



***Air Quality Monitoring
Program***
for the
Rocglen Coal Mine
Incorporating an
Air Monitoring Protocol



Whitehaven Coal Mining Pty Ltd

ABN: 65 086 426 253

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Document Control*					
Edition	Revision	Comment	Author	Date	Authorised by:
1	Rev 0	Initial Document	T Thompson	24/4/2008	C Burgess
	Rev 1	Amendment to Monitoring Locations	T Thompson	9/1/2009	D Young

*To be revised at least every 2 years.

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ACRONYMS USED THROUGHOUT THIS REPORT

AEMR	-	Annual Environmental Management Report
AQMP	-	Air Quality Monitoring Program
CCC	-	Community Consultative Committee
CHPP	-	Coal Handling and Preparation Plant
DECC (EPA)	-	Department of Environment and Climate Change (Environment Protection Authority)
DoP	-	Department of Planning
DPI-MR	-	Department of Primary Industries - Mineral Resources
EA	-	Environmental Assessment
EMS	-	Environmental Management Strategy
GSC	-	Gunnedah Shire Council
INP	-	Industrial Noise Policy
ISO	-	International Standards Organisation
NSC	-	Narrabri Shire Council
PA	-	Project Approval
ROM	-	Run of Mine
WCMPL	-	Whitehaven Coal Mining Pty Ltd

1 INTRODUCTION

The Rocglen Coal Mine (“the mine”), previously known as the Belmont Coal Project is located approximately 25km north of Gunnedah and 23km south east of Boggabri (see **Figure 1**). The mine is located within a 366ha site bordering the eastern edge of Vickery State Forest. The mine is being developed by Whitehaven Coal Mining Pty Ltd (WCMPL) as an open cut mining operation.

Project Approval (PA) 06_0198 was granted for the mine by the Minister for Planning on 15th April 2008. The approved mine will involve the following activities and features.

- Coal mining by open cut and auger mining methods over an area of approximately 114ha.
- Crushing, screening and stockpiling of coal.
- Installation and/or construction of Project Site infrastructure and services, eg power supply, water management structures and internal access roads.
- Upgrading previously closed roads and construction of purpose built roads on Proponent-owned properties as part of a coal transport route.
- Transportation of coal from the mine via a purpose built road between the project site and Shannon Harbour Road over the “Brentry” and “Stratford” properties, an upgraded section of Shannon Harbour Road, and existing sections of Hoad Lane, Blue Vale Road and the Kamilaroi Highway to the Whitehaven Coal Handling and Preparation Plant (CHPP) and rail Loading Facility at the Whitehaven Siding.
- The backloading of coarse and fine rejects from the Whitehaven CHPP to the Mine Site for disposal (via the same transport route).
- Final Rehabilitation of the areas of disturbance within the Mine Site following completion of the Project.

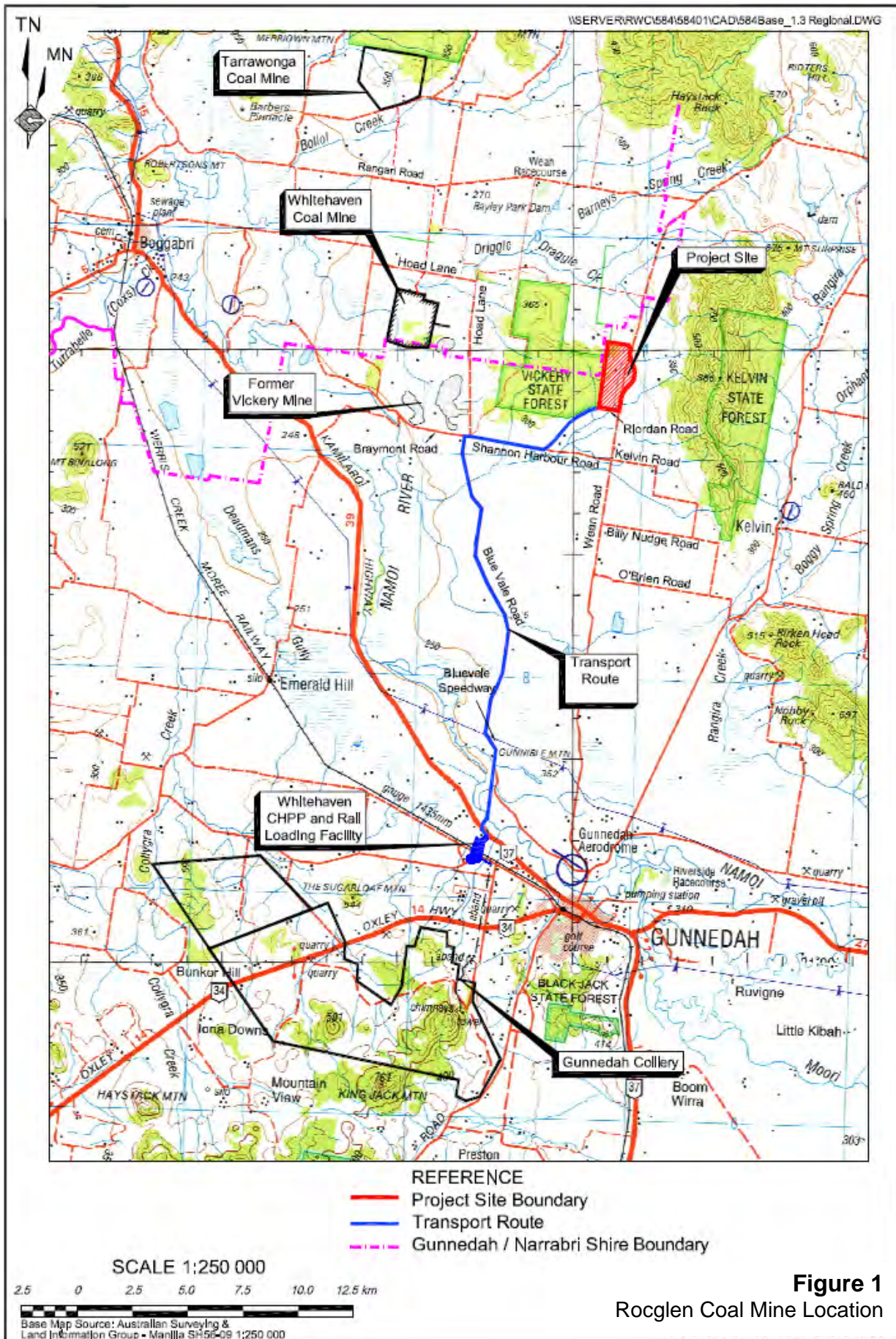
It is recognised that the operation of the mine has the potential to impact on the air quality within and beyond the boundaries of the mine site. In order to manage the potential impacts on local air quality, and in compliance with *Condition 3(24)* of PA 06_0198, the following Air Quality Monitoring Program (AQMP) has been prepared.

The AQMP presents the relevant conditions of the PA 06_0198 (see **Section 2**) and includes an Air Monitoring Protocol (AMP) to evaluate compliance with the air quality criteria identified by PA 06_0198 (see **Section 3**). **Section 4** presents the specific features of the AQMP including monitoring locations, parameters measured and frequency of monitoring.

The AQMP has been prepared with reference to relevant legislation and guidelines and is consistent with the commitments in the following documentation which was prepared prior to the granting of PA 06_0198.

- Air Quality Assessment – included as Part 8 of the Specialist Consultant Studies Compendium accompanying the *Environmental Assessment* for the Belmont Coal Project.
- *Environmental Assessment* – specifically Section 4B.10 and Section 5 (14).
- Final Statement of Commitments – specifically commitments 14.1 to 14.18.

The AQMP applies to the construction and operational phases of the mine.



2 REQUIREMENTS OF PA 06_0198

PA 06_0198 incorporates two conditions relating to air quality management and air quality monitoring. These conditions are presented in full in **Box 1**. It is noted that a number of conditions arose from the DECC's recommendations to the DoP and as such will be consistent with conditions of an Environment Protection Licence for the mine.

SCHEDULE 3 SPECIFIC ENVIRONMENTAL CONDITIONS

AIR QUALITY

Note: These conditions should be read in conjunction with sections 14 and 17 of the Statement of Commitments.

Impact Assessment Criteria

23. The Proponent shall ensure that dust emissions generated by the project does not cause additional exceedances of the criteria listed in Tables 5 to 7 at any residence on privately owned land, or on more than 25 percent of any privately-owned land.

Pollutant	Averaging period	Criterion
Total suspended particulate (TSP) matter	Annual	90 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	Annual	30 µg/m ³

Table 5: Long term impact assessment criteria for particulate matter

Pollutant	Averaging period	Criterion
Particulate matter < 10 µm (PM ₁₀)	24 hour	50 µg/m ³

Table 6: Short term impact assessment criteria for particulate matter

Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level
Deposited dust	Annual	2 g/m ² /month	4 g/m ² /month

Table 7: Long term impact assessment criteria for deposited dust

Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 2003, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.

Monitoring

24. The Proponent shall prepare and implement an Air Quality Monitoring Program for the project in consultation with DECC, and to the satisfaction of the Director-General. This program must:
- be submitted to the Director-General prior to the commencement of construction activities (not including the Kamilaroi Highway and Hoad Lane intersections and sections 1 and 2 of the coal transport route);
 - be prepared in consultation with the DECC; and
 - use a combination of high volume samplers and dust deposition gauges to monitor the performance of the project.

Box 1
Air Quality - Related Consent Conditions

3 AIR MONITORING PROTOCOL

3.1 Introduction

The AMP has been prepared with reference to relevant legislation and guidelines to address the following matters relevant to the management of air pollutants produced by activities on the mine site.

- Air quality compliance criteria (see **Section 3.2**).
- Air quality controls and management procedures (see **Section 3.3**).
- Community consultation (see **Section 3.4**).
- Management of complaints (see **Section 3.5**).
- Monitoring methods and programs (see **Section 3.6**).
- Response to air quality compliance criteria exceedance (see **Section 3.7**)

3.2 Air Quality Compliance Criteria

Air quality compliance criteria for the operation of the mine, as incorporated in *Condition 3(23)*, have been established using relevant DECC guidelines and conditional requirements recommended by the DECC for inclusion in PA 06_0198. WCMPL will ensure that dust and other particulate matter generated on the mine site does not result in exceedances of the criteria listed in **Table 1** at any residence on privately owned land, or on more than 25 percent of any privately-owned land.

Table 1
Air Quality Impact Assessment Criteria

Pollutant	Criterion		Averaging Period
Total suspended particulate matter (TSP)	90µg/m ³		Annual mean
Particulate matter <10µm (PM ₁₀)	50µg/m ³		24-hour maximum
	30µg/m ³		Annual mean
Deposited dust	Maximum increase in deposited dust level	Maximum total deposited dust level	
	2.0g/m ² /month	4.0g/m ² /month	Annual mean

Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 2003, AS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.

Source: Modified after PA 06_0198 – Tables 5 to 7.

3.3 Air Quality Controls and Management Procedures

WCMPL will adopt a range of design and operational safeguards and operational procedures for the mine to ensure that the effectiveness of the air quality controls are optimised throughout all stages of the mine's development and operation.

The controls have been selected largely based on their proven effectiveness at other mines.

Vegetation Clearing and Soil Stripping

- Cleared Trees and branches will be retained for the use in stabilising slopes identified for rehabilitation with native woodland communities.
- Minimise clearing ahead of construction and operational activities (As per Statement of Commitments (SoC) 14.1).
- Soil stripping will be undertaken at a time when there is sufficient soil moisture to prevent significant dust lift-off (As per Statement of Commitments (SoC) 14.2).
- WCMPL will avoid stripping soil in periods of high winds (SoC 14.3).
- Dust suppression by water application will be used to increase soil moisture during periods of high wind or low soil moisture (SoC 14.4).

Drilling and Blasting Activities

- The drill rig will utilise water injection or alternatively, be fitted with dust collectors (SoC 14.5).
- Blast hole stemming will be used to prevent venting of explosive gasses.
- Blasting will be conducted both before the establishment, and after the break-up of low-level atmospheric temperature inversions.

Overburden Ripping and Placement

- Ripping of softer overburden material will be avoided during periods of high wind (SoC 14.6).

Coal Mining

- Low moisture coal will be sprayed with water prior to excavation to raise moisture content to >6% (SoC 14.7).

Internal Road and Hardstand Area Construction

- Clearing ahead of construction activities will be minimised (SoC 14.1).
- Cleared areas will be watered regularly during construction, where appropriate.

Coal Processing Area

- Water will be applied to the coal at the feed hopper, crusher and at all conveyor transfer and discharge points (SoC 14.8).
- All conveyors will be fitted with appropriate cleaning and collection devices to minimise the amount of material falling from the return of conveyor belts.

- Some flexibility will exist to temporarily cease operation in the event of protracted dry periods, high winds, or significant dust generation and dispersal towards the surrounding residences (SoC 14.14).

Wind Erosion of Open Cut Stockpiles

- The extent of clearing/site preparation in advance of mining will be minimised (SoC 14.1).
- Progressive rehabilitation of areas of disturbance, including topsoil and subsoil stockpiles will be undertaken.
- Bund walls and windbreaks will be constructed as required (SoC 14.9).

Internal Transport

- The road for the transportation of coal product between the mine facilities area and mine entrance will be sealed.
- Internal roads will be regularly watered.
- Earthmoving equipment and on-site vehicles will:
 - Be fitted with exhaust controls which satisfy NSW DECC emission requirements (SoC 14.12);
 - Be properly maintained and any mobile equipment which does not comply with NSW DECC guidelines will be removed; and
 - Have the exhausts of all equipment directed upwards or to the side so as not to cause dust lift-off (SoC 14.13).

Blasting

- The following factors contributing to non-ideal detonation behaviour and higher emission (principally NO₂) concentrations will be avoided whenever possible.
 - Weak overburden which reduces the necessary explosive confinement will be ripped in preference to blasting.
 - Water infiltration.
 - Long explosive columns.
 - Explosive pre-compression, caused by hole-to-hole shock propagation due to wet overburden and clay veins.

The controls and management procedures will be reviewed in response to the results of air quality monitoring, complaints or comments identified through WCMPL's consultation effort. Any changes made will be noted as part of annual environmental reporting (in the Annual Environmental Management Report (AEMR)).

3.4 Community Consultation

WCMPL will maintain a positive dialogue with all members of the local community to avoid any adverse impacts and/or misunderstandings arising from its activities. Consultation will be undertaken in several ways.

1. Formal and informal meetings with landowners / residents of land surrounding the site and other members of the local community with the greatest potential to be impacted by mine operations.
2. The establishment and involvement in a Community Consultative Committee (CCC) as required by *Condition 4(9)* of PA 06_0198. The CCC is to be comprised of:
 - An independent chairperson
 - two or three WCMPL representatives, including the person responsible for environmental management of the mine;
 - one representative from each of Narrabri Shire Council and Gunnedah Shire Council; and
 - at least three representatives from the local community.

The appointment of the nominated representatives will be approved by the Director-General.

The CCC will be chaired by an independent chairperson, whose appointment has also been endorsed by the Director-General, meet at least four times per year, and review the environmental performance of the development.

WCMPL will ensure that the CCC is provided with the most up-to-date information on the environmental performance of the mine and respond to any comments made by representatives of the CCC.

3. Inviting representatives of the local Aboriginal community to monitor surface disturbing activities and potential sites of significance (as and if identified).

3.5 Management of Complaints (Complaints Management Protocol)

Whilst all endeavours will be made by WCMPL to avoid adverse air quality impacts on local landowners / residents, it is acknowledged that from time to time such impacts may occur. In order for WCMPL to ensure an appropriate and consistent level of reporting, response and follow-up to any complaints, the following complaints management protocol will be adopted and followed.

- A publicly advertised telephone complaints line will be in place to receive complaints during operating hours and record complaints at other times.
- Each complaint received will be recorded on a Complaints Register which will take the form of a log book or similar database. The mine's Complaints Register will include the following details for air quality complaints.
 - The date and time of complaint.

- Any personal details the complainant wishes to provide or if no such details are provided a note to that effect.
- The nature of the incident that led to the complaint, including the time of the dispersal and its duration.
- The action taken by WCMPL in relation to the complaint, including any follow-up contact with the complainant.
- If no action was taken by WCMPL, the reason why no action was taken.
- The Mine Manager will be responsible for ensuring that an initial response is provided within 24 hours of receipt of a complaint (except in the event of complaints recorded when the mine is not operational).
- Data from the site weather station will be obtained for the time applicable to the complaint for use in determination of cause and identification of future remedial actions.
- Additional measures will be undertaken as required to address the complaint. This may include visiting the complainant, or inviting the complainant to the mine site.
- Once the identified measures are undertaken, the Mine Manager will sign off on the relevant complaint within the Complaints Register.
- If necessary, follow-up monitoring will take place to confirm the source of the complaint is adequately mitigated.
- A copy of the Complaints Register will be kept by WCMPL and made available to the CCC and the complainant (on request). A summary of complaints received every 12 months (if any) will be provided to DoP, NSC, GSC, DECC, DPI (MR) and the CCC through the AEMR.

Based on the nature of individual complaints, specific contingency measures may be implemented to the (reasonable) satisfaction of the complainant. The Mine Manager retains ultimate responsibility to ensure that complaints received are properly recorded and addressed appropriately.

3.6 Monitoring Methods and Programs

Section 4 presents the air quality monitoring methods and procedures including details on monitoring locations, methods, frequency, parameters and reporting.

3.7 Response to Air Quality Criteria Exceedance

Conditions 3 & 4 of Schedule 5 of the Project Approval identify actions required in the event of an exceedance in Air Quality criteria. These requirements are as follows:-

- Notification to the Department of Planning and other relevant agencies within 24 hours of detecting an exceedance of the limits/performance criteria in the approval, or the occurrence of an incident that causes or may cause material harm to the environment.
- Within 6 days of the initial notification to the Department of Planning and other relevant agencies, provide a written report to the Department of Planning and other relevant agencies describing:-
 - the date, time and nature of the exceedance;
 - the cause, or likely cause of the exceedance;
 - what action has been taken to date;
 - the proposed measures to address the exceedance.

In addition to the above notification protocol, the following response protocol is to be followed. It is noted that the response to an exceedance will vary depending on whether it is an exceedance of dust deposition or PM₁₀/TSP criteria.

1. Confirmation of Exceedance

The analysing laboratory will be contacted to ensure no error has been made in storing, analysing or recording the sample or result. Should this investigation conclude the treatment, analysis and result recording for the sample are satisfactory, WCMPL will proceed to response point 2.

2. Notification (of exceedance)

Monthly dust deposition exceedance (4.0g/m²/month)^a: The Mine Manager and Area Manager will be notified.

Exceedance of 24 Hour PM₁₀ criteria (50µg/m³): In the event that the PM₁₀ level recorded for a single 24 hour period exceeds 50µg/m³, the Mine Manager will notify the DoP and DECC as to the nature of the exceedance(s) and all relevant records of activities and weather conditions during the 24 hour period. A single exceedance may be considered anomalous, however, repeated exceedances will require the preparation of a corrective action plan. PM₁₀ monitoring will include observations of general dust conditions, additional sources of dust generation, and a copy of the relevant weather details as obtained from the site weather station.

Annual Average exceedance of dust deposition (4.0g/m²/month) or PM₁₀ (30µg/m³) or TSP (90µg/m³): In the event that the annual average dust deposition recorded at any off-site monitoring location exceeds 4.0g/m²/month, or PM₁₀ exceeds 30µg/m³, or TSP exceeds 90µg/m³ the Mine Manager will notify the DoP and DECC as to the nature of the exceedance(s). Exceedance of the annual average levels will require the preparation of a corrective action plan.

^a It should be noted that the criteria for dust deposition is an annual average value and therefore a dust deposition value of >4.0g/m² for any given month is not strictly an exceedance, rather an indication that should there be no change to dust generating or suppression activities the probability of an exceedance once the annual average is calculated is high.

3. Corrective Action Plan

WCMPL will prepare a corrective action plan to reduce dust generation and thereby reduce dust deposition and/or PM₁₀ concentrations around the mine site and return the operation to compliance. Preparation of the plan may require the assistance of a specialist air quality consultant. Details on the preparation of the corrective action plan will be included in the relevant AEMR and Environment Protection Licence Annual Return and to the DECC prior to implementation.

4. Re-assessment

Dust Deposition: In the event the annual average dust deposition level is exceeded in any calendar year, particular attention will be paid during the following 12 months to achieve compliance. The corrective action plan discussed above will be main control designed to lower the annual average dust deposition level.

In the event that the annual average does not comply in a second year, a revised corrective action plan (of Step 3) will be required, this time requiring the input of a specialist air quality consultant.

PM₁₀/TSP: Compliance with PM₁₀ / TSP concentration compliance criteria will be reassessed following the completion of the corrective action plan. In the event that a repeated non-compliant result is recorded, a revised corrective action plan (Step 3) will be implemented, this time requiring the input of a specialist air quality consultant.

5. Notification (of compliance)

WCMPL will notify the DoP and DECC and other relevant government agency(ies) and local stakeholder(s) of the return to compliance following the successful completion of Step 4.

6. Independent Review and Land Acquisition

If WCMPL fails to establish compliance with the air quality criteria at surrounding residences, or on 25% of privately-owned land, or following a legitimate complaint from a resident / land owner of criteria exceedance, WCMPL will, following instruction from the Director-General, commission a suitably qualified person to conduct an independent review.

7. Reporting

The recorded exceedance, corrective actions and reassessment will be reported to the CCC and included in each relevant AEMR.

3.8 Responsibilities and Accountabilities

Throughout the mine's operational life, the Mine Manager will have overall responsibility for ensuring contractors, employees and service providers comply with all laws, regulations, licences, and approvals.

All persons undertaking any form of work on the site will be required to attend a site-specific induction at which they will be instructed in the environmental rules, procedures and processes applicable to their activities whilst they are on the site.

4 MONITORING AND REPORTING

4.1 Introduction

WCMPL will undertake sufficient monitoring to establish that air pollutants generated by its activities are not of concern to the surrounding landowners and that the measured air quality pollutant levels are compliant with the air quality compliance criteria established and provided in **Section 3.2**. **Table 2** tabulates all relevant information for the Air Quality Monitoring Program.

Table 2
Air Quality Monitoring Program and Criteria

Purpose	Location*	Parameter to be Analysed	Criteria (Annual Average)	Frequency / Timing of Monitoring
Air Quality Compliance Monitoring	BD2, BD3, BD4, BD5, BD6, BD7, BD8	Dust Deposition (g/m ² /month)	4.0g/m ² /month	Monthly
	BA1, BA2	Particulate Matter <10µg/m ³	Annual Average – 30µg/m ³ 24 hour Maximum – 50µg/m ³	Once every 6 days (DECC Schedule)

* See **Figure 2** for air quality monitoring locations.

4.2 Parameters Measured

Various activities on the mine site will emit dust in various forms, namely total suspended particulate matter (TSP), particulate matter with aerodynamic diameters less than 10µm (PM₁₀) and deposited dust, which is assessed as insoluble solids as defined by Standards Australia, 2003, AS 3580.10.1:1991: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.

Table 1 presented the limits to the concentrations or deposition rates (in the case of deposited dust) that must not be exceeded at any residence on, or on more than 25 percent of, any privately-owned land. Monitoring implemented to ensure compliance with these criteria, presented in **Table 1**, will include monitoring of dust deposition rates and PM₁₀ concentrations at residences surrounding the mine site.

A record of site activities undertaken and meteorological records during the period of recording would also be retained.

No monitoring of TSP is proposed as PM₁₀ concentrations are considered of greater significance given its synergies with health-related issues. It is also recognised that the PM₁₀ particle size fraction is typically in the order of 50% of the TSP mass in rural areas (*Heggies, 2007*). As a consequence, the achievement of the PM₁₀ annual average goal will ensure the annual TSP goal is achieved. Reporting against TSP criteria will therefore be based on multiplying the recorded PM₁₀ levels by a factor of 2.

4.3 Monitoring Locations

Figure 2 presents the locations of the seven dust deposition gauges and two high volume air samplers (HVAS) for measuring PM₁₀ concentrations. The locations have been selected taking into account local meteorological conditions, the proximity of surrounding residences and the locations of likely dust emission sources from the mine site. Additional gauges would be established at residences more distant to the existing gauges in the event the gauges on WCMPL's land exhibit regular exceedances attributable to the mine's operation.

On the 21st November 2008, the land holder of "Costa Vale", located north of the Rocglen Mine, requested that all air quality monitoring equipment be removed off the property. In response to this request, deposited dust gauge BD-1 was removed from "Costa Vale", and PM10 HVAS, BA-1, was relocated to the WCMPL owned "Glenroc" property, located adjacent to the Rocglen Mine's northern boundary. This is shown on **Figure 2**.

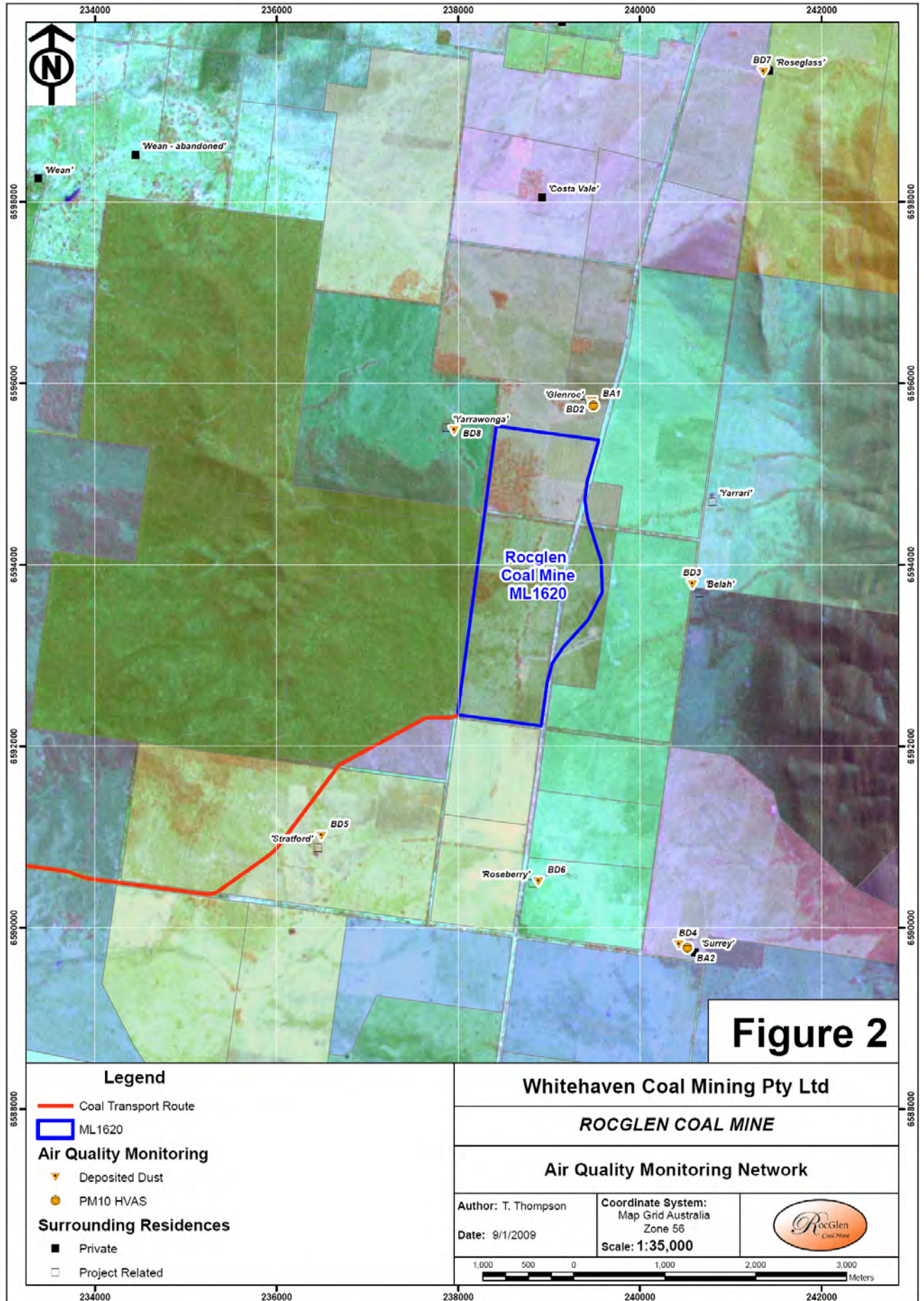


Table 3 presents a summary of the air quality monitoring sites included in the AQMP.

Table 3
Air Quality Monitoring Locations

Reference*	Location			Parameters	
	Easting (MGA 56)	Northing (MGA 56)	Residence / Property	Deposited Dust	PM ₁₀
BD2	239476	6595801	"GLENROC"	✓	
BD3	240582	6593782	"BELAH"	✓	
BD4	240434	6589810	"SURREY"	✓	
BD5	236498	6591008	"STRATFORD"	✓	
BD6	238887	6590504	"ROSEBERRY"	✓	
BD7	241363	6599433	"ROSEGLASS"	✓	
BD8	237958	6595481	"YARRAWONGA"	✓	
BA1* ¹	239487	6595753	"GLENROC"		✓
BA2	240522	6589776	"SURREY"		✓

See **Figure 2** for a map of locations
^{*1} BA-1, originally located on "Costa Vale" was relocated to "Glenroc" at land owners request
 Note: BD-1, located on "Costa Vale" has been removed at land owners request

4.4 Monitoring Frequency

Monitoring of deposited dust will be undertaken monthly.

Monitoring of PM₁₀ will be undertaken once every 6 days in accordance with the DECC state schedule for PM₁₀ monitoring.

4.5 Monitoring Procedures, Data Recording and Reporting

4.5.1 Monitoring Procedures

Monitoring of dust deposition and data recording will be undertaken in accordance with:

- AS 3580.1.1:2007 "Ambient Air - Guide for the Siting of Sampling Units" (NSW DEC Method AM-1); and
- AS 3580.10.1-2003 "Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method" (NSW DEC Method AM-19).

Monitoring of PM₁₀ and data recording will be undertaken in accordance with:

- "Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales", DEC 2005;
- AS 3580.1.1:2007 "Methods for sampling and analysis of ambient air – Guide to siting air monitoring equipment" (NSW DEC Method AM-1); and

- AS/NZS 3580.9.6:2003 “Methods for sampling and analysis of ambient air – Determination of suspended particulate matter – PM₁₀ high volume sampler with size-selective inlet – Gravimetric Method”.

4.5.2 Data Recording

For each deposited dust monitoring location, once each month the glass container used to capture the deposited dust will be removed, replaced and sent to a NATA accredited laboratory for analysis. For each PM₁₀ HVAS, after each monitoring event, the pre-weighed filter will be removed, replaced and sent to a NATA accredited laboratory for analysis generally in monthly batches to coincide with the despatch of the deposited dust samples.

The following information will be recorded at each deposited dust monitoring location.

- Date and time of removal and replacement.
- Condition of the dust gauge.
- Notable ground disturbances or activities ongoing in the general activity (not associated with the activities on the mine site).
- Any other notable activities or conditions at or around the monitoring location.

The following information will be recorded at each PM₁₀ HVAS monitoring location.

- Date of operation
- PM₁₀ HVAS location and ID
- Filter paper number
- The flow (m³/hr) and run-time reading for the start and end of a monitoring event, along with total run time.
- Any notable activities or conditions at or around the monitoring location.

4.5.3 Data Reporting

The results of all air quality monitoring will be made publicly available at the offices of GSC and NSC and at WCMPL's Gunnedah office. In accordance to PA 06_0198 *Condition 5(11)*, monitoring results will be provided on the Whitehaven website. These results will be updated at least every three months. Each year, the results of air quality monitoring program will be summarised and presented in the AEMR together with reference to the prevailing meteorological data and site activities during the measurement period(s). Reporting will also include an analysis of the monitoring results against the criteria listed in **Table 1**, previous monitoring results and predictions made in the EA. Based on these results, trends in the air quality levels will be identified and any non-compliance noted.

The recording of an exceedance of air quality criteria identified in **Table 1** will trigger the implementation of contingency measures described in **Section 3.7** of the AQMP.