



**SUNNYSIDE COAL PROJECT
ENVIRONMENTAL
MANAGEMENT SYSTEM**

Document Owner:	Closed Mines Superintendent
Last Revision Date:	05/07/2023
Date Printed:	05/07/2023

WHC_PLN_SUN_AIR QUALITY MANAGEMENT PLAN

AIR QUALITY MANAGEMENT PLAN



**SUNNYSIDE COAL PROJECT
ENVIRONMENTAL
MANAGEMENT SYSTEM**

Document Owner:	Closed Mines Superintendent
Last Revision Date:	05/07/2023
Date Printed:	05/07/2023

WHC_PLN_SUN_AIR QUALITY MANAGEMENT PLAN

Contents

1 INTRODUCTION 4

2 AIR QUALITY CRITERIA 6

3 AIR QUALITY CONTROLS AND MANAGEMENT MEASURES 6

 3.1 Air Quality Management and Mitigation 6

 3.2 Notification and Independent Review 7

4 MONITORING AND REPORTING 8

 4.1 Monitoring Program 8

 4.2 Monitoring Locations 8

 4.3 Site monitoring is Reporting 8

 4.3.1 Air Quality Incidents 8

 4.3.2 General 8

5 DOCUMENT REVIEW 8

Tables

Table 1 – Air Quality Criteria 6

Table 2 - Operational Controls 6

Figures

Figure 1 – Regional Location 5



**SUNNYSIDE COAL PROJECT
ENVIRONMENTAL
MANAGEMENT SYSTEM**

Document Owner:	Closed Mines Superintendent
Last Revision Date:	05/07/2023
Date Printed:	05/07/2023

WHC_PLN_SUN_AIR QUALITY MANAGEMENT PLAN

ACRONYMS USED THROUGHOUT THIS DOCUMENT

AQMP	-	Air Quality Management Plan
DP&E	-	Department of Planning and Environment
EPA	-	Environment Protection Authority
HVAS	-	High Volume Air Sampler
NMPL	-	Namoi Mining Pty Ltd
PA	-	Project Approval
PM ₁₀	-	Particulate Matter < 10µm
TSP	-	Total Suspended Particulate Matter



SUNNYSIDE COAL PROJECT ENVIRONMENTAL MANAGEMENT SYSTEM

Document Owner:	Closed Mines Superintendent
Last Revision Date:	05/07/2023
Date Printed:	05/07/2023

WHC_PLN_SUN_AIR QUALITY MANAGEMENT PLAN

1 INTRODUCTION

This Air Quality Management Plan (AQMP) has been prepared in accordance with Condition 3(19A) of Project Approval (PA) 06_0308 for the Sunnyside Coal Project (Sunnyside). Sunnyside is operated by Namoi Mining Pty Ltd (NMPL), a subsidiary company of Whitehaven Coal Limited.

This document considers the area of land corresponding to the project site boundary for Sunnyside, referred to as the “mine site” which corresponds to ML624. As illustrated in Figure 1, Sunnyside is located approximately 15km west of Gunnedah.

Mining operations at Sunnyside were suspended in late November 2012 and recommenced in late 2017. Coal extraction at the Sunnyside Coal Mine ceased in September 2019, with crushing and coal transport to the Gunnedah Coal Handling and Processing Plant (CHPP) concluding on the 27th October 2019. Following cessation of mining rehabilitation including final landform, topsoil, and vegetation establishment was completed in December 2020.

All infrastructure has been removed baring a 20,000L polyurethane tank that is used for weed spraying. Site has been fully rehabilitated with well-established vegetating groundcover, with no exposed areas that are susceptible to dust generation. EPA Licence for the site has been relinquished as there are no scheduled activities being undertaken.



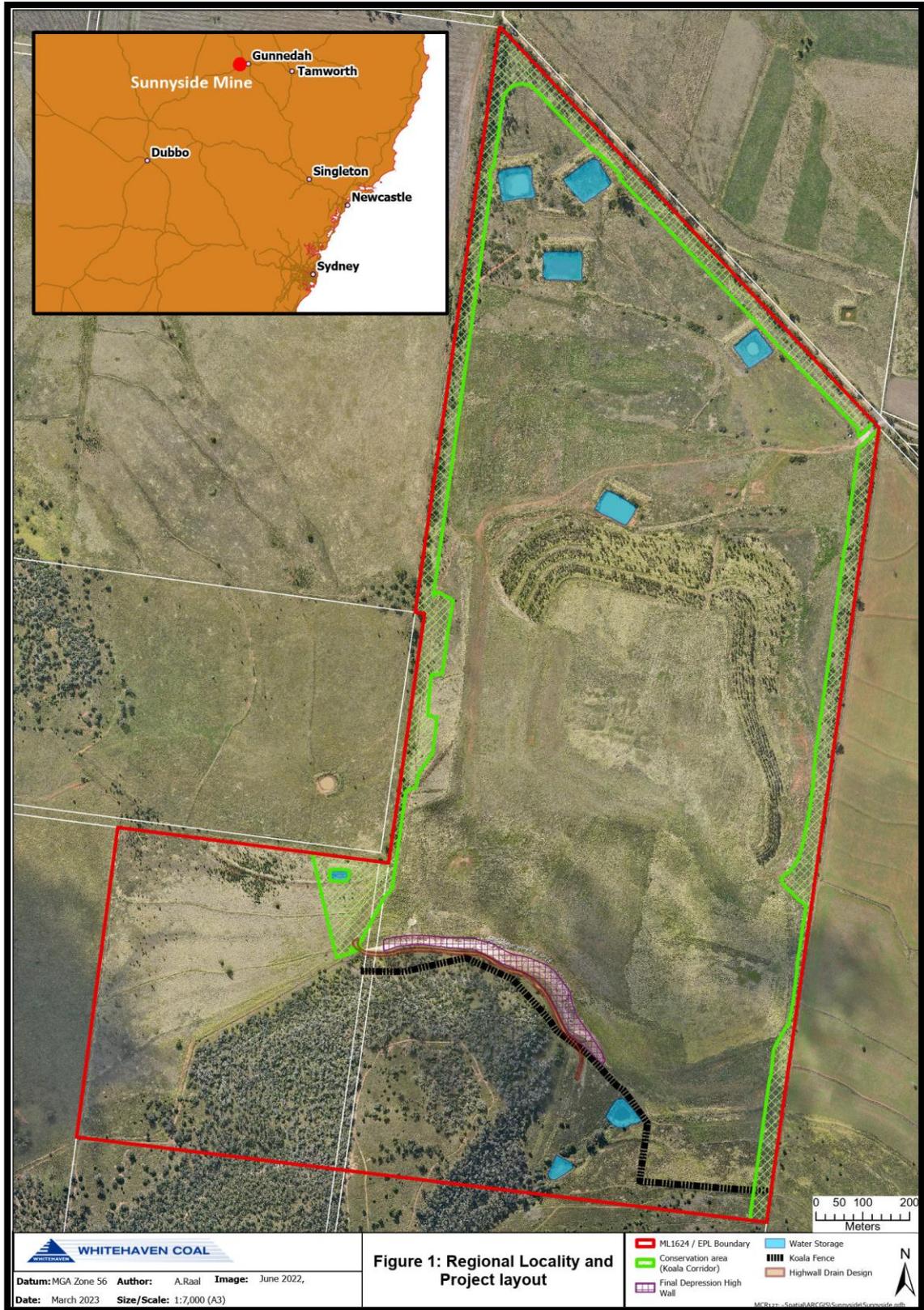
SUNNYSIDE COAL PROJECT ENVIRONMENTAL MANAGEMENT SYSTEM

Document Owner: Operations Supt

Last Revision Date: 10/2017

Date Printed: 11/07/2023

WHC_PLN_SUN_AIR QUALITY MANAGEMENT PLAN





SUNNYSIDE COAL PROJECT ENVIRONMENTAL MANAGEMENT SYSTEM

Document Owner: Operations Supt

Last Revision Date: 10/2017

Date Printed: 11/07/2023

WHC_PLN_SUN_AIR QUALITY MANAGEMENT PLAN

2 AIR QUALITY CRITERIA

The air quality criteria, as per Condition 3(18) of PA 06_0308, is detailed in Table 1.

Table 1 – Air Quality Criteria

Pollutant	^d Criterion	Averaging Period
Total suspended particulate matter (TSP)	^a 90µg/m ³	Annual
Particulate matter <10µm (PM ₁₀)	^a 50µg/m ³	24 hour
	^a 30µg/m ³	Annual
^c Deposited dust	Maximum increase in deposited dust level	Maximum total deposited dust level
	^b 2.0g/m ² /month	^a 4.0g/m ² /month
<i>Notes:</i> ^a Total impact (ie. incremental increase in concentrations due to the development plus background concentrations due to all other sources); ^b Incremental impact (ie. incremental increase in concentrations due to the development on its own); ^c Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air – Determination of Particulate Matter – Deposited Matter – Gravimetric Method; and ^d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Secretary.		

3 AIR QUALITY CONTROLS AND MANAGEMENT MEASURES

3.1 Air Quality Management and Mitigation

Table 2 includes the management actions listed in the Statement of Commitments in relation to air quality. These actions, in addition to monitoring and reporting (Section 4), constitute the air quality management system for the site.

Table 2 - Operational Controls

Statement of Commitments	Current Status
Fence off all land which is not to be disturbed to encourage natural regeneration.	No longer applicable
Establish ground cover on disturbed areas and emplacement areas as soon as possible.	No longer applicable
Undertake soil stripping at a time when there is sufficient soil moisture to prevent significant lift-off of dust.	No longer applicable
Avoid stripping soil in periods of high wind.	No longer applicable
Use water application for dust suppression to increase soil moisture should stripping occur during periods of high wind or low soil moisture.	No longer applicable
Utilise water injection on the drill rigs or alternatively fit them with dust collectors.	No longer applicable
Use aggregates for blast hole stemming to prevent venting of explosion gases.	No longer applicable
Conduct blasting both before the establishment, and after the break up of low-level atmospheric temperature inversions.	No longer applicable
Avoid ripping of softer overburden material during periods of high wind.	No longer applicable
Spray low moisture coal with water prior to excavation to raise moisture content to >6%.	No longer applicable
Minimise clearing ahead of construction activities.	Not applicable.
Water cleared areas regularly during construction activities.	Not applicable.



SUNNYSIDE COAL PROJECT ENVIRONMENTAL MANAGEMENT SYSTEM

Document Owner: Operations Supt

Last Revision Date: 10/2017

Date Printed: 11/07/2023

WHC_PLN_SUN_AIR QUALITY MANAGEMENT PLAN

Minimise clearing ahead of road construction.	Not applicable.
Water active construction areas regularly.	Not applicable.
Restrict truck speeds on roads under construction to <50kph.	Not applicable.
Apply water to the coal at the feed hopper, crusher and all conveyor transfer and discharge points at the rate of approximately 2.0L/t coal processed.	No longer applicable
Temporarily cease operation in the event of protracted dry periods, high winds and significant dust generation and dispersal towards the surrounding residences.	No longer applicable
Minimise the extent of clearing/site preparation in advance of mining.	No longer applicable
Clearly define any access or haul roads and restrict vehicles and equipment to those roads.	No longer applicable
Routinely apply water with or without chemical dust suppressants.	No longer applicable
Progressively rehabilitate areas of disturbance including topsoil and subsoil stockpiles.	Rehabilitation completed
Install bund walls and wind breaks as required.	Bunds removed as part of final rehabilitation
Regularly water haul roads.	No longer applicable.
Avoid coal being loaded above the truck body sides.	No longer applicable
Cover all trucks carrying product coal from the mine with approved covers and securely fix the tailgates to prevent windblown dust emissions or spillages.	No longer applicable
Fit all earthmoving equipment on-site with exhaust controls which satisfy NSW EPA emission requirements.	No equipment on site
Ensure all equipment is properly maintained to ensure no unacceptable exhaust emissions occur and commit to the removal of any vehicle or item of mobile equipment from on-site activities which is observed not to comply with NSW EPA guidelines.	No longer applicable
Direct the exhausts of all equipment upwards or to the side so as not to impinge on the ground and cause dust lift-off.	No longer applicable
Undertake an air quality monitoring program to demonstrate compliance with the nominated goals specified in the Environment Protection Licence. <ol style="list-style-type: none"> 1. Deposited dust at selected residences and strategic locations surround the Project Site. 2. Continuous wind speed and direction at the Project Site weather station. 3. PM₁₀ dust at a residence nearby six day cycle. 	Site has no dust generating activities or exposed areas, monitoring is no longer required
Avoid burning vegetation.	No longer applicable
Use water injection or dust collectors during drilling.	No longer applicable
Avoid ripping softer overburden material during periods of high wind.	No longer applicable
Establish and maintain a dust monitoring program in line with recommended locations.	Site has no dust generating activities or exposed areas, monitoring is no longer required.
Install and maintain an automatic weather station within the Project Site.	Weather station installed and operational.
Adopt strategies to reduce GHG environs as nominated in EA Section 4B.5.5.4.	No longer applicable
Install first flush devices on the domestic water tanks at "Weron", "Ivanhoe", "Mulwalla", "Mulwalla (2)", "Innisvale", "Sugarloaf", "Lilydale", "Woodlawn", "Plain View", "Illili", "Glendower", "Ferndale" and "Eulalie".	Planned to have devices removed as no-longer required.

3.2 Notification and Independent Review

Schedule 4 of PA 06_0308 details notification and independent review requirements.



SUNNYSIDE COAL PROJECT ENVIRONMENTAL MANAGEMENT SYSTEM

Document Owner:	Operations Supt
Last Revision Date:	10/2017
Date Printed:	11/07/2023

WHC_PLN_SUN_AIR QUALITY MANAGEMENT PLAN

4 MONITORING AND REPORTING

4.1 Monitoring Program

Final rehabilitation of site has been completed, with remaining works related to ongoing maintenance and monitoring. Additionally, the EPA licence for the site has been surrendered.

Site air quality monitoring will be monthly visual inspection that includes photographs and is recorded electronically.

4.2 Monitoring Locations

4.3 Site monitoring is Reporting

4.3.1 Air Quality Incidents

High regional dust or bushfire smoke noted on the property will be recorded with photographic evidence and reported as required.

Incident reporting will be undertaken in accordance with Conditions 5(3) and 5(4) of PA 06_0308.

4.3.2 General

A review of air quality management and monitoring will be included in the Annual Review, in accordance with the requirements of Condition 5(5) of PA 06_0308.

5 DOCUMENT REVIEW

This document will be reviewed in accordance with the requirements of Condition 5(5A) of PA 06_0308.