



# Augusta Power Stations

## Dust Management Plan

### Demolition and Site Rehabilitation

**Flinders Power**

**January 2018**

	<b>Title:</b>	<b>Names:</b>	<b>Signatures:</b>	<b>Date:</b>
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#### **Document History**

<b>Rev</b>	<b>Date</b>	<b>Amended by</b>	<b>Description of Changes</b>
Draft		Kieron Smith	Initial Draft Version
Rev 1	24/08/2016	Kieron Smith	Updated and changed to cover Make –Safe Period
Rev 2	09/09/2016	Kieron Smith	Updated and changed to cover Demolition Period
Rev 3	05/10/2016	Kieron Smith	EPA recommendations and corrections incorporated
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Rev 5	05/11/2016	Brad Williams	Final version incorporating EPA feedback
Rev 6	01/02/2017	Brad Williams	Revised following dust event of 1 <sup>st</sup> and 2 <sup>nd</sup> January 2017
Rev 7	03/03/2017	Brad Williams	Revised to address EPA feedback of 20 <sup>th</sup> February 2017
Rev 8	09/08/2017	Brad Williams	Revised to address excavation, transport and use of ash for backfill
Rev 9	08/12/2017	Brad Williams	Revised to incorporate changes as per EPA letter of 6 December 2017
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## 1. Introduction & Purpose

Flinders Power operates the Flinders assets which comprise the Northern and Playford Power Stations in Port Augusta (known collectively as the 'Augusta Power Stations' (APS)), as well as the Leigh Creek Coal Mine. Flinders Power also formerly maintained a dedicated rail line between Leigh Creek and Port Augusta.

Flinders Power is strongly committed to sound environmental management, as demonstrated within the board-endorsed Environment & Community Policy. The Policy states a commitment to partnering with the communities in which Flinders Power operates, and a focus on continual improvement of environmental performance.

The nature of the operation, if poorly managed, has the potential to create fugitive dust emissions which may adversely impact on the amenity of the local community. Therefore, the objectives of dust control are to:

1. Minimise and control the impact of Flinders Power closure activities on air quality and emission of dust from site operations;
2. To ensure compliance with EPA Licence requirements;
3. Maintain environmental amenity and a strong relationship with the local community and regulatory authorities.

To achieve these objectives, a Dust Management Plan (DMP) has been formed. The objectives of the DMP are to:

- Nominate potential sources of dust emissions;
- Describe methods and responsibilities for dust management controls to minimise the potential for impacts to the environment;
- Clearly define the responsibilities and actions required to respond to environmental incidents;
- Outline the methods to communicate and engage with the local community in relation to dust management; and
- Outline the monitoring and reporting arrangements to ensure ongoing compliance with the DMP.

### Scope

This plan applies to activities covered under:

- EPA Licence 13006 (Northern & Playford Power Stations).

This document is also part of the site Environmental Closure and Post Closure Plan where specific activities and responsibilities for performing dust management measures are assigned to the appropriate parties. During the site demolition process Flinders Power has specific responsibility for areas not covered by the plant demolition project. These areas, the Ash Storage Area and the Coal Stockpile Pad, are subject to separate rehabilitation and revegetation projects, covered in the Environmental Closure and Post Closure Plan.

Dust management activities involved with the decommissioning and demolition of the plant and structures on site are covered in the demolition plans developed under the Project Alliance Agreement.

## 2. Background

The Playford Power station (PPS) ceased operation in April 2012. The Northern Power Station (NPS) ceased operation on the 9<sup>th</sup> May 2016.

NPS and PPS utilised a supply of coal delivered daily by train from the Leigh Creek Coalfields. After combustion in the boilers, ash was collected from the bottom of the boiler, mixed into a seawater slurry and transferred to the Ash Storage Area by pipeline. Fly ash from the exhaust gas was captured by electrostatic precipitators at NPS, bag house filters at PPS, and then sold to secondary users with the excess transferred to the Ash Storage Area.

The Ash Storage Area was continually filled with deposited ash and sea water slurry from the boilers. The nature of this mixture allowed the surface to form a salt crust when it dried out - due to the ever-changing location of the deposition field creating high areas of ash. During heavy rain this surface crust was occasionally damaged allowing winds to disturb the ash and potentially blow it off site.

There was also a flooding regime for the Ash Storage Area, whereby internal levees were built up, filled with an ash/water mixture and then quickly released to allow for a large portion of the surface of the Ash Storage Area to be flooded so that a salt crust could re-form on top. This management strategy changed in October 2016 due to the erosive effects of utilising a pure seawater flooding technique (as opposed to an ash and seawater slurry) and the increased risks associated with dust generation. In November 2016 the 212Ha Ash Storage was sealed utilising a dust suppressant applied by air and land.

The coal stockpile at Augusta Power Stations was designed as an emergency supply, should mine site or railway operations be impacted. Historically the coal stockpile has been used on only intermittent occasions. However during the last few years of operation, due to increased variability in load profile in response to increased volatility in the SA energy market, the stockpile was utilised as a dynamic stockpile. The movement of coal on the stockpile became a frequent activity to meet strategic stockpiling or generation output needs as required. The increased use of the stockpile increased the risk of fugitive dust emissions.

To reduce these impacts during operation there were established Operating Instructions relating to the methods of stockpiling and reclaiming coal from the stockpile, the use of water cannons for wetting down the stockpile, the use of a water truck for applying dust suppressant to the surface of the stockpile water and a description of weather conditions for operations on the stockpile.

Whilst these actions were effective in reducing dust emissions from the stockpile and Ash Storage Area, a change in strategy, continued monitoring, vigilance and innovation is required to maintain control over dust emissions during the demolition and site rehabilitation phase.

Other identified sources of minor fugitive dust during this phase include roadways and during demolition of coal and ash handling plant.

### 3. Setting

The township of Port Augusta is located approximately 300km north of Adelaide on the northern tip of Spencer Gulf and has a Dry Arid Low Latitudes climate.

Figure 2 demonstrates the seasonal wind patterns for the region, including wind direction and wind speed. The charts indicate that strong regular southerlies are dominant during the summer season. Port Augusta township, especially the suburb of Willsden, is potentially affected by fugitive coal dust and ash for most of the year, except during winter when the dominant wind direction changes from southerlies to northerlies.

#### Stockpile

The distance between the coal stockpile and the closest residents in Port Augusta to the north is approximately 3.5km (refer to Figure 1 below).

Coal formerly arrived from the Leigh Creek mine in open rail wagons and was bottom dumped via the rail car dumper on the rail line near the coal stockpile. It was then conveyed to either the main coal storage bins for immediate use or to the stockpile for storage.

Maintaining the moisture level of the coal to a point where surface dust mobilisation is decreased from the stockpile was achieved by the use of water cannons on the stockpile.

The coal stockpile has been decommissioned and as of September 2016 the pad was being rehabilitated and revegetated. A sprinkler system has been established over the surface area to promote vegetation establishment and control dust.

#### Ash Storage Area

Waste ash from the boilers and the electrostatic precipitators was formerly mixed with seawater and piped to the Ash Storage Area.

Deposited ash formed a salt crust due to the evaporation of water from the mix which stopped the ash from being mobilised and entrained by wind into the airshed.

The levees on the edges of the Ash Storage Area were periodically raised to allow for a greater ash holding capacity.

During the operational period ash could enter the airshed during windy periods when the surface crust was damaged by heavy rain and after heavy machinery working on the ash dam has broken up the surface. A map of the Ash Storage Area is shown in Figure 3 with flood coffer dams numbered and the direction of floodwater flow during surface flooding events indicated.

Following NPS closure a number of measures were taken to control dust lift-off from the Ash Storage Area, including the installation of new pipework to ensure continued seawater supply, the construction of new coffer dams and the use of a temporary pump and pipework from Playford. Periodic filling of the coffer dams and breaching enabled seawater to flow out and re-establish a crust. However this continued operation was progressively causing erosion to the surface of the dam and the banks of the coffer dams, and certain areas such as the central discharge point were unable to be reached by flooding. In August 2016 a 15Ha area adjacent the original slurry discharge point was sealed with dust suppressant applied by cropduster. This treatment was successful in containing dust from this area. Continued flooding to the east and west of this location caused

further damage and in October 2016 it was decided to change strategy from seawater flooding to sealing the entire dam surface with dust suppressant.

These measures were intended to achieve short-term dust control, particularly during summer 2016/17, while the long-term rehabilitation plans were being implemented. These actions are referenced in Implementation and Control Action 2.

In late December 2016 a major storm event impacted the dust suppressant seal, causing areas of ash to be re-exposed. On the 1<sup>st</sup> and 2<sup>nd</sup> January 2017 a dust event occurred whereby windblown dust was generated from the surface of the dam.

Reapplication of the dust suppressant was conducted throughout January 2017, with a seal re-established by 25<sup>th</sup> January 2017. Commencement of earthworks also occurred during this period with the opening of an adjacent borrow pit, and the commencement of construction of topsoil 'fingers' across the surface of the dam.

At the time of updating the Dust Management Plan, approximately 180ha of the Ash Storage Area had been covered with soil, with the completion of five east-west access fingers. Seeding had occurred over 140ha of the site.

## **Coal Conveyor System**

The coal conveyor system begins at the train unloading facility at NPS. Coal was directed either to the coal storage bins or the coal stockpile by the conveyor system. Coal from the storage bins was conveyed to PPS or NPS as required. The coal conveyors are enclosed and the transfer points are inside a number of enclosed towers to reduce dust emissions.

Fugitive coal dust was formerly washed down daily from the inside of the conveyor enclosures and the transfer towers. The effluent was captured in sumps underneath the towers where the coal dust sediment was collected and returned to the stockpile area.

Following closure, clean-out of the conveyor lines and transfer towers occurred with all accessible coal washed to the ground where it could be contained and disposed. These control actions are described in the APS Environmental Closure and Post-Closure Plan.

Short term coal dust management measures are being applied during the demolition and rehabilitation phase. This is referenced in Implementation and Control Action 3 & 5.

## **Coal Storage Bins**

There are three Coal Storage Bins at NPS with a capacity of 18,000 tonnes located to the west of the stockpile. These are enclosed, with a tripper on top conveyors and ploughs on the bottom conveyors. Both of these are enclosed to reduce dust emissions.

Coal bins at Playford were decommissioned and emptied in 2012.

Following closure, clean-out of the NPS bins occurred with all accessible coal washed to the ground where it could be contained and disposed. These control actions are described in the APS Environmental Closure and Post-Closure Plan.

Short term coal dust management measures are being applied during demolition of the bins. This is referenced in Implementation and Control Actions 3 & 5.

## Roadways

There are a number of roadways, sealed and unsealed, around the site where dust settles and aggregates. Road vehicle speeds are kept to a 20 kmh limit on most roads, with two roads on site having a 40kmh limit, for both safety and environmental considerations.

The Ash Storage Area is surrounded by a levee system allowing vehicle access on top. Windblown ash can settle on the roadways and this is periodically sprayed with dust suppression chemical and wet down with a water truck to reduce dust lift off.

Dust control measures used pre-closure are continuing during the closure process. This is referenced in Implementation and Control Action 4.

## Demolition Activities

Flinders Power (FP) and McMahon Services Australia formed an Project Alliance Agreement in May 2016 to facilitate the successful delivery of the site demolition program.

The Alliance is a unified team to jointly manage the planning, asset salvage and decommissioning works of the Augusta Power Stations. The successful delivery of this project relies on the combined efforts of both FP and McMahon Services, and the pooling of knowledge, experience and expertise under the Alliance is the best contractual means to deliver the complex closure program. The Alliance will see the partnership of both the Owner Party (FP) and Non-Owner Party (McMahon Services) to create a single team working unanimously, collaboratively, and cooperatively and acting in good faith to make best-for-project decisions.

FP have invaluable knowledge and expertise about the Augusta Power Stations. This knowledge is integral to ensure the safety of all personnel and management of environmental risks. McMahon Services has over 25 years of decommissioning experience conducting high risk demolition and hazardous materials removal works at sites across Australia. McMahon Services are a licenced entity by the SA EPA and are accredited to ISO 14001.

Each module of works within the delivery phase is defined by a unique scope of work with Flinders reserving the right to let independent work scopes.

Potential dust generating activities identified in the Project Risk Assessment Register include:

- Stack felling;
- Bin felling;
- General demolition activities;
- General civil works; and
- General site traffic.

Dust management measures are being incorporated into the demolition control plans, as referenced in the APS Environmental Closure and Post Closure Plan and Alliance Demolition Plans.

## **Utilities Available During Demolition**

The majority of electricity used by major plant at the station was formerly provided by onsite generation. Following closure, there remain a number of small electricity supplies to the site, mainly into offices and workshops, though the main infrastructure utilised for dust control is provided by large standalone portable generators. A number of water pumps are used around the Ash Storage Area for seepage water and a portable diesel water pump can be deployed as required.

Seawater has been previously pumped from the cooling water inlet screens of NPS to the Ash Storage Area via an agreement with a third party to access power supplies. Additional pipework and outlets were installed on the southern side of the Ash Storage Area for targeted seawater flooding. Additional seawater was also obtained from the Playford Station seawater inlet using a portable diesel water pump for flooding the south-western corner of the Ash Storage Area.

Mains water at high pressure, off the SA Water mains pipeline, is also available on site and is utilised for stockpile revegetation.

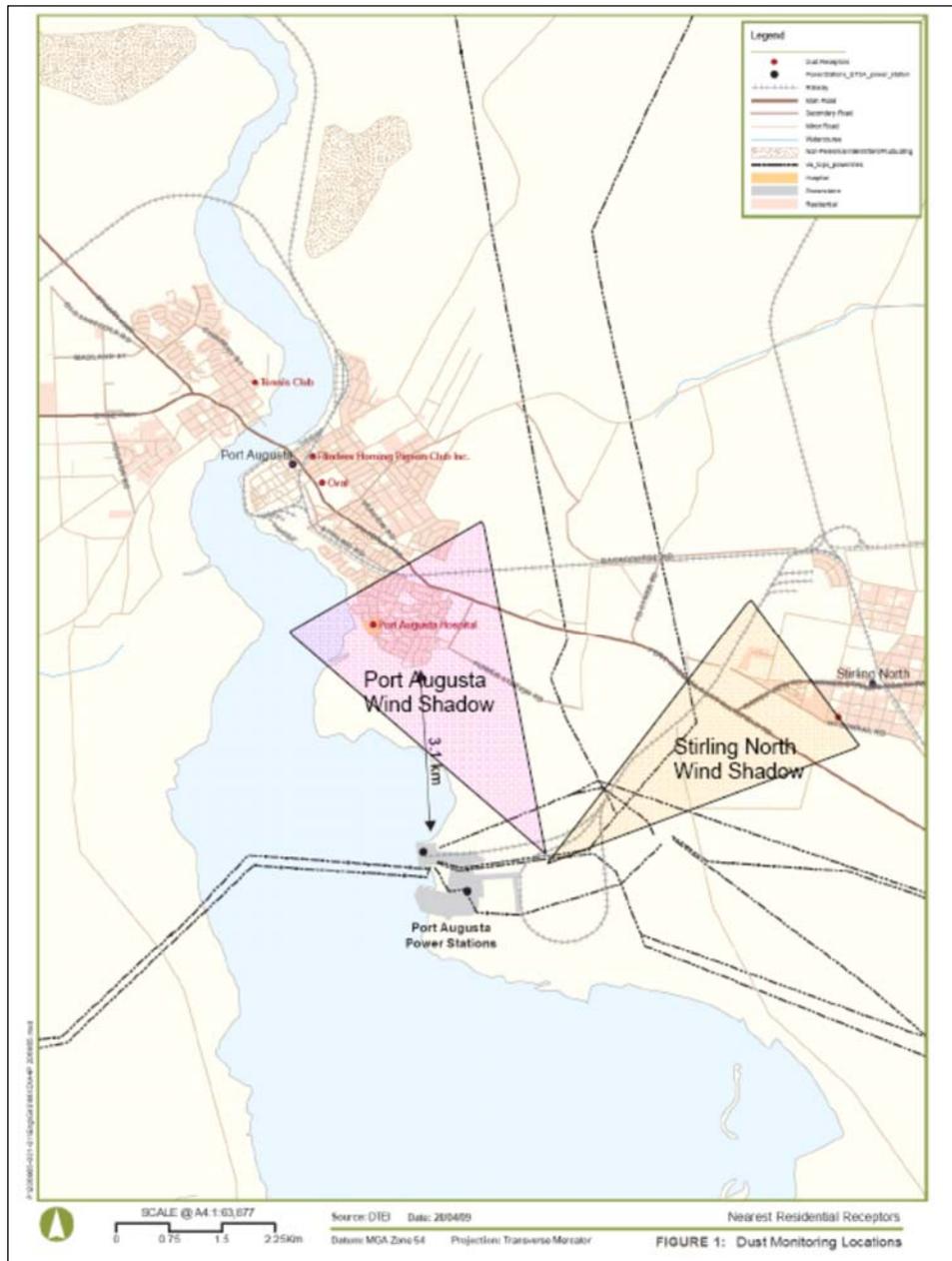


Figure 1 Location of the Port Augusta and Stirling North Communities in relation to the APS Site and Coal Stockpile (after Aurecon, 2010)

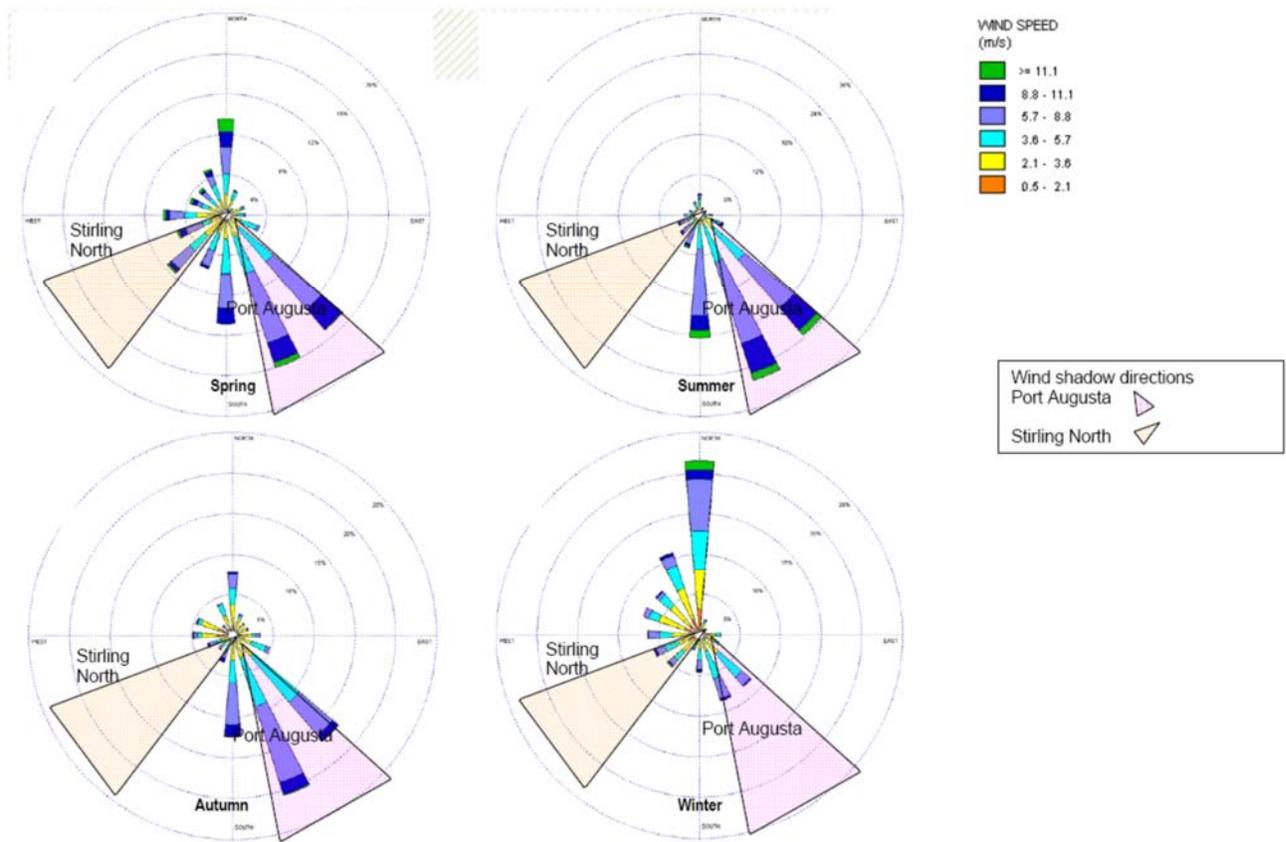


Figure 2 Seasonal Wind Profile



Figure 3 Ash Storage Area map showing numbered flood coffer dams and direction of floodwater flow during surface flooding events.

## 4. Supporting Documentation

The following document map outlines the role of the Dust Management Plan in meeting compliance obligations.

Governing Legislation	EPA Authorisations	Plans	Appendices & Supporting Documents
<b>Environmental Protection Act 1993</b>	<b>EPA Licence 13006</b>		
	Condition 1.1 Dust Prevention	<b>APS Dust Management Plan (this document)</b>	<p>Appendix A: Ash Dam Interim Sealing – Proposal 7<sup>th</sup> November 2016</p> <p>Appendix B: Ash Dam Interim Sealing – Risk Assessment 2<sup>nd</sup> January 2017</p> <p>Appendix C: Complaint Handling Procedure</p> <p>Appendix D: Fugitive Dust Trigger Action Response Plan (Rev4 29<sup>th</sup> May 2017)</p> <p>Appendix E: Ash Storage Area – Extreme Weather Monitoring &amp; Response Plan (3 March 2017)</p>
	Condition 2.2 Complaints Register	FPP Incident Management System	
	Condition 2.3 Develop and Implement Closure and Post-Closure Plan	Environmental Closure and Post Closure Plan – Augusta Power Stations (Rev8 3 March 2017)	<p>App A – Detailed Risk Assessments</p> <p>App B – NPS Make Safe Manual</p> <p>App C – PPS Closure Manual</p> <p>App D – Closure &amp; Care Project Plan</p> <p>App E – Chemical &amp; Oil Management Plan AppE1 – Chemical Manifest &amp; Removal Scope</p> <p>App F – Demolition Alliance Supporting Plans</p> <p>App G - APS Dust Management Plan</p>

		App H – Project Risk Assessment Register
Condition 2.6 Generic Contingency Plan	Augusta Power Station Emergency Response Plan	
Condition 2.7 Pollution Control Equipment Register	Refer Ellipse Maintenance Management System	
<b>Environmental Compliance Agreement (2000)</b>		
Section 1 Definitions and Interpretations	Flinders Power APS Ash Storage Area End of Life Plan Draft Cost Estimate (14 <sup>th</sup> February 2000)	

## 5. Environmental Conditions

The Augusta Power Stations operate according to the Environment Protection Act 1993 (SA).

The EP Act 1993 states the principle of a “general environmental duty”.

*Part 4—General environmental duty*

*25—General environmental duty*

*(1) A person must not undertake an activity that pollutes, or might pollute, the environment unless the person takes all reasonable and practicable measures to prevent or minimise any resulting environmental harm.*

The operation of the coal handling and storage system is an authorised activity under an Environmental Authorisation (Licence) under Part 6 of the EP Act provided by the EPA.

### EPA Notification of Process Changes

According to the requirements of the Environment Protection Act 1993 and Licence Condition 4.2, the EPA must be notified when there is a proposed change to operating conditions that:

- May increase emissions or alter the nature of pollutants or waste; or
- May increase the risk of environmental harm; or
- Would relocate the point of discharge of pollution or waste.

Further, in accordance with section 83 of the Act, the EPA must be notified when serious or material environmental harm is caused or threatened.

FP commits to ensuring compliance with these obligations.

### Licence Conditions

**Note:** *Environmental Authorisation 13006 is being reviewed (as of March 2017) by SA EPA and FP and is being amended to reflect the revised environmental monitoring requirements during the demolition and rehabilitation period. This section will be updated when the revised conditions have been finalised.*

The Northern and Playford EPA licence, (13006) states specifically the activities for which APS undertakes.

*Licensed Activities*

*The Licensee(s)*

*-Flinders Power Holdings GmbH, Flinders Labuan (No 1) Ltd, Flinders Labuan (No 2) Ltd is (are) authorised to undertake the following activities of environmental significance under Schedule 1 Part A of the Environment Protection Act 1993 (the Act), subject to the conditions of licence set out in the attached pages:*

*1(5)(a) Petroleum storage*

2(1)	<i>Abrasive blasting</i>
7(3)(C)	<i>Crushing, grinding or milling works (rock, ores or minerals)</i>
7(5)	<i>Coal Handling &amp; storage</i>
8(2)(a)	<i>Fuel burning coal or wood</i>
8(7)	<i>Discharges to marine or inland waters (heat or antibiotic or chemical water treatments)</i>
8(6a)(a)	<i>Desalination plant that discharges wastewater to the marine environment</i>

Licence 13006 contains the following condition relating to dust on site:

*S-9 Dust Prevention*

*The licensee must:*

- *Take all reasonable and practicable measures to prevent dust leaving the Premises;*
- *Develop a Dust Management Plan to the satisfaction of the EPA; and*
- *Implement the Dust Management Plan approved in writing by the EPA (or any revised plan approved in writing by the EPA).*

Accordingly, Augusta Power Stations operates the former coal stockpile, coal handling plant and the Ash Storage Area in such a manner to reduce its effects on the environment, including the roads to and from the stockpile, and the levees on the ash storage area.

The following Licence condition relates to ambient air monitoring:

*3.1 Ambient Monitoring and Reporting (U-124)*

*The Licensee must:*

- 3.1.1 *Continuously monitor ambient sulphur dioxide and ambient nitrogen dioxide at a location (or locations) within the Port Augusta township approved in writing by the EPA;*
- 3.1.2 *Monitor ambient particulate concentrations (TSP and PM10) one day in six at a location (or locations) within the Port Augusta township approved in writing by the EPA;*
- 3.1.3 *Undertake an investigation to determine the source of any exceedance(s) and provide to the EPA the outcomes of the investigation if following levels are exceeded at any monitoring location(s):*
  - a. *Sulphur dioxide: 571 micrograms per cubic metre (determined as a one hour average);*
  - b. *Nitrogen dioxide: 246 micrograms per cubic metre (determined as a one hour average);*
  - c. *Particles (PM10): 50 micrograms per cubic metre (determined as a one hour average);*
- 3.1.4 *Notify the EPA within seven days of any sulphur dioxide exceedance, as measured at the monitoring location(s) referred to in sub-condition (1); and*
- 3.1.5 *Submit to the EPA on a monthly basis a summary of monitoring results for ambient particles (TSP and PM10), ambient nitrogen dioxide and ambient sulphur dioxide.*

## Ambient Dust Monitoring – TSP & PM10

**Note 1:** *Environmental Authorisation 13006 is being reviewed (as of August 2017) by SA EPA and FP and is being amended to reflect the revised environmental monitoring requirements during the demolition and rehabilitation period. This section will be updated when the revised conditions have been finalised.*

To monitor the ambient air dust levels across the community there are a number of High Volume Air Samplers (HVAS) at strategic locations in Port Augusta and Stirling North. There are two types of HVAS, a total suspended particulate (TSP) type which samples all of the dust in the air and another for particulate matter 10 microns and smaller in diameter (PM<sub>10</sub>). These samplers are currently set to run daily in accordance with Environmental Protection Order conditions. The results are provided to the EPA daily and are posted on [www.flinderspower.com.au](http://www.flinderspower.com.au).

**Note 2:** *As a result of the dust event of 1<sup>st</sup> and 2<sup>nd</sup> January 2017, the EP issued an Environment Protection Order. Requirement D of the Order required: 'Increase the frequency of sampling conducted pursuant to condition 3.1.2 (TSP and PM10) Ambient Monitoring and Report (U-124) of the Licence to daily rather than one day in six, at the approved locations within the Port Augusta Township. The results of such sampling must be provided to the EPA within 1 business day following the Licensees' receipt of the results. (Compliance Date: Forthwith)'*

*Flinders commenced daily sampling on Wednesday 11th January 2017, following maintenance and re-calibration of the units. Results have been consistently provided via email to the EPA since that time.*

## Speciation

One of the challenges in undertaking ambient monitoring for dust within the community is differentiating coal and ash particles derived from operational activities as distinct from natural regional dust. A key differentiator is wind direction and strength. The wind direction and strength for the day of measurement is captured within data reports, and used to assist determine whether particles may have derived from the APS site. Another method used is colour – a filter paper of a red colour indicates a high contribution of natural regional dust, and is particularly noticeable during regional dust storms. A filter paper of a grey colour can indicate a contribution from the ash dam, however the natural urban dust, and wood smoke from domestic heaters, tends to also be grey in colour. A very dark grey/black tinge can indicate the contribution from coal dust. The township of Port Augusta and surrounding communities is located in a desert climate and is subject to frequent dust storms from the arid interior. The analysis of historical high ambient dust results against weather events shows a strong correlation with regional conditions.

Another key data input is local knowledge. On certain days there may be local activities (eg development of the Central Oval, or mowing at the Lea Memorial Oval) that may be a key contributor to local dust. These conditions are noted on the monitoring results database.

Along with ambient air dust sampling, dust collected from various locations around the site, including along the railway and around the Ash Storage Area and town have been sampled to determine the coal and ash content.

Other methods to identify the sources of dust collected at monitoring stations are continually investigated.

The results of speciation work undertaken by the EPA or Flinders Power will be taken into account and the plan may be updated to reflect any requirements arising from these.

In late 2016/early 2017 the EPA conducted dust sampling and analysis at a monitoring station located adjacent to the Ash Dam, and from a station within the Port Augusta community. The results of the sampling, including assessment from SA Health, are available on [http://www.epa.sa.gov.au/business\\_and\\_industry/industry-updates/flinders-power-port-augusta](http://www.epa.sa.gov.au/business_and_industry/industry-updates/flinders-power-port-augusta). The results of the analysis indicated that whilst the toxicity of the ash particulate is considered low, the particle size warrants proactive management of dust from the ash dam.

## 6. Dust Management Plan (DMP)

### Plan Stakeholders - Roles and Responsibilities

Positions in Flinders Power have been identified and assessed as having direct influence over parts of the process involved with managing dust on the APS site. The responsibilities of such positions are described here to ensure clear and progressive lines of accountability and communication for the purpose of implementing this Plan.

#### *Facility Manager APS*

- Approve and support the DMP. Ensure ongoing compliance with the DMP;
- Authorise the resources required to implement this plan;
- Custodian of the 'Ash Storage Area Contingency Plan – Extreme Weather Monitoring & Response Plan' – Appendix E.
- Consult with the Environmental Coordinator to determine appropriate environmental management strategies and contingency measures required by the DMP;
- Install and maintain dust management infrastructure, including dust suppression sprays and cannons;
- Report actual and potential environmental incidents;
- Ensure sufficient resources (personnel, materials and equipment) are available to respond to high dust events;
- Consult with the Environmental Coordinator with respect to the management of contractors for decommissioning, demolition and rehabilitation activities that may affect the integrity and effectiveness of the DMP;
- Maintain dust management infrastructure to ensure ongoing effectiveness and reliability;
- Liaise with environmental and allied Regulators;
- Notification to Regulators of any adverse dust events;
- Notification to Regulators of any material changes to dust management controls; and
- Consult and liaise with community stakeholders, including proactive notification of actual/potential dust events.

#### *Program Director – Flinders Sites*

- DMP document owner;
- Review and approve the DMP;
- Provide advice and/or assistance to the Facility Manager APS to ensure the DMP is appropriately implemented in the workplace;
- Liaise with environmental and allied Regulators;
- Ensure the FP website has current and accurate environmental monitoring data; and
- Consult and liaise with community stakeholders.

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#### *Environmental Coordinator*

- Manage stockpile and Ash Storage Area operations in accordance with the provisions of this plan, in order to minimise the creation of fugitive dust;
- Provide advice and or assistance to the Facility Manager APS to ensure the DMP is appropriately delivered and followed in the workplace;

- Coordinate sampling of PM10 and TSP high volume samplers;
- Ensure dust monitoring equipment is functional and accurate;
- Collation and reporting of environmental monitoring data;
- Ensure dust and weather monitoring equipment is functional and accurate.
- Collate and deliver daily environmental data, including 5-day weather forecast, dust risk rating, BOM dust alerts, BOM severe weather alerts and previous period environmental monitoring data;
- Ensure proactive and reactive notification mechanisms are in place;
- Maintain, interpret and communicate dust monitoring results;
- Investigate DMP non-conformances or dust quality exceedences;
- Determine appropriate management strategies and implement contingency measures in consultation with the relevant manager/supervisor;
- Complete all required Internal and External reports required by the DMP;
- Ensure the Incident Management System contains the details of incidents and complaints related to the DMP;
- Service and maintain ambient monitoring equipment in accordance with OEM instruction and the Environmental Monitoring Plan;
- Publishing and provision of real-time and monthly data reporting to the EPA and community; and

#### *FP Project Management Team*

- Manage stockpile and Ash Storage Area operations in accordance with the provisions of this plan, in order to minimise the creation of fugitive dust.

#### *Land Management Team*

- Maintain the Ash Storage Area to reduce dust generation;
- Inspect the Ash Storage Area, levees and batters, along with site roads, and perform dust suppression actions as required;
- Wash down coal dust and spillages from underneath conveyor structures and ash from under the boiler area;
- Maintain site vegetation; and
- Perform any other dust mitigation actions around site as necessary.

#### *Alliance Team members (FP, McMahon's Services and subcontractors)*

- Implement Alliance Plans including Environmental Management Plan;
- Ensure appropriate dust management controls are applied for specific demolition activities e.g. charge felling;
- Undertake operation activities in accordance with relevant Flinders Power policies, procedures, management protocols, plans, statutory, licence and contract requirements;
- Implement appropriate environmental management measures; and
- Report actual and potential environmental incidents to the Facility Manager via their supervisor.

## **Implementation and Control Actions**

The Implementation and Control Actions in the DMP are based on the following specific items:

- Design and use of plant and equipment so as to control and minimise dust;
- Development and application of work procedures which reduce the potential for dust;

- Use of dust suppression techniques on the Ash Storage Area, coal storage and handling areas; and
- Development and implementation of auxiliary techniques to monitor weather conditions affecting site, in particular the Ash Storage Area in order to implement the Trigger Action Response Plan (TARP).

The following Tables (1 to 5) document the potential coal air quality/dust impacts with associated control plans.

This has been developed by utilising the 2014 Aspects and Impacts Register as the basis to identify the locations or activities with the highest risk of dust generation on the site, and updating these to reflect the requirements during closure activities.

The locations/activities have been ranked according to the highest residual risk for the environmental aspects contained in each.

Table 5 'Aspects and Control Action 5: Demolition Activities' specifically references the Alliance Project Risk Register which relates to dust control for demolition activities.

**Table 1. Aspect and Control Action 1: Coal Stockpile Operations**

The following action plan relates to the revegetation of the former stockpile area.

Augusta Power Stations Environmental Aspects and Impacts Register																
Ref No	Responsible Dept./Branch/Section	Activity/Location	Enviro Aspect (cause)	Enviro Impact (effect)	Legal & other requirements	Inherent Risk			Operational Controls		Residual Risk			Monitoring	Training	Note
						Consequence	Likelihood	Rating	Primary	Support	Consequence	Likelihood	Rating			
	FPP Project Management Team	Civil works on stockpile pad. Preparation for revegetation	Coal dust & wind blown soil	Air quality	EPP (Air Quality)	Major	Likely	Extreme-8	Dust Management Plan, Access to area during low wind speeds Water truck	Irrigation water sprinkler system	Minor	Possible	Mod-5	wind direction/speed, ambient monitoring, ad-hoc dust monitoring	Operator training	Closure period
23	Environmental Services	Coal stockpile management	Coal dust	Air quality	EPP (Air Quality)	Major	Likely	Extreme-8	Dust Management Plan, Sprays, Water truck,	Project Group	Minor	Unlikely	Low-4	wind speed/direction, ambient monitoring	Operator awareness	General conditions

**General Control Matrix**

Area	Potential impact	Potential contaminants	Rehabilitation Controls	Responsible personnel
Coal Stockpile and Tower Pad	Heavy machinery generating dust while operating on or near the stockpile where coal is present during revegetation activities and prior to vegetation becoming established.  Air quality/dust movement off site due to wind speed and direction.	Coal dust, soil and surface dust.	Surface ripping during low winds (<35km/hr) Cease work when wind speeds increase (>35km/hr) Use of water truck to wet surface Allowing surface to harden Installation of irrigation system Revegetation of pad surface. Daily monitoring by Project Manager and Land Management Team. Additional revegetation as required.	FPP Project Management Team
			Use of dust suppression chemicals on open areas as required.	Environmental Coordinator
			Daily weather reports for wind speed & direction forecasting and provide advice to team.	Environmental Coordinator
			Manually operate the sprinkler systems on forecasted strong wind conditions prior to forecasted conditions. Install a remote activation system to allow operation in unforeseen or non-forecasted events quickly.	Environmental Coordinator/Facility Manager.



**Table 2. Aspects and Control Action 2: Ash Storage Area Management**

The following action plan relates to the management of the Ash Storage Area (ASA).

Augusta Power Stations Environmental Aspects and Impacts Register																
Ref No	Responsible Dept./Branch/Section	Activity/Location	Enviro Aspect	Enviro Impact	Legal & other requirements	Inherent Risk			Operational Controls		Residual Risk			Monitoring	Training	Note
			(cause)	(effect)		Consequence	Likelihood	Rating	Primary	Support	Consequence	Likelihood	Rating			
5	Environmental Services	Ash storage dam management	Dust (Ash) emissions	Air quality	EPP (Air Quality)	Major	Almost certain	Extreme-9	Dust Management Plan, TARP, dust suppression chemical application to surface and levees, real-time PM10 monitoring at ash dam and within community, text alerts, BOM monitoring of weather predictions.	APS Ash Storage Dam Inspection Checklist, JSP234 Ash disposal pipe laying, JSP235 Vehicle operation in Ash Pond area	Major	Unlikely	High-6	daily inspections, ambient monitoring, 3 monthly inspections		
212	Environmental Services	Ash storage dam management	Dust (Red sand) emissions	Air quality	EPP (Air Quality)	Major	Almost certain	Extreme-9	Dust Management Plan, TARP, dust suppression chemical application to surface and levees, trained vehicle operators, real-time PM10 monitoring at ash dam and within community, text alerts, BOM monitoring of weather predictions.	APS Ash Storage Dam Inspection Checklist, JSP235 Vehicle operation in Ash Pond area	Major	Unlikely	High-6	daily inspections, ambient monitoring, 3 monthly inspections		

**General Control Matrix**

Area	Potential impact	Potential contaminants	Mitigation measures	Responsible personnel
Ash Storage Area	<p>Generation of dust from the main surface of the Ash Storage Area, including borrow pits on the south side</p> <p>Surface dust from main pipework outfall area</p> <p>Generation of ash dust from the inside of the western levee areas</p> <p>Generation of ash dust from the inside of the Eastern levee areas</p> <p>Southern levee surfaces and batters, including areas where wind-blown ash has settled</p>	Ash dust particles.	<p>Use of dust suppression treatment on the surface of the ASA – Refer Appendix A and B.</p> <p>Trigger Action Response Plan (Refer to section 7).</p> <p>Use of water carts and additional dust suppression on banks and roadways as required</p> <p>Daily visual inspection and remedial works as required.</p>	<p>Facility Manager APS Environmental Coordinator McMahon Services</p> <p>Facility Manager</p> <p>Land Management Team</p> <p>Environmental Coordinator</p>
Ash Storage Area – Implementation of long-term rehabilitation plan	<p>Generation of red dust from the borrow pit during excavation and haulage</p> <p>Generation of surface red dust from haul roads to/from the borrow pit and the Ash Storage Area</p>	Soil 'red dust' particles	Monitoring of dust generation and use of dust suppression measures during the implementation of the long-term rehabilitation plan for the Ash Storage Area. Refer to Appendix D: Fugitive Dust Trigger Action Response Plan (Rev 4 29 <sup>th</sup> May 2017).	<p>Facility Manager APS McMahon Services</p>

	Generation of red dust from topsoil fingers and ash dam surface after spreading			
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**Table 3. Aspects and Control Action 3: Coal Conveyor System and General Site**

The following action plan relates to the management of dust around the conveyor system and general site.

Augusta Power Stations Environmental Aspects and Impacts Register																
Ref No	Responsible Dept./Branch/Section	Activity/Location	Enviro Aspect	Enviro Impact	Legal & other requirements	Inherent Risk			Operational Controls		Residual Risk			Monitoring	Training	Note
			(cause)	(effect)		Consequence	Likelihood	Rating	Primary	Support	Consequence	Likelihood	Rating			
62	Flinders Project Services	Coal bin storage	Coal dust	Air quality	EPP (Air Quality)	Moderate	Possible	High-6	Enclosure, wash down of built up dust	Maintenance routines	Moderate	Rare	Mod-4	ambient monitoring, maintenance records		

**General Control Matrix**

Area	Potential impact	Potential contaminants	Mitigation measures	Responsible personnel
Conveyors	Residual coal dust generation from conveyors and bins around the station.	Coal dust.	Enclosed structures. Dust wash down (completed during Make Safe period). Defect /hazard reporting. Routine site inspection.	Environmental Coordinator
Open areas	Generation of dust from surfaces, such as underneath conveyors and towers where coal has spilled or dust settled.	Coal dust and surface dust.	Wash down with water hose when required.	Land Management Coordinator

Demolition Control Actions

**Table 4. Aspects and Control Action 4: Site Roads (General Conditions)**

The following action plan relates to the management of dust roadways around site.

Augusta Power Stations Environmental Aspects and Impacts Register																
Ref No	Responsible Dept./Branch/Section	Activity/Location	Enviro Aspect	Enviro Impact	Legal & other requirements	Inherent Risk			Operational Controls		Residual Risk			Monitoring	Training	Note
			(cause)	(effect)		Consequence	Likelihood	Rating	Primary	Support	Consequence	Likelihood	Rating			
21	Environmental Services	Road traffic	Dust emissions	Air quality	EPP (Air Quality), EPA Licence 13006 Cond No 1.1	Moderate	Possible	High-6	Speed limits on-site Routine road washing		Minor	Unlikely	Low-4	Site inspections		

General Control Matrix

Area	Potential impact	Potential contaminants	Mitigation measures	Responsible personnel
Roads	Generation of dust from road surfaces.	Coal dust and surface dust.	Water spray with water truck. Street sweeper (hired as required)	McMahons Facility Manager APS

**Table 5. Aspects and Control Action 5: Demolition Activities**

The following action plan relates to the management of dust during specific demolition activities.

Augusta Power Stations - Demolition Environmental Aspects and Impacts																
Ref No	Responsible Dept./Branch/Section	Activity/Location	Enviro Aspect	Enviro Impact	Legal & other requirements	Inherent Risk			Operational Controls		Residual Risk			Monitoring	Training	Note
			(cause)	(effect)		Consequence	Likelihood	Rating	Primary	Support	Consequence	Likelihood	Rating			
	McMahons	Road traffic during demolition activities, removal of material off site	Dust emissions	Air quality	EPP (Air Quality), EPA Licence 13006 Cond No 1.1	Moderate	Possible	High-6	Pre-task JSEA, Site vehicle speed limits. Routine road washing with water truck	McMahons - Demolition, Environmental Management & Hazardous Materials Plans	Minor	Unlikely	Low-4	Ambient dust monitoring, site inspections/supervision		
	McMahons	General Demolition Activities	Dust emissions	Air quality	EPP (Air Quality), EPA Licence 13006 Cond No 1.1	Major	Likely	Extreme-8	Pre-task JSEA, Water spray with water truck. Water areas with water hoses.	McMahons - Demolition, Environmental Management & Hazardous Materials Plans	Moderate	Unlikely	Mod-5	Ambient dust monitoring, site inspections/supervision		
	McMahons	General Civil Works	Dust emissions	Air quality	EPP (Air Quality), EPA Licence 13006 Cond No 1.1	Major	Likely	Extreme-8	Pre-task JSEA, Water spray with water truck. Water areas with water hoses.	McMahons - Demolition, Environmental Management & Hazardous Materials Plans	Moderate	Unlikely	Mod-5	Ambient dust monitoring, site inspections/supervision		
	McMahons	Stack Felling	Dust emissions	Air quality	EPP (Air Quality), EPA Licence 13006 Cond No 1.1	Major	Likely	Extreme-8	Pre-task JSEA, Water spray with water truck. Industrial mist fans	McMahons - Demolition, Environmental Management & Hazardous Materials Plans	Moderate	Unlikely	Mod-5	Ambient dust monitoring, site inspections/supervision		
	McMahons	Bin Felling	Dust emissions	Air quality	EPP (Air Quality), EPA Licence 13006 Cond No 1.1	Major	Likely	Extreme-8	Pre-task JSEA, Water spray with water truck.	McMahons - Demolition, Environmental Management & Hazardous Materials Plans	Moderate	Unlikely	Mod-5	Ambient dust monitoring, site inspections/supervision		

Alliance Project Risk Assessment Register – Dust from demolition activities – extract:

Asset Issue or Improvement Opportunity						Inherent Risk Rating			Residual Risk Rating					Proposed Mitigation of Risk Exposure / Improvement Actions			Target Risk Rating		
Owner	Category	Issue	Cause	Potential Consequences	Exposure Type	Consequence	Likelihood	Rating & Priority	Current Approach (Existing Controls)	Effectiveness	Consequence	Likelihood	Rating & Priority	Risk Reduction Treatment or Asset Improvement Strategic or Approved Action	Action Owner	Planned Completion Date	Consequence	Likelihood	Rating & Priority
RT/TC	Environment	Excessive release of dust during demolition activities	Mass collapse of structure, weather conditions - wind increase. Removal of bitumen exposing earth beneath, plant movement on site generating dust.	Damage to the environment via dust pollution, loss of flora / fauna, loss of program, litigation / financial / company branding.		2. Major	C. Likely	High 7	Water shall be utilised for the purpose of dust suppression during demolition activity via air misters, sprayers with milk hoses suppressing dust during works as well as pre-wetting materials before demolition activity commences, water cannons built into large excavators (PC1250) spraying during demolition activity. Plant movement minimised where possible to prevent excessive generation of dust. If required water cart utilised to suppress / seal ground area. Reduced activity during high winds. Dust monitoring using visual and electronic monitors.	Effective	3. Moderate	D. Possible	Medium 16				3. Moderate	D. Possible	Medium 16

General Control Matrix (for Table 5. Aspects and Control Action 5: Demolition Activities)

Area	Potential impact	Potential contaminants	Mitigation measures	Responsible personnel
Stack Felling	Generation of dust.	Coal dust, ash and surface dust.	Vehicle speed limits. Water shall be utilised for the purpose of dust suppression during demolition activity via air misters, spotters with milk hoses suppressing dust during works as well as pre-wetting materials before demolition activity commences, water cannons built into large excavators spraying during demolition activity. Plant movement minimised where possible to prevent excessive generation of dust. If required water cart utilised to suppress / seal ground area. Reduced activity during high winds. Dust monitoring using visual and electronic monitors. Community and stakeholder engagement and information sharing of demolition events with potential for significant dust generation which may have an adverse effect on the community. Refer to task-specific JSEA developed for the activity (Appendix F)	McMahons Facility Manager APS
Coal Bin Felling	Generation of dust.	Coal dust, ash and surface dust.		McMahons Facility Manager APS
General demolition activities	Generation of dust.	Coal dust, ash and surface dust.		McMahons Facility Manager APS
General civil works	Generation of dust.	Coal dust, ash and surface dust.		McMahons Facility Manager APS
Site traffic for demolition material removal	Generation of dust.	Coal dust, ash and surface dust.		McMahons Facility Manager APS
Reclaim, transport and use of ash from the Ash Storage Area for demolition activities (eg backfill of voids)	Generation of dust	Ash dust		McMahons Facility Manager APS
Reclaim, transport and use of soil from the on-site borrow pit for demolition activities (eg backfill of voids, topdressing, working base for excavator)	Generation of dust	Soil (red) dust		McMahons Facility Manager APS

## 7. Ash Storage Area – Dust Management

The current approach for dust management on the Ash Storage Area (ASA) utilises regional weather predictions of wind speed and direction to inform activity planning and the implementation of dust management measures on the ASA.

Historically, infrequent events have occurred whereby rainfall on the ASA during the spring and summer months has caused the salt crust on the surface, created by surface seawater/ash slurry flooding, to deteriorate and allow ash to become airborne in strong winds.

### Whole of ASA Dust Suppression Treatment

Conditions on the ASA since closure has shown that the normal dust suppression activities used (coffer dam building and surface flooding) have damaged the ASA surface, allowing fine ash to be lifted from the surface. A review of the dust suppression methods used on the ASA through August – October 2016 determined that the optimal method of dust suppression is to seal the whole of the ASA surface with a dust suppression treatment.

An initial area of 15Ha in the middle of the ASA was sealed with dust suppression chemical in August 2016 which was applied by crop duster airplane. The results of the sealing of this initial area were positive and after severe weather events during September and October 2016 causing large ash lift off events from the remainder of the ASA and dangerous conditions for machinery on the ASA levee banks it was decided to investigate the sealing of the whole of the main ASA.

A risk assessment and proposal for the sealing of the ASA was developed in collaboration with the EPA and provided for review on the 21<sup>st</sup> October 2016. Approvals were provided and the project was completed on 22<sup>nd</sup> November 2016.

Severe storm activity in the period 24-28<sup>th</sup> December 2016 impacted the dust suppressant seal, which rapidly dried and led to a dust event on the 1<sup>st</sup> and 2<sup>nd</sup> January 2017.

The use of a dust suppressant seal is an interim measure prior to the completion of the full rehabilitation program.

### Trigger Action Response Plan – Ash Storage Area

A Trigger Action Response Plan (TARP – refer Appendix D) has been developed, incorporating the “stoplight” performance monitoring tool and visual site inspections as the triggers. The TARP will hold two key functions:

- To monitor sealant condition and determine if further treatment is required to control ash dust generation from the Ash Storage Area; and
- To monitor the generation of ‘red dust’ during the completion of the long term rehabilitation plan, including soil trafficking, emplacement and throughout the germination period of vegetation.

A newly installed ambient dust monitoring system is also used to inform site staff of “real time” airborne dust levels around the ASA and in two community monitoring sites. These “real time” levels

are used in conjunction with site visual observations to determine escalating trigger points within the TARP.

The mitigation responses are drawn from the Aspect Control Actions appropriate for the identified triggers. The site Incident Management System (IMS) is used as the action assignment and data recording tool.

The TARP has been communicated to the appropriate site stakeholders to ensure appropriate actions are taken to mitigate dust from specific identified areas/activities on site.

The Ash Storage Area has been identified as the key area for dust management and a three tiered process using wind forecasts has been developed, with a daily weather forecast utilising a Red-Yellow-Green “stoplight” type format. Daily weather reports are reviewed for wind speeds forecasted to be over 35kmh in the proceeding days and a weather forecast chart is used to identify times of risk of generating dust.

The chart below shows an example of the weather forecast prepared and communicated daily to site leaders.

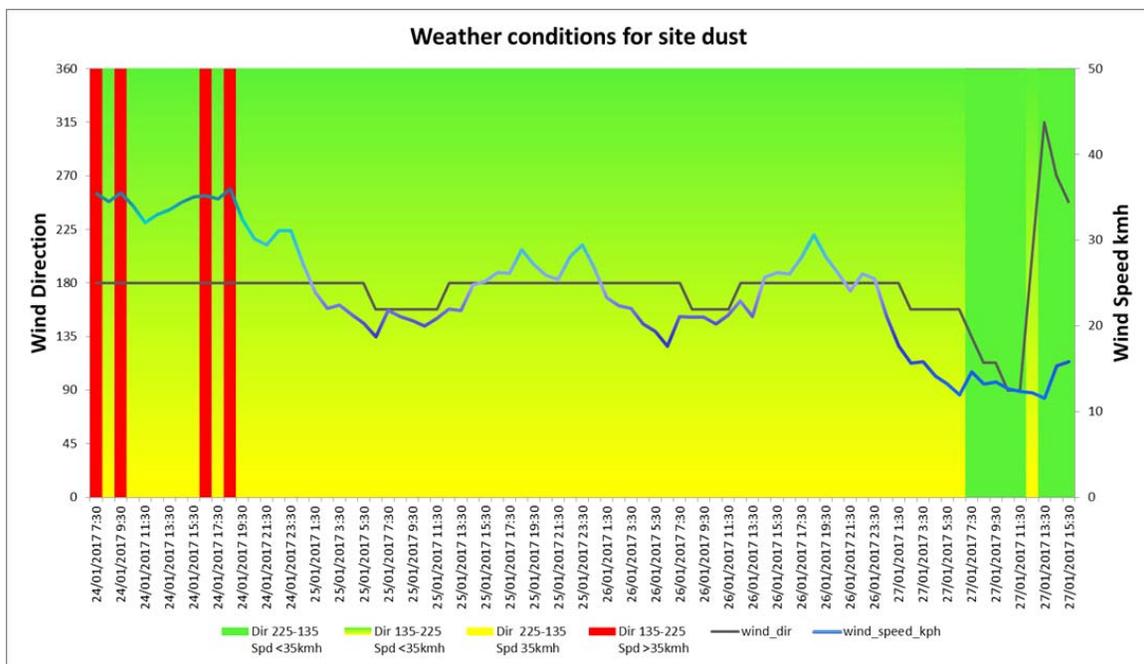


Figure 4 Example ‘stoplight’ TARP system for weather warning.

The green band to show when potentially dust generating activities with heavy plant can take place. A yellow band indicates when caution is required, and a red band indicates times where it is likely that site activities may need to cease.

The daily report is supplemented with the predicted weather conditions (sourced from weatherzonepro) for the next 6 day forecast period. An example is provided in Figure 5 below.

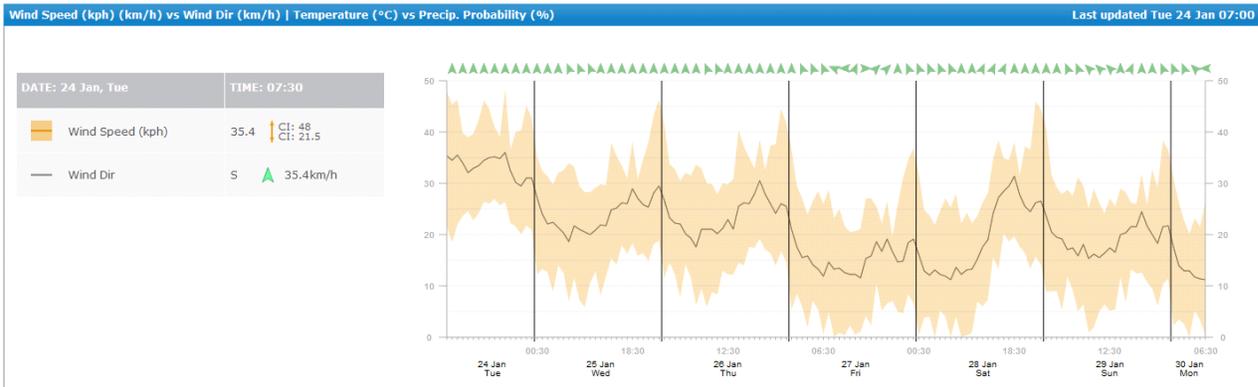


Figure 5 Example six-day predicted weather forecast

Further, Flinders has access to the Bureau of Meteorology dust warning system, which is checked daily, and alerts issued with the daily environmental report. An example dust warning is provided in Figure 6 below.

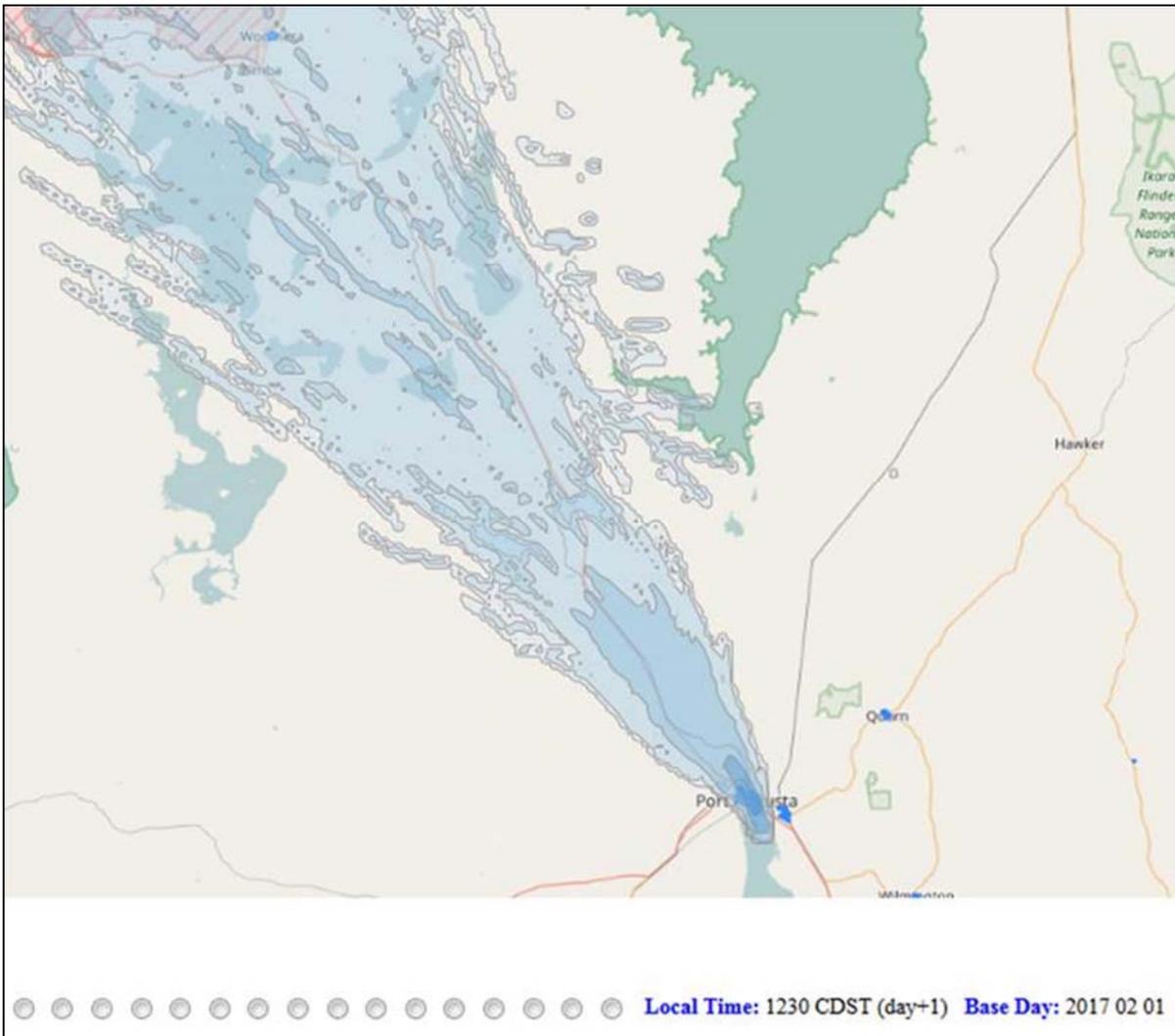


Figure 6 Example BOM dust warning

Preparation for extreme weather events is documented in Appendix E: Ash Storage Area – Extreme Weather Monitoring & Response Plan.

On high wind speed days the following example precautions will be undertaken where appropriate. Full details are provided in the TARP (Appendix D):

- Ensure safety of site staff and visitors;
- Monitor wind speeds using Bureau of Meteorology data;
- Cease work activities on the Ash Storage Area;
- Surface inspections to determine if ash is blowing off;
- Targeted action for high risk accessible areas; and

- Notify stakeholders and the community if required (Port Augusta City Council, community and SA EPA), in accordance with Section 5 of the APS Environmental Closure & Post-Closure Plan.

When a community complaint regarding dust is received by the company, activities on the Ash Storage Area will be reviewed and ceased if deemed appropriate, by the Flinders Power Facility Manager or delegate.

## 8. Former Coal Stockpile Area– Dust Management

The NPS Coal Stockpile pad has been rehabilitated and revegetation of the surface is in progress.

Whilst the vegetation is established the existing Coal Stockpile TARP will be followed, as below.

### Trigger Action Response Plan –Stockpile Revegetation

A (TARP) has been developed for revegetation work on the stockpile, incorporating the “stoplight” performance monitoring tool and visual site inspections as triggers.

Stockpile revegetation has been identified as a key area for dust management and the stoplight” Red-Yellow-Green weather forecast will also be used during activities on the stockpile pad.

The ‘stoplight’ format will use a Green band to show when potentially dust generating activities with heavy plant can take place according to the following weather conditions:

Any activities during a wind speed below 20kp/h (6 m/s or 11 knots) from the SOUTH EAST to SOUTH WEST.

A Yellow band will show the hours when potentially dust generating activities with heavy plant can take place according to the following:

Any activities during a wind speed over 20kp/h (6 m/s or 11 knots) from any wind direction other than from the SOUTH EAST to SOUTH WEST.

A Red band will show the hours when potentially dust generating activities with heavy plant cannot take place:

Any movement activities during a wind speed over 20kp/h (6 m/s or 11 knots) from the SOUTH EAST to SOUTH WEST.

### Stockpile inactive/Revegetation Program:

Proactive measures will be undertaken when strong wind conditions are forecasted by manually operating the former coal stockpile sprinkler system to dampen the area to prevent dust lift.

A remote operating system will be installed to provide a quick response to any non-forecasted or unforeseen weather events.

## 9. Dust Monitoring and Evaluation

**Note:** *Environmental Authorisation 13006 is being reviewed (as of August 2017) by SA EPA and FP and is being amended to reflect the revised environmental monitoring requirements during the demolition and rehabilitation period. This section will be updated when the revised conditions have been finalised.*

Ongoing dust monitoring, by either visual evaluation of ash/coal dust generation on site or by interpretation of the results from the dust monitoring network, will determine if dust mitigation measures are effective or required in specific circumstances.

Groups responsible for inspections are described in the action tables and TARP. Text and email alerts are automatically sent to a nominated group of responsible persons when dust, wind speed and wind direction thresholds are exceeded. These mechanisms are outlined in the TARP.

The monitoring of real-time PM10 data from the boundary monitors of the Ash Storage Area is presented on a screen within the Flinders Power office on site, and monitored by both Flinders Power and McMahon Services personnel. A summary of data is provided in the daily environmental report.

Access to real-time dust monitoring information for the Ash Storage Area and community monitoring stations is made available to the EPA. A summary of real-time data for the community PM10 monitors is presented on the Flinders Power website and made openly available to the community.

The monitoring of real-time PM10 data from Stirling North and Lea Memorial Oval is verified daily (M-F) by the Environmental Coordinator.

The monitoring of ambient high-volume filter papers within the Port Augusta community is conducted daily by the site Environmental Coordinator.

## 10. Community and Stakeholder Engagement

Community and stakeholder engagement is detailed in the APS Closure and Post Closure Environmental Plan.

A summary of these mechanisms are outlined below.

Mechanism	Target Group							Posted on FP website?	Frequency	Notes
	Residents	PACC	MP	Media	EPA	NRM Board	Special-interest groups			
<b>Weekly progress report</b>		X	X		X			No	Weekly	A summary of activities at the site, including demolition and ash dam rehabilitation
<b>Face-to-Face meetings / site visits</b>		X						N/A	Monthly	Monthly meetings with PACC CEO and Mayor, when available.
<b>Annual environmental presentation</b>		X						Yes	Annual	Annual presentation to PACC – open public forum.
<b>Media release/ Infomercials</b>	X			X				Yes	Ad-hoc	Strategic media release e.g. felling of PPS A station stack
<b>Works Progress Fact Sheet</b>	X	X	X	X				Yes	Monthly / Quarterly	A monthly progress update. Letter drop
<b>Focus topic fact sheet</b>	X	X	X	X	X	X	X	Yes	Ad-hoc	A brochure on a particular topic (e.g. ash dam, Playford A building demolition). Letter drop.
<b>Flinders Power website</b>	X	X	X	X	X	X	X	Yes	Regular updates	Information portal. Links to FP YouTube account. FP contact details.
<b>Flinders Power hotline &amp; email</b>	X			X			X	Yes	N/A	All community complaints are logged.
<b>Special-interest presentations</b>							X	N/A	On request	Presentations or site visits on request (eg Rotary, schools).
<b>Community site visits</b>	X							N/A	On request	Actively invite community members
<b>Community forum/</b>	X	X						Yes	Monthly	Group now established

reference group											
Community information days	X								Yes	TBA	May include site tours
SMS distribution list	X	X	X	X	X	X	X	X	Yes	Ad-hoc	Rapid notification of dust incidents.

Flinders power is also performing community sentiment monitoring using the following

- Daily media monitoring – print, TV, radio and online
- Complaints hotline & email – central recording
- Facebook – linked with community forums
- FP personnel embedded within the community
- Feedback from SA Government Regulators
- Close relationships with PACC, MP’s, local media and community leaders.

### 10.1 Complaint Management

Community complaints regarding nuisance coal dust and ash are to be dealt with according to the Complaint Handling Procedure contained in Appendix C.

## References

Aurecon, 2010. Alinta Northern Power Station, Stockpile Dust Management, Flinders Power, Report ref: 206865-001-01, 9 September 2010

Environment Protection Act 1993 (SA)

EPA Licence 13006 (Northern and Playford Power Station)

EPA Licence 13011 (Leigh Creek to Port Augusta Railway Operations)

Flinders Power Environment & Community Policy (June 2016)

## Appendices

Appendix A: Ash Dam Interim Sealing – Proposal 7<sup>th</sup> November 2016

Appendix B: Ash Dam Interim Sealing – Risk Assessment 2<sup>nd</sup> st January 2017

Appendix C: Complaint Handling Procedure

Appendix D: Fugitive Dust Trigger Action Response Plan (Rev 1 5<sup>th</sup> January 2017)

Appendix E: Ash Storage Area – Extreme Weather Monitoring & Response Plan

Appendix F: JSEA for the excavation, transport and use of soil and ash from the borrow pit or Ash Storage Area for demolition activities

## Appendix C

### Complaint Handling Procedure

All complaints received by Flinders Power employees, including security, are handled according to the following steps.

All complaint receivers are required to:

- Collect all details from the complainant (time, location, concerns)
- Repeat back and confirm details with the complainant
- Obtain complainants contact details
- Advise relevant Supervisor immediately

The Facility Manager is to be advised as soon as practicable of receipt of the complaint.

The complainant will be contacted and an investigation of the complaint initiated as soon as practicable of the receipt of the complaint. The investigation typically may include:

- A visit to the complainant to:
  - Observe local dust conditions;
  - Discuss the event with the complainant; and
  - Taking of samples.
- A review of site data from the time of the incident.
- A review of meteorological data.

Following the investigation, the complainant is to receive a written response outlining the investigation procedure and findings. If requested the findings of the investigation will be explained and discussed with the complainant in person.

Details of the complaint, the investigation, management actions implemented and follow up is recorded within the FP Incident Management System.

All media enquiries are to be managed through the approved Flinders Power Media Protocols.