



PERFORMANCE COMMITMENTS IMPROVEMENTS UNDERSTANDING

MANAGING DUST IS A KEY FOCUS

Our control techniques, processes and systems are world class

Port Waratah understands that if not managed appropriately, the nature and scale of our operations has the potential to generate dust and negatively impact our community. We therefore recognise that dust is a material issue for our portside stakeholders.

How we manage air quality

Our Intelligent Dust Management System (IDMS) utilises data from onsite weather stations, as well as forecast weather data from the Bureau of Meteorology, to continuously assess stockpile moisture levels and the potential for dust lift-off. A network of Real-Time Dust Monitors (RTDM) within the site boundary is also used to report onsite dust concentration measurements.

The stockyard water sprays are automatically activated to proactively manage stockpile moisture and/or respond to RTDM levels as required. Water sprays are also utilised as required throughout all conveyor transfer operations, from train unloading to shiploading.

Dust mitigation measures have been considered throughout our infrastructure design, incorporating soft-flow chutes, conveyor belt cleaning systems, real-time dust monitoring and enclosed facilities wherever possible. Operational management practices, such as the use of mobile spray systems and water carts, manual hosing or spraying of coal, routine site cleaning and sealing open areas, wherever possible, also assist in reducing the potential for dust generation. Port Waratah is committed to delaying or, if required, ceasing operations in adverse conditions.

Regulatory compliance

We routinely review the data collected by the Newcastle Local Air Quality Monitoring Network to understand Newcastle's seasonal air quality performance. This information is shared throughout the business and is taken into consideration during operational planning.

Seasonal air quality monitoring reports for 2020, which are collated by the Department of Planning, Industry and Environment, showed that air quality results remained within national benchmarks and were recorded in the good to fair categories for the majority of the year, despite extensive bushfires greatly impacting on air quality in the Newcastle region during the 2019/20 summer.

Other factors that can impact air quality in the Newcastle area include natural aspects, such as below average rainfall, sea salt and pollen, domestic activities (such as wood fires, heaters, motor vehicles and internal combustion engines) and industrial activities.

We recorded one licence non-compliance attributed to excessive dust generation during shiploading operations at the Kooragang Terminal in 2020. In response, we suspended shiploading activities and the conveyor and chute sprays were inspected. Repairs were subsequently undertaken, and the remainder of the vessel's cargo was loaded at a reduced load rate to manage risk of further dust generation. No further issues were observed.

Continuous improvement

We are committed to the continuous improvement of our dust management systems and capabilities, evaluating IDMS performance on an annual basis and introducing refinements, wherever possible.

During 2020, a detailed review of the dust management infrastructure and operational processes within the coal transfer and stockyard was undertaken and led to improvements in operational and maintenance regimes. A review of the coal-flow process was also undertaken to streamline the movement of coal and minimise the potential for coal spillage. Updates have been incorporated into the process, resulting in a reduction in coal spillage volumes. This will continue to be a focus in 2021.

We also undertook a project to replace the series of real-time dust monitors located around the perimeter of Kooragang Terminal. This investment will ensure the ongoing operation and improved reliability and performance for the IDMS. Similar capital investment is scheduled for Carrington Terminal in early 2021.

Community feedback

Air quality and dust are key environmental concerns for our local community, particularly for those living in portside suburbs. The 2020 Local Voices Community Anchor Survey results indicated a positive shift in community perceptions regarding management of dust impacts and overall satisfaction with our dust management practices.

CASE STUDY

New Dust Management Technology

Following completion of a successful trial in 2020, our Intelligent Dust Management System (IDMS) will be further enhanced with upgraded Real-Time Dust Monitors (RTDMs) and extended to within the train unloading stations. The RTDMs will provide improved early detection capability by measuring dust concentrations at the moment coal arrives. In the event that elevated dust concentrations are experienced, this new technology will enable a quick response to manage the specific cargo as it is transferred to the stockpile.

