Flinders Power Facts Air quality monitoring



Daily monitoring

Since the cessation of power generation in May 2016, we have been working on demolition and rehabilitation of the Port Augusta Power Stations.

We have many responsibilities and obligations to our regulators, stakeholders and the broader community to ensure our operations are compliant with legislated health requirements and the law.

Dust occurs naturally in our dry South Australian environment. It can also be generated when we undertake activities like earthworks and demolition at the Port Augusta power stations site.

We do everything we can to minimise, and where possible stop dust arising from our operations.

Every day we carefully monitor current and predicted weather conditions including wind speed and direction, rain and temperature forecasts then make an assessment whether there is any risk of dust occurring as a result of our activities. We have installed a weather station on our site which provides real-time data and distribute forecast information to staff on a daily basis. We also distribute the Bureau of Meterology's dust and severe weather warning alerts.

Then we use this information to assess the suitability of our day's scheduled activities. If we consider the weather conditions to be unsuitable for the day's planned work, we will modify or suspend these activities in response.

Ash storage area

The Environment Protection Authority regulates our activities. As part of our regulation, we have a Trigger Action and Response Plan (TARP) in place.

This plan outlines a series of escalating actions to help us respond to various trigger points. The plan helps us to go about the work needed to rehabilitate the ash storage area, while ensuring we are not adversely affecting the community around us with dust from our activities - particularly earth moving activities.



Where are the monitors located?

There are five dust monitors installed around Port Augusta monitoring air quality. These are located at:

- Stirling North (adjacent tennis courts),
- Lea Memorial Oval
- West Side Pigeon Club
- Port AugustaTennis Association and
- The Port Augusta Hospital

The monitors located at Stirling North and Lea Memorial Oval provide continuous, real time data to us.

This data is supplemented by 3 additional dust monitors located on our site situated around the boundary of the ash storage area.

We monitor this data through our control centre on-site 24 hours a day, 7 days a week.

If the dust levels exceed a set threshold, automatic text and email alerts are sent to our staff - triggering an series of escalating responses depending on the level and duration of dust.



What do the air monitors measure?

The air monitors measure:

- TSP total suspended particles (a measure of total visible dust). There are generally particles that are able to get trapped in your nose and throat
- PM10 finer dust (a measure of particle less than 10microns in size). These particles are much smaller than TSP and due to their much smaller size, it's possible for them to enter the lungs

How do I understand the data?

We have a target value for PM10 to ensure we're not exceeding the Environment Protection (Air Quality) Policy 2016 of 50 micrograms/ m^3 averaged over a 24 hour monitoring period.

This means we have set responses and procedures put in place if there are short term 'spikes' (high level readings for short durations) and long term low dust levels that may exceed the average over the 24 hour monitoring period.

The monitors at Lea Memorial Oval and Stirling North are real time monitors – this means you can see the results in real time, along with wind speed and direction information.

You can view this data on our website at flinderspower.com.au/ community-information/ and selecting the Real Time Information link.

The graphs show the readings taken at 15 mintute intervals during the day for Lea Memorial Oval and Stirling North, with the target value shown on the vertical axis and the time of day across the horizontal axis, (see graph shown below).

High dust levels are often attributable to regional events (e.g. dust storms or strong changes in wind direction) or local events (e.g. mowing the lawn at Lea Memorial Oval, or traffic movements on unsealed roads at Stirling North). We use the wind speed and direction data, combined with visual observations, to determine if dust could be attributable to activities at the APS site.

In addition to the data being provided by the monitors and the weather station, we also visually monitor our activities. Our staff conduct daily checks of the monitors and supplement the data with visual information from various points on site and in the community.

If dust levels are too high we use a range of measures to respond including water carts, application of dust suppressant and ceasing activity on site. These measures and our monitoring help us to carry out our work while minimising the effect of dust on our local community.

Graph showing real time air quality monitoring



Where can I find out more?

You can call us on 0419 252 760 or email us at enquiries@flinderspower.com.au with any questions about air quality monitoring. You can also find out more online at Flinders Power and the EPA's websites: flinderspower.com.au/ community-information/ and epa.sa.gov.au/business_and_industry/industry-updates/flinders-power-port-augusta