



# MANAGEMENT APPROACH

## Air Quality



### COMMITMENT

We manage the dust emissions from our terminal that have the potential to adversely impact air quality.

### GOALS

To minimise the potential impact on local air quality as a result of our operations and to comply with the requirements of our Project Approval and Environmental Protection Licence.

NCIG recognises the risk of our terminal operations impacting air quality. A primary concern of nearby residents is the potential for coal dust emissions to detrimentally affect local environmental amenity. Air quality and dust management is therefore a critical part of our operations. We manage specialised systems and regularly monitor local air quality, sharing results with our neighbouring communities and government regulators.

NCIG is committed to managing air quality impacts at our terminal and regularly monitors the air quality onsite and in neighbouring port suburbs. Air quality impacts can occur from our onsite activities at our dump station (train unloading), our stockyard (coal stockpiling and reclaiming) and during shiploading to vessels. We seek to manage the potential air quality impacts of these activities through equipment design (enclosed plant and infrastructure), controlled work procedures, real time operational air quality monitoring and through continuous improvements of our systems and processes.

Management of air quality from our site is a critical element of our operations and we have several operational plans and strategic initiatives that underpin our efforts.

### SYSTEMS AND PROGRAMS

#### Operation Dust and Air Quality Management Plan

Onsite management of air quality is undertaken in accordance with our Operation Dust and Air Quality Management Plan (ODAQMP), which enables us to meet requirements of our Environmental Protection Licence (EPL 12693). Key commitments from our management practices include:

- design and construction of the terminal in a manner that minimises or prevents the emission of visible dust beyond the boundary of our site (including windblown and traffic generated dust)
- control dust emissions on all internal roads, trafficable areas and manoeuvring areas by sealing, or otherwise treating surfaces to minimise the potential for dust generation.
- active management of the coal types handled to ensure adaptive material management practices.



- do not permit any offensive odour to be emitted beyond the boundary of the Project site.
- utilise real-time monitoring data to inform environmental management decisions during operations. This is done through interaction with real-time air quality monitors, which measure Total Suspended Particles (TSP). These are located at the boundaries of the stockyard and used to assist the management of operations.
- review results of the Newcastle Air Quality Monitoring Network (AQMN), which is administered by the Environmental Protection Authority, and operated by the NSW Biodiversity Conservation Division. The AQMN provides real-time air quality measurements of PM10, PM2.5 and other industrial air pollutants at neighbouring suburbs of Mayfield, Stockton, Carrington and Newcastle.

### **Integrated Dust Management System**

We keep dust levels from our facility as low as possible through our award-winning Integrated Dust Management System (IDMS). The IDMS uses weather forecasting and real-time weather data from NCIG's meteorological weather station to activate water sprays that maintain optimal coal moisture levels and wet down stockpiles and unsealed surfaces before strong winds arrive to prevent dust lift off.

### **Conveyor and stockyard sprays**

Conditioning of coal through water addition is a simple and effective way of preventing dust generation from exposed surfaces. This is applied through both conveyor sprays and stockyard sprays. The activation of stockyard sprays is controlled through a real-time weather station feed and weather forecasting.

### **Veneering**

To strengthen our dust management controls and the effectiveness of our spray system, NCIG has implemented a stockpile veneering program. Veneering involves the application of a surface binding agent to stockpiles and unsealed surfaces to suppress generation of dust. It has been proven to significantly reduce windblown dust emissions at NCIG. We undertake veneering ahead of forecasted windy conditions through a process that involves the mixing of a specialised product with water in a water truck on site and then spraying the veneering solution over unsealed areas to bind any loose surface particles that may be liberated as dust emissions.

### **Stockyard optimisation**

In 2021 NCIG finalised a Stockyard Rearrangement Project, which involved a major re-arrangement of our stockyard. Stockpiles of inherently dustier coal types were relocated away from NCIG's boundary locations and downwind receivers. The re-arrangement reduces the potential impact on near neighbours during forecast windy conditions. The project was undertaken with the cooperation of NCIG customers and in close consultation with neighbours and internal stakeholders.

## **TRAINING AND COMMUNICATION**

Air quality management at NCIG is communicated through our site induction and general environmental awareness training for our employees and contractors.

## **MANAGEMENT**

Day-to-day management of our Air quality performance is overseen by NCIG's Health, Safety, Environment and Community (HSEC) team. Performance and progress against our goal is overseen by our Executive Leadership Team and by the NCIG Board.

## **MEASURING OUR PROGRESS**

We regularly monitor the air quality around our terminal and in our surrounding suburbs. We monitor and measure our air quality performance against our Project Approval and Environmental Protection Licence (EPL No. 12693). We also measure our progress by reporting our performance statistics through our monthly business scorecard, which is overseen by the Executive Leadership Team.

## MONITORING

NCIG undertakes air quality and dust monitoring in accordance with the current NCIG ambient air quality monitoring program at onsite and local monitoring locations as follows:

- Dust emission data is collected from eight dust deposition gauge locations located proximal to our terminal, for example in Stockton, Carrington and Mayfield.
- Total Suspended Particulates (TSP) and PM10 concentration data is collected every six days from monitoring sites located at Steel River, Mayfield, Stockton and Fern Bay in conjunction with PWCS.
- TSP monitoring is also undertaken on site at boundary locations to assist with proactive operational responses to elevated dust levels.
- PM10 and PM2.5 particulate matter data is received from the NSW Government's PM10 and PM2.5 particulate monitoring sites (as part of the Newcastle Local Air Quality Monitoring Network).
- NCIG works closely with Port Waratah Coal Services (PWCS) to ensure a comprehensive dust monitoring network is maintained in surrounding residential areas.

## COMPLIANCE

Each year we review the performance of our terminal against the requirements of our Project Approval and EPL through our compliance tracking program and through EPL return. Additionally, independent environmental audits of NCIG's Project Approval are conducted every three years.

## REPORTING

We report our performance and progress regarding air quality in our Annual Environmental Management Report (AEMR) and our annual Sustainability Report, which are available on our website. We also annually provide air emissions information to the Australian Government through the National Pollution Inventory reporting scheme. This process allows the Department of Agriculture, Water and the Environment to provide free information about substance emissions in Australia to community, industry and government.

## AWARDS & RECOGNITION

### Mining Prospect Awards

At the 2014 Mining and Prospects Awards NCIG received recognition in Excellence in environmental Management by Australian Mining for the innovative and effective management of dust achieved through the development of our Integrated Dust Management System.

### Australian Bulk Handling Awards

NCIG was recognised for Dust Control, Technology, Application or Practice at the 2010 Mining Prospect Awards. This award acknowledged the comprehensive management of dust achieved at NCIG through the IDMS implementation.

