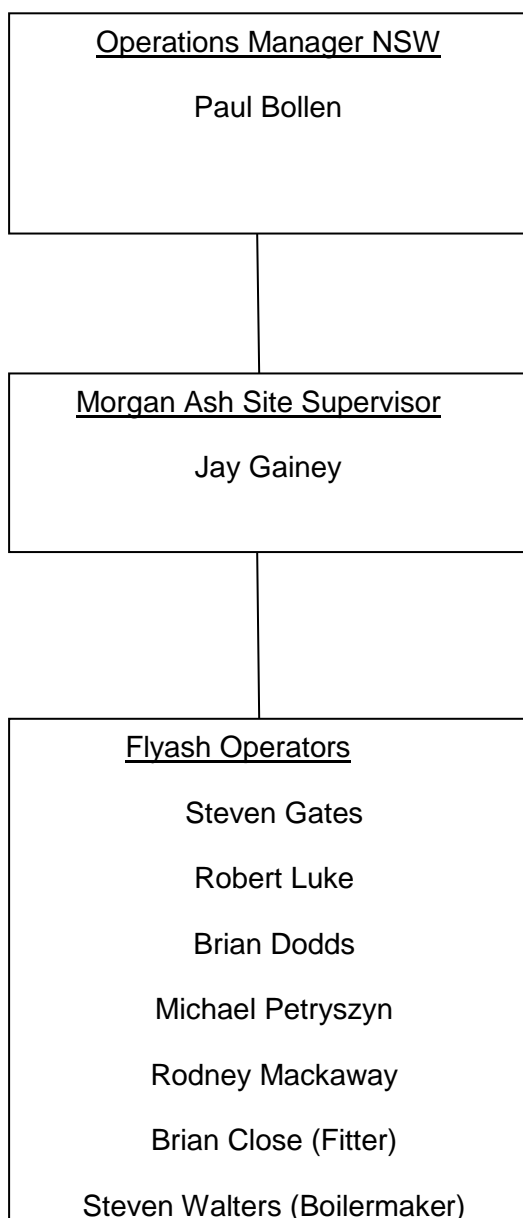
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- Undertake all duties in the appropriate manner in respect of environmental requirements.
- To observe Morgan Ash's environmental policy and understand how their activities effect the environment.
- To immediately correct or bring to the attention of Morgan Ash's Management any condition that would effect the environment.

Employees

- Undertake all duties in the appropriate manner in respect of environmental requirements.
- To observe Morgan Ash's Environmental Policy and understand how their activities effect the environment.
- To immediately correct and bring to the attention of a Supervisor or Management any condition that would effect the environment



## **6 ENVIRONMENTAL EVENT REPORTING**

### **6.1 Environmental Event Reporting**

The environmental event notification and reporting system covers all environmental non-compliances against legislation, permits, customer requirements, Morgan Ash standards and complaints received.

### **6.2 Environmental Event – Definition**

An environmental event or incident is any event caused by Morgan Ash operations and activities that caused or may have caused adverse impact on any part of the environment, including breaches of environmental regulations. Incidents can be either of a “one off” (acute) or continuous (chronic) nature.

Environmental events include but are not limited to:

- Infringement of the Morgan Ash environmental standards.
- Release of an environmentally hazardous substance(s), such as a large product spillage
- An Environmental Protection Authority inspection where it is indicated verbally that a non compliant condition exists
- Discovery of an actual or suspected site contamination
- Verbal or written notification from any customers indicating non compliance with contract requirements
- Third party complaints or concerns with Morgan Ash operations or processes
- Environmental incident near miss

### **6.3 Environmental Event Report**

If an environmental event as described above occurs the incident shall be recorded in the Incident reporting system via proprietary software, Cintellate, capturing hazards, near miss, property damage, fire, vehicle, injury/illness and safety – No injury incidents and environment, quality and community complaints.

As much information is to be gathered for the Operations Manager to review as soon as practical.

If the incident does or is likely to be a breach of EPA License requirements urgent action must be taken and the Operations Manager informed immediately on 0407667220. The Operations Manager is to notify the appropriate regulatory authority (ARA). All of the agencies listed below are to be notified of the environmental event:

**NOTE:** Only incidents that present an actual or likely risk of material harm to the environment need to be reported (see Definitions).

Fire & Rescue NSW

Phone: 000; Doyalson Fire Brigade 43 99 3497

Environment Protection Authority

Phone: 131 555

WorkCover NSW

Phone: 13 10 50

Wyong Shire Council

Phone: 4350 5555

Ministry of Health

Phone: 9391 9000

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Where the pollution incident causes or threatens material harm to the environment or human health, all the following authorities must be notified:

- 1 The appropriate regulatory authority (ARA) for the activity under the POEO Act (usually the EPA or local council)
- 2 The EPA if they are not the ARA
- 3 The Ministry of Health (via Public Health Units)
- 4 WorkCover NSW
- 5 The local authority if it is not the ARA – a ‘local authority’ is a local council (being the council of an area under the Local Government Act 1993), or the Lord Howe Island Board for Lord Howe Island, or the Western Lands Commissioner for the Western Division, except any part of the Western Division within the area of a local council
- 6 Fire and Rescue NSW (***should be called first if the incident presents an immediate threat to human health or property***)

**7 ENVIRONMENTAL AUDITING AND REVIEW****7.1 Environmental Auditing**

Morgan Ash’s environmental auditing program is designed to provide a clear and appropriate understanding of environmental performance. The auditing program is designed to cover each area of Morgan Ash’s operations and processes. The audit program requires an audit to be carried out annually.

**7.2 Environmental Review**

Morgan Ash’s environmental review is conducted at the regular management meetings.

Progress on monitoring control and incidents is covered in these meetings.

**7.3 Environmental Plan Testing**

The environmental plan will be tested annually or within one month of any environmental incident by the Operations Manager/Site Supervisor. Testing will be in the form of an audit to ensure that the items contained in the environmental management plan document are still correct and relevant for the activities and possible pollutants on site. The audit will also check that any listed controls are still in place and usable.

**7.4 Test Dates or Environmental Incident**

Date of Last Test of Environmental Plan/Environment Incident	Next Test Due	Completed Yes/No
30/10/2012	25/11/2013	No
30/10/2014	25/11/2014	Yes
25/11/2014	25/11/2015	Yes
25/11/2015	25/11/2016	Yes
25/11/2016	25/11/2017	Yes
25/11/2017	25/11/2018	

## **8 ENVIRONMENTAL MONITORING DATA**

### **8.1 Legislative Requirements**

The specific requirements for the publication of monitoring results are set out in section 66(6) of the POEO Act. In summary, this provision requires that:

- licensees who undertake monitoring as a result of a licence condition publish monitoring data that relates to pollution within 14 days of obtaining the data
- licensees who maintain a website make the monitoring data available in a prominent position on the website
- licensees who do not maintain a website provide a copy of the monitoring data to any person who requests a copy of the data at no charge
- the data must be published in accordance with requirements issued in writing by the EPA.

There is a penalty for not publishing the results of monitoring in accordance with section 66(6). The legislation also includes a penalty for making available false or misleading results in accordance with section 66(7).

### **8.2 Licence Data Monitoring Requirements**

Morgan Ash has no monitoring requirements specified in its licence.

### **8.3 Publishing Monitoring Data Results**

This section is not applicable to the Morgan Ash site.

## 9 POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

### 9.1 Possible Pollution Incidents

The emergencies that could occur on site that would be considered as causing actual or potential material harm to the environment are:

- Silo rupture with external release (to air - loading station & weighbridge) Likelihood = Rare
- Product pipe rupture either on Morgan Ash site or Delta site Likelihood = Rare
- Failure of valves allowing unabated continual flow from silo at loading areas Likelihood = Rare
- Vehicle interaction with loading station or weighbridge. Likelihood = Rare
- Silo Overfill. Likelihood = Possible

### 9.2 Flora & Fauna that could be affected

Personnel – exposure to dust. Dust marks are available on site and would be given to everybody on site in the event of a spill.

### 9.3 Inventory of Potential Pollutants

Potential Pollutant	Maximum amount able to cause pollution event
Flyash	<b>I</b> = Ash 30 ton; <b>F</b> = Ash 100 ton; <b>D</b> = Ash 90 ton; <b>C</b> = Ash 90 ton; <b>E</b> = Ash 400 ton <b>J</b> = Ash 40 ton
Cement	<b>G</b> = Cement 96 ton;
Lime	<b>B</b> = Lime 54 ton
Slag	<b>H</b> = Slag 77 ton

### 9.4 Pre-emptive Actions

The actions to be taken to prevent any of the above listed possible pollution incidents will be regular maintenance checks carried out on all silos, pipe work and critical valves. These checks will be carried out as part of the overall general site maintenance. Silos are fitted with high level probes to provide an early warning ensuring they are not overfilled.

### 9.5 Environmental Clean Up Equipment

The containment equipment is stored in the oil shed and consists of:

- 2 brooms
- 4 x 3 metre soaker hoses
- 16ft x 20ft tarp
- 1 shovel

For large release of product a vacuum truck would be required and sourced from Aqua-Assets Pty Ltd on (02) 4952 4000 or Transpacific Pty. Ltd (02) 4967 6000. (see procedure below)

***Action to be Taken to Control Possible Incidents that could cause Actual or Potential Material Harm to the Environment***

**9.6 Clean Up Procedure for Ash Spillage on Delta Site**

**9.6.1 Spillage during Normal Operating Hours**

Normal plant operating hours for the purpose of this instruction is 6.00am till 3.00pm Monday to Friday.

**Minor Spills**

All minor spills can be left till normal working hours for clean up. They are to be swept up and shovelled into a wheelbarrow and disposed of in the sluice drain for eventual transfer to the ash dam.

**Large Spills**

- If a large spillage occurs the site manager is to instruct the operator to shut down the appropriate plant in a safe manner.
- Contact Delta and inform them of the spill and action being taken. Contact the Operations Manager and inform him of the incident.
- The site manager is to dispatch 2 employees to the spill area on the Delta site with the containment equipment.
- The employees who are attending the spill are to sweep and/or shovel up the spillage into a pile and contain using the containment equipment. This is to be done by surrounding the pile with the soaker hoses and covering with the tarp, ensuring the edges of the tarp are weighed down to prevent it blowing off the pile.
- The site manager or his designate is to contact Aqua-Assets Pty Ltd on (02) 4952 4000 or Transpacific Pty. Ltd (02) 4967 6000 and arrange for the vacuum truck to attend site to suck up the spillage during their normal operating hours of 7.00am to 3.30pm.

**9.6.2 Spillage during Night or Weekend**

- If a large spillage occurs the operator to shut down the appropriate plant in a safe manner.
- The operator is to contact Gary Thomas or in his absence or unavailability Brian Close. The person contacted will then attend site and call in another person to help with clean up.
- Contact Delta and inform them of the action being taken. Contact the Operations manager and inform him of the incident.
- Two employees are to be dispatched to the spill area on the Delta site with the containment equipment.
- The employees who are attending the spill are to sweep and/or shovel up the spillage into a pile and contain using the containment equipment. This is to be done by surrounding the pile with the soaker hoses and covering with the tarp, ensuring the edges of the tarp are weighed down to prevent it blowing off the pile.



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- The site manager or his designate is to contact Aqua-Assets Pty Ltd on (02) 4952 4000 or Transpacific Pty. Ltd (02) 4967 6000 and arrange for the vacuum truck to attend site to suck up the spillage during their normal operating hours of 7.00am to 3.30pm.

**9.6.3 Contacts**

Name	Title	Mobile No	Home Phone
Jay Gainey	Site Supervisor	0428 618 768	
Brian Close	Maintenance Planner / Fitter	0414 500 347	(02) 4977 2868

**9.7 Clean Up Procedure For Ash Spillage On Morgan Ash Site****9.7.1 Minor Spills**

All minor spills can be left till normal working hours for clean up. They are to be hosed into the collection (split) pits. From these pits the clean water runs into the Delta drains and eventually to the settlement ponds. The heavy water is pumped into the rejects pit and from there pumped to Delta's ash pit from where they pump it to the ash dam.

**9.7.2 Large Spills during Normal Working Hours**

- If a large spillage occurs the site manager is to instruct the operator to shut down the appropriate plant in a safe manner.
- The environmental reporting section of this procedure would be activated. To enact this process the Environmental Officer identified in page 3 of this document **MUST** be contacted immediately.
- The employees who are attending to the spill are to sweep and/or shovel up the spillage into a pile and contain using the containment equipment. This is to be done by surrounding the pile with the soaker hoses and covering with the tarp, ensuring the edges of the tarp are weighed down to prevent it blowing off the pile.
- The site manager or his designate is to contact Aqua-Assets Pty Ltd on (02) 4952 4000 or Transpacific Pty. Ltd (02) 4967 6000 and arrange for the vacuum truck to attend site to suck up the spillage during their normal operating hours of 7.00am to 3.30pm.

**9.7.3 Spillage during Night or Weekend**

- If a large spillage occurs the operator to shut down the appropriate plant in a safe manner.
- The environmental reporting section of this procedure would be activated. To enact this process the Environmental Officer identified in page 3 of this document **MUST** be contacted immediately.
- The operator is to contact Gary Thomas or in his absence or unavailability Brian Close. The person contacted will then attend site and call in another person to help with clean up.
- Two employees will be required to undertake any clean up on site.

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- The employees who are attending the spill are to sweep and/or shovel up the spillage into a pile and contain using the containment equipment. This is to be done by surrounding the pile with the soaker hoses and covering with the tarp, ensuring the edges of the tarp are weighed down to prevent it blowing off the pile.
- The site manager or his designate is to contact Aqua-Assets Pty Ltd on (02) 4952 4000 or Transpacific Pty. Ltd (02) 4967 6000 and arrange for the vacuum truck to attend site to suck up the spillage during their normal operating hours of 7.00am to 3.30pm.

**9.7.4 Contact with Neighbours**

Due to the site location the only neighbour that could be adversely affected by a release of product on site would be Delta Electricity. They would be contacted and informed of any spillage as per the above procedures or otherwise at our earliest convenience.

Name	Title	Mobile No	Phone
Delta Electricity	Asset Team Leader External Plant	0419 633 623	(02) 4352 6269

**10 TRAINING REQUIREMENTS**

All employees & permanent on site contractors will be trained in the contents of the Environmental Management Plan and the appropriate response to an incident that could cause actual or potential material harm to the environment including:

- The contents of and how to use a spill kit.
- The procedure to be followed after a pollution incident and who should be contacted during and after the incident.
- The procedure on how to contain a product spill.

The objective of the training is to ensure all persons on site have the knowledge on what to do in the case of a pollution causing event on site.

Training will be conducted at 3 yearly intervals and records of training will be kept in the personnel files of the individuals trained and recorded in Morgans Ash Training Matrix.

**11 ASPECT AND IMPACT RISK ASSESSMENT TABLE**

<b>RISK ASSESSMENT MATRIX</b> (to determine risk priority)					
	<b>Likelihood</b>				
<b>Consequences</b>	<b>Rare</b>	<b>Unlikely</b>	<b>Possible</b>	<b>Probable</b>	<b>Very Likely</b>
<b>Negligible</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>7</b>	<b>11</b>
<b>Minor</b>	<b>3</b>	<b>5</b>	<b>8</b>	<b>12</b>	<b>16</b>
<b>Serious</b>	<b>6</b>	<b>9</b>	<b>13</b>	<b>17</b>	<b>20</b>
<b>Significant</b>	<b>10</b>	<b>14</b>	<b>18</b>	<b>21</b>	<b>23</b>
<b>Catastrophic</b>	<b>15</b>	<b>19</b>	<b>22</b>	<b>24</b>	<b>25</b>

<b>Rating</b>	<b>Description</b>
<b>Very Likely</b>	It is almost certain that the consequence will occur. Common or frequent occurrence
<b>Probable</b>	The consequence is likely to occur. It is known to occur, or not surprised as it has happened' several times
<b>Possible</b>	The consequence could occur sometime or 'I've heard of it happening'
<b>Unlikely</b>	The consequence is not likely to occur. There is confidence that it will not occur although it is conceivable
<b>Rare</b>	The consequence may only occur in exceptional circumstances or 'the probability is close to zero'

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Health & Safety	Negligible	Minor	Serious	Significant	Catastrophic
	Minor Injuries requiring First aid Treatment  No ongoing health effects.  Near Miss with the potential consequence for the injuries above.	Single or multiple injuries requiring medical treatment No ongoing health effects.  Near Miss with the potential consequence for the injuries above.	Single or multiple injuries requiring hospitalisation and incurred a loss of more than one full shift.  Near Miss with the potential consequence for the injuries above.	Single severe injury causing irreversible permanent disability or impairment or single fatality.  Near Miss with the potential consequence for the injuries above.	Incident with short or long term effects causing multiple fatalities.  Near Miss with the potential consequence for the injuries above.
Cost	Less than \$10K	\$10K – 50K	\$50K – \$150K	\$150K – \$1M	Greater than \$1M
Environment	Minor incident with minimal or no lasting effects  Onsite uncontrolled release immediately contained.  Cleanup completed within 12 hours.  Less than a 5 litre spill	Incident with minor effects on the environment.  Onsite uncontrolled release not immediately contained or minor off site release.  Cleanup completed within 72 hours.  10 to 20 litre spill	Incident with medium term effects on the environment.  Offsite uncontrolled release with an effect on the environment for one year.	Incident with serious environmental effects  Offsite uncontrolled release not contained causing of up-to 10 years impact duration	Catastrophic incident with impairment of the ecosystem function.  Significant and identifiable risk to humans animals and plant species
Community	Low level incident  Public concern restricted to one local complaint	Minor- medium impact issue Public concern with a small local group  Potential for local media attentions	Medium impact issue Ongoing public concern with a local group or community Involvement of non government organisation  Local media	Serious social incident  Ongoing local and/or state issue Involvement of government department/s and non government organisations.  National Media	Very Serious Incident  Ongoing state or national issue Involvement of federal government department/s and non government organisations.  National media
Legal	Prosecution unlikely	Short term involvement of regulator	Medium term involvement of regulator and potential for prosecution.	Serious breach fine or prosecution likely. Licence potentially effected.	Major breach Significant fine or litigation likely. Licence to operate threatened

**MANUAL****ENVIRONMENTAL MANAGEMENT MANUAL****VP-EM-0201**

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**29 May 2018****12 TRAFFIC MANAGEMENT**

This is covered in OHS –SP – 35

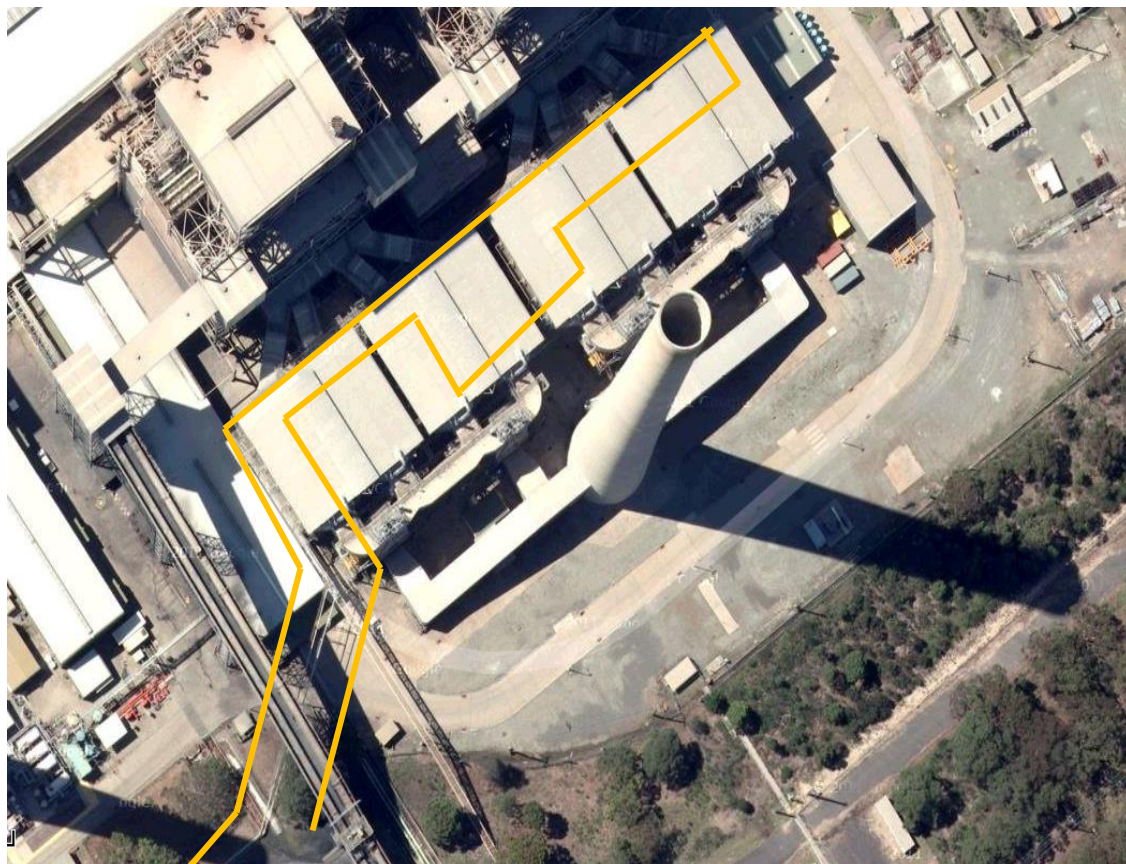
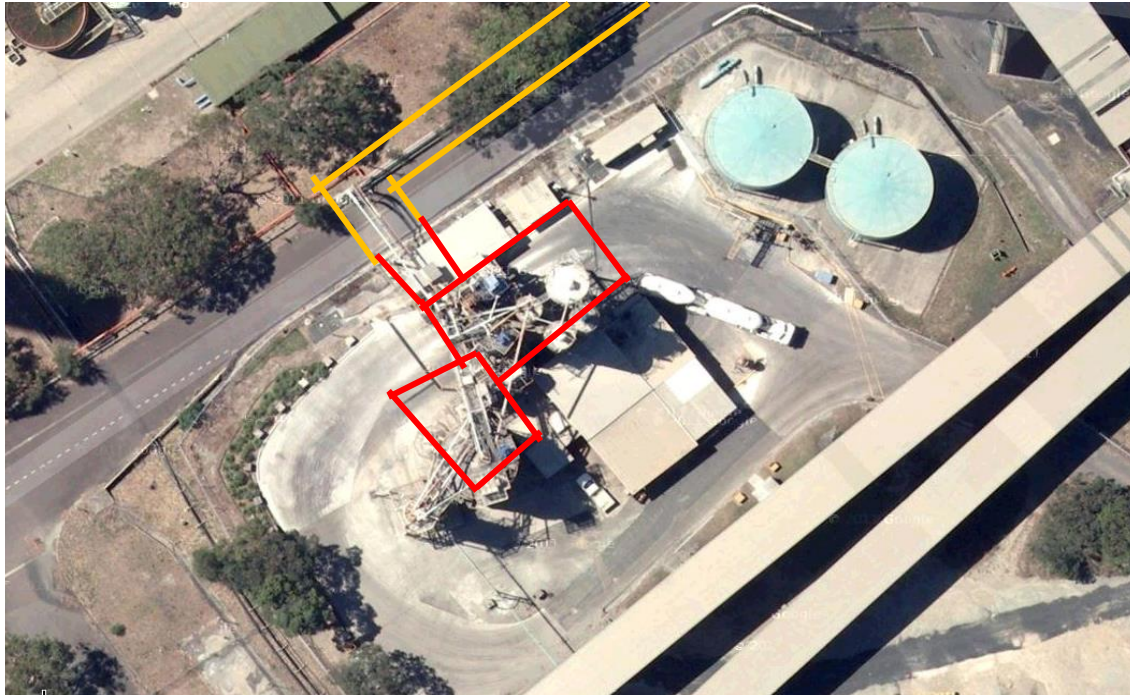


**13 AREAS LIKELY TO BE AFFECTED BY POSSIBLE INCIDENTS THAT COULD CAUSE ACTUAL OR POTENTIAL MATERIAL HARM TO THE ENVIRONMENT**

Areas Possibly Impacted on Delta Site



Areas Possibly Impacted on Morgan Ash Site



**MANUAL****ENVIRONMENTAL MANAGEMENT MANUAL****VP-EM-0201**

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**29 May 2018****14 ASPECT AND IMPACTS REGISTER**

Aspect Description	Impact Description	Legislated Yes/No	Likelihood	Consequence	Risk Ranking	Current Controls	Risk Ranking
<b>Waste and Effluent</b>							
Despatch Operations	Dust, cementitious waste to landfill.	N	Rare	Negligible	1	Regular maint & housekeeping, settling pits for run off	1
<b>Storm Water</b>							
General Building, site run off	Contaminants to storm water run off.	Y	Possible	Minor	5	Site storm water drains & site practices only permit rain & mains water to enter drainage systems	5
<b>Fire Water/Fire Suppressants</b>							
Site Fire	Contaminants to storm water drainage system	N	Rare	Negligible	1	Site emergency response procedure in place	1
<b>Noise/Vibration/Asbestos</b>							
Product Intake & Despatch	Employees/Contractors	Y	Very Likely	Minor	16	Vibration testing,/monitoring, plant maintenance, PPE for employees working in noisy areas & monitoring sound levels. Restricted speed limits for site traffic.	6
Asbestos containing material	Employees/Contractors	Y	Unlikely	Significant	14	Asbestos containing material has been identified and an Asbestos Register is in place. Regular inspection of areas conducted and loose material picked up, bagged & disposed of correctly.	10



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**29 May 2018**

Aspect Description	Impact Description	Legislated Yes/No	Likelihood	Consequence	Risk Ranking	Current Controls	Risk Ranking
<b>Emissions</b>							
Site vehicle movement	Dust on local community & site	N	Rare	Minor	3	Site housekeeping of sealed roads, speed limits & traffic control.	3
Product Intake & Despatch	Dust on local community & site	Y	Probable	Minor	12	Maintenance of dust collectors. High level monitors on silos, trucks close hatches before moving after loading	5
<b>Soil / Groundwater</b>							
Washing vehicles & hosing down	Runoff	Y	Rare	Negligible	1	Truck wash run off contained in settling pit. Pit cleaned out on regular basis to prevent overflow and empties into Delta ash dam.	1
<b>Energy and Resources</b>							
Ash collection & despatch	Dust emissions	Y	Probable	Minor	12	Monitoring conducted	12
<b>Flora and Fauna</b>							
Site Flora & Fauna	Noxious weeds, feral animals & loss of native plants	Y	Unlikely	Minor	5	Weed spraying, and care / maintenance program.	1
<b>Aesthetics, Cultural and Heritage</b>							
Site appearance	Customer & neighbour perception/impact	N	Probable	Minor	12	Land care program - trees/lawns/weeds maintenance, road maintenance, building maintenance	5

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**29 May 2018****15 HAZARDOUS CHEMICAL REGISTER****OIL SHED**

Product	Type	Manufacture	Drum size	Items	Total stock
super 20w-50	Helix	Shell	20 litres	1	5 litres
15w-40	Rimula x	Shell	20 litres	1	20 litres
sae 80w-90 gear oil	Spirax	Shell	20 litres	1	15 litres
P100 compressor oil	Corena	Shell	20 litres	2	40 litres
CH46 compressor oil	Corena	Shell	20 litres	1	20 litres
P68 compressor oil	Corena	Shell	20 litres	1	20 litres
S37 compressor oil	Corena	Shell	20 litres	2	30 litres
220 Gear oil	Omala	Shell	20 litres	1	20 litres
HTX 220 Gear oil	Enersyn	BP	20 litres	1	20 litres
Gear oil	SHC 320	Mobil	20 litres	1	20 litres

**WORKSHOP STORE**

Product	Type	Manufacture	drum size	Items	Total stock
Mineral Turps		Glendale chemicals	4 litres	1	4 litres
Steel Primer		Keytite	5 litres	1	5 litres
Grease	Retinax	Shell		1	3 kgs
Silastic		Dow corning	Cartridges	10	10
Solvent Cement		Vinidex	1 litre	1	1 litre
Priming Fluid		Vinidex	1 litre	1	1 litre
Petroleum Jelly		Shell	1 kg	1	1 kg
Graphite Grease		Dixon			. 5 kg
Penetrine		CRC 5-56		1	4 litres
Machining oil		Devcon		1	5 litres
Degreaser		Septone		1	5 litres

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**29 May 2018****OFFICE No 2 STORE**

Product	Type	Manufacture	drum size	Items	Stock
Line marking paint	yellow	Ultra colour	500g	3 cans	3 cans
Spray paint		Galmet	350 g	4 cans	4 cans
Cold Galvanizing		Galmet	400g	5 cans	5 cans
Belt Grip		CRC	400g	2 cans	2 cans
Adhesive Lubricant	TAC 2	CRC	300g	7 cans	7 cans
Metal protection	converter & sealer	Galmet	1 litre	1	1 litre
Adhesive Lubricant	221	Sikaflex	Cartridges	3	3
Wet surface putty		Devcon	500g	1	500g
Grease	Sapphire ultraplex	Rocol	Cartridges	7	7
GP Epoxy grout		Epirez	5 litres	1	5 litres
GP Epoxy grout	Hardener	Epirez	1 litre	1	1 litre
Solvent cement		ABS	4 litre	1	3 litre
Soldering fluid		Radiant	500ml	1	500ml
Truck wash		Septone	5 litres	1	4 litres
Safe Tap		Devcon	5 litres	1	5 litres
Degreaser		Septone	5 litres	1	5 litres
Penetrine		CRC 5-56	4 litre	1	4 litres
Lens cleaner	Aerosol	MSA	150g	2	200g
Butane gas refill		Weller	200g	2	400g
Chemical welding compound		Goss	250ml	2	500ml
Rust paint epoxy finish		Galmet	4 litres	2	3 litres

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**29 May 2018****CAGE No 1**

Product	Type	Manufacture	drum size	Items	Stock
Gas	Oxygen	Coregas	E Size	1	1
Gas	Acetylene	Coregas	E Size	1	1
Gas	Argo Shield	Coregas	E Size	1	1

**WORKSHOP**

Product	Type	Manufacture	drum size	Items	Stock
Gas	Oxygen	Coregas	E Size	1	1
Gas	Acetylene	Coregas	E Size	1	1
Gas	Argo Shield	Coregas	E Size	1	1

**OFFICE No 1 STORE**

Product	Type	Manufacture	drum size	Items	Stock
Vectra	Floor Sealer	Diversey	5 litres	2	1.5 litres
Domestos		Diversey	5 litres	1	5 litres
Forest Pine	Disinfectant	Septone	5 litres	1	5 litres
Trak Strip	Floor Stripper	Septone	5 litres	1	1 litre

**LP GAS STORAGE TANK**

Product	Type	Manufacture	drum size	Items	Stock
Gas	LP	Elgas	443 litres	1	443 litres

**16 SURROUNDING AREAS MAP**