

MAC-ENC-MTP-040

AIR QUALITY MANAGEMENT PLAN

Document Owner

General Manager

Document Approver

Manager Production Overburden

Revision History

| Version No. | Date Published | Details |
|-------------|----------------|---|
| 1 | 06/06/2012 | Approved by the Department of Planning & Infrastructure on 6/6/2012 |
| 2 | 27/05/2013 | Approved by the Department of Planning & Infrastructure on 27/5/2013 |
| 3 | 25/01/2019 | Approved by the Department of Planning & Infrastructure on 25/01/2019 |

Contents

| | | |
|----|---|----|
| 1. | Introduction | 3 |
| 2. | Planning | 4 |
| 3. | Control Measures..... | 5 |
| 4. | Air Quality Monitoring Program | 7 |
| 5. | Reporting and Review..... | 9 |
| 6. | References..... | 10 |
| | Figure 1: Air Quality Monitoring Locations | 12 |
| | Appendix A: Dust Trigger Action Response Plan (TARP)..... | 13 |

1. Introduction

1.1. Context

Hunter Valley Energy Coal Pty Ltd (HVEC) operates the Mt Arthur Coal Mine Complex (Mt Arthur Coal) which consists of approved open cut and underground mining operations, a rail loop and associated rail loading facilities, in accordance with the Mt Arthur Coal Open Cut Consolidation Project Approval (09_0062 MOD 1) dated 26 September 2014 (Project Approval), and Environment Protection Licence No. 11457 (EPL). The operations are located in the Upper Hunter Valley, NSW, approximately five kilometres south west of Muswellbrook.

Extraction of coal requires the clearing of land and excavation of overburden material to recover coal using heavy earth moving equipment. Coal preparation, handling and loading is undertaken at the centralised Mt Arthur Coal Mine Coal Handling and Preparation Plant (CHPP). Export coal is loaded onto trains via the rail loading facility whilst domestic coal is generally transported via conveyor directly to the Bayswater Power Station. All of these activities generate fugitive dust. Other emissions to air include carbon monoxide (CO), sulphur dioxide (SO₂) and nitrogen dioxide (NO₂) from diesel powered equipment and vehicle exhausts and emissions associated with blasting and spontaneous combustion.

A full project description, including baseline data, history of operations, current operating philosophy and mining methods is provided in the Mt Arthur Coal Consolidation Project Environmental Assessment (EA) (Hansen Bailey, 2009) and Mt Arthur Coal Open Cut Modification Environmental Assessment (Resource Strategies, 2013).

1.2. Purpose

The purpose of this Air Quality Management Plan (AQMP) is to provide an overview of, and direction to the systems, processes and documentation that have been established to:

- ensure compliance with operating conditions of all active approvals;
- minimise the impact of dust from mining activity on the environment and nearby residences;
- minimise the release of greenhouse gas (GHG) emissions and prevent the emission of offensive odours;
- evaluate and report on the effectiveness of the air quality management system; and
- maintain an effective response mechanism to deal with exceedances and complaints.

1.3. Scope

The scope of this AQMP applies to all activities at Mt Arthur Coal, including mining, handling, transport, processing and storage of coal that have the potential to impact on the immediate and surrounding receiving environment.

The impacts of blasting on air quality are managed via the *Blast Management Plan (MAC-ENC-MTP-015)* (BMP). In addition, the health and safety of workers from air quality is included in the *Air Quality, Dust and Other Airborne Contaminants Principal Hazard Management Plan (MAC-STE-MTP-001)* and is therefore not included in this AQMP.

1.4. Responsibilities

The maintenance and update of this plan is the responsibility of the HSE Superintendent. Implementation of operational controls is the responsibility of the Production Mining Manager and Statutory Open Cut Examiner (OCE). All employees at Mt Arthur Mine share the responsibility of maintaining the Licence to Operate which includes the management of Air Quality and are referenced where applicable in operational control documentation.

2. Planning

2.1. Management Systems

Mt Arthur Coal has well-established management systems that are aligned with the international management system standard ISO 14001. These management systems provide the framework to support the planning, implementation, monitoring and review to achieve continual improvement in air quality management. To minimise the air quality impacts of these activities an Air Quality Management System (AQMS) has been established, which includes mechanisms for predictive forecasting and real-time air quality monitoring, providing feedback on the effectiveness of controls and enabling adaptive air quality management.

2.2. Risk Management

Mt Arthur Coal implements a comprehensive risk management system as documented in the *Risk Management Standard (NEC-STE-STD-016)* and *Risk Management Procedure (MAC-STE-PRO-005)*. Air quality and GHG risks and their associated control measures are documented in the MAC Environment Risk Register; the control measures are summarised in Section 3 of this AQMP. Operational and project related changes that have the potential to materially alter the air quality or GHG risk profile are managed through the Mt Arthur Coal Management of Change Procedure (NEC-STE-PRO-030).

2.3. Legal Requirements

Requirements and commitments associated with air quality and GHG are defined within the following approvals:

- Mt Arthur Coal Mine Open Cut Consolidation Project Modification 1 (09_0062 MOD 1); and
- Environmental Protection Licence EPL 11457.

In accordance with the Project Approval, Mt Arthur Coal must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the project do not cause exceedances of the criteria listed in Table 1 at any residence on privately-owned land.

Table 1: Mt Arthur Coal air quality and dust deposition criteria

| Pollutant | Averaging period | Impact assessment | | Land acquisition | |
|------------------|------------------|---------------------------|-------------|---------------------------|-------------|
| | | Criterion | Basis | Criterion | Basis |
| TSP | Annual | 90 µg/m ³ | Cumulative | 90 µg/m ³ | Cumulative |
| PM ₁₀ | Annual | 30 µg/m ³ | Cumulative | 30 µg/m ³ | Cumulative |
| PM ₁₀ | 24-hour | 50 µg/m ³ | Cumulative | 150 µg/m ³ | Cumulative |
| PM ₁₀ | 24-hour | - | - | 50 µg/m ³ | Incremental |
| Deposited dust | Annual | 2 g/m ² /month | Incremental | 2 g/m ² /month | Incremental |
| Deposited dust | Annual | 4 g/m ² /month | Cumulative | 4 g/m ² /month | Cumulative |

2.4. Consultation and Communication

This AQMP has been prepared in consultation with the Department of Planning and Environment (DPE). In addition, Mt Arthur Coal has extensive consultation and communication processes, including:

- A comprehensive community engagement program which includes a Community Consultative Committee (CCC);
- Periodic engagement via the Upper Hunter Mining Dialogue for co-ordination of air quality management at the Mt Arthur mine complex with air quality management at the Drayton, Mangoola and Bengalla mines to minimise cumulative air quality impacts;
- Ongoing consultation with relevant government agencies;

- A community response line (1800 882 044) which enables members of the community to contact environment and community staff directly to discuss concerns with air quality;
- Regular reporting on the environmental performance of the project on the BHP Mt Arthur Coal website; and
- Publicly available project approvals, environmental and other related documentation (annual reports, complaints register, CCC minutes etc.) via the BHP Mt Arthur Coal website (<https://www.bhp.com/environment/regulatory-information>).

3. Control Measures

3.1. Air Quality Control Measures

The Project Approval requires Mt Arthur Coal to implement reasonable and foreseeable avoidance and mitigation measures' regarding particulate matter emissions. Key operational control measures are included in Table 2.

Table 2 - Key air quality control measures

| Source | Air quality mitigation measures | Responsibility | Timing |
|--|---|----------------|-------------|
| Areas disturbed by mining activity | Disturb minimum area necessary for mining as per Mine Operations Plan (MOP) | Mine Planning | Ongoing |
| | Reshape, topsoil and rehabilitate completed overburden emplacement areas as soon as practicable | Mining | Ongoing |
| | Activate Trigger Action Response Plan (TARP) (See Appendix A) | Mining | As required |
| Hardstand areas | Site speed limits apply | Mining | Ongoing |
| | Apply dust suppressant on hardstand areas used regularly for access. | Mining | As required |
| Overburden emplacement and coal handling | Temporarily vegetate exposed surface of unused overburden emplacement areas | Mining | As required |
| | Maintain unsealed coal handling areas in a moist condition | Mining | As required |
| Unsealed roads | Apply dust suppressant on major haul roads | Mining | As required |
| | Apply dust suppressant on minor roads used regularly for access | Mining | As required |
| | All roads are speed limited | Mining | As required |
| | Drill rigs fitted with water sprays | Mining | Ongoing |

MAC-ENC-MTP-040 AIR QUALITY MANAGEMENT PLAN

| Source | Air quality mitigation measures | Responsibility | Timing |
|------------------------------|---|----------------|-------------|
| Drilling & Blasting | Assessment of weather conditions prior to blasting | Mining | Ongoing |
| CHPP & Rail loading facility | Conveyors shielded and water sprays fitted at transfer points | Processing | Ongoing |
| | Water sprays on plant feed and clean coal stockpiles | Processing | As required |
| | Raw coal hopper bins shielded and water sprays fitted | Processing | Ongoing |

Note: Responsibilities may be delegated as required.

Key operational control procedures describing the air quality management measures for sources of fugitive dust caused as a result of mining activity include;

- The *Dust Management Procedure (MAC-PRD-PRO-122)* details the action to be taken by operations personnel when excessive dust is identified (levels that could result in an exceedance of the criteria in Table 1) if mining activities continued business as usual. A key component of this procedure is the Dust Trigger Action Response Plans (TARP) (see Section 3.2). The MAC Dust Forecast Summary is a preventative tool which performs dust dispersion modelling using refined meteorological forecast data and operational emission source estimations to identify the likely risk of mining activities with the potential to result in excessive dust generation. Where there is high risk identified within the MAC Dust Forecast Summary controls from Table 2 or TARP are considered for implementation.
- The *Land Management Procedure (MAC-ENC-PRO-012)* outlines the ground disturbance permit process for Mt Arthur Coal and details control measures to be implemented during vegetation clearing, topsoil stripping and topsoil stockpiling to ensure activities are undertaken in an environmentally responsible manner and in accordance with statutory requirements and site environmental management plans. The document includes intent to reshape, topsoil and rehabilitate completed overburden emplacement areas as soon as practicable.
- Dust from vehicle movements is controlled in accordance with the *Surface Transport Management Plan (MAC-STE-MTP-0027)* and *Water Cart Operations Procedure (MAC-PRD-PRO-120)*.
- Construction and maintenance of haul roads will be undertaken in accordance with the *Mine Haul Road Standard (MAC-STE-STD-002)* which requires that the wearing course shall be formed from the best available material at time of construction considering dust generation.
- *Train Loading Spillage Clean-up Procedure (MAC-CPP-PRO-026)* includes the management controls to be implemented to mitigate the risks associated with dust generation from coals spills.

3.2. Trigger Action Response Plan

The Trigger Action Response Plan (TARP) is included within the *Dust Management Procedure (MAC-PRD-PRO-120)* and a summary is included as Appendix A. The TARP is facilitated real-time via the Dust Control System (DCS) whereby a dashboard presents a visual map with real-time updates of 1 hour, 3 hour and 24 hour PM10 concentrations (incremental), wind speed, wind direction, and when zoomed in, the location of various plant (water carts dozers, drills etc). The TARP facilitates the reasonable modification of mining activity to mitigate excessive dust emissions from MAC mining activities to avoid exceedances of the criteria in Table 1. Alert triggers are automatically generated when high wind speeds and wind direction within the MAC arc of influence combined with MAC mining activities have contributed to excessive dust. There are three tiers of alarms (Level 1, Level 2 & Level 3 as per Appendix A) based on risk and reactive controls are put in place relative to the risk. Following the generation of an Alert Trigger the OCE is notified to activate the TARP. Any Coal Mine Worker can manually trigger the Dust TARP on observing excessive dust. Actions to mitigate the generation of dust are included within the TARP (See Appendix A) and a record of response should be kept.

MAC-ENC-MTP-040

AIR QUALITY MANAGEMENT PLAN

3.3. Greenhouse Gas Management

Mt Arthur Coal undertakes regular reviews and monitoring of GHG emissions and energy efficiency initiatives to ensure that GHG emissions per tonne of product coal are kept to the minimum practicable level. Energy efficiency initiatives and opportunities are evaluated in the context of:

- their compatibility with the mine's production output and needs;
- energy and carbon costing;
- capital cost; and
- overall operating cost effectiveness including maintenance costs.

Following the assessment, reasonable and feasible measures (emissions reduction and/or energy efficiency initiatives) that are deemed effective at reducing GHG emissions are implemented.

3.4. Odour Management

It is a requirement of the Project Approval that no offensive odours are emitted from the site, as defined under the *Protection of the Environment Operations Act 1997* (NSW). The primary potential sources of odour at Mt Arthur Coal are spontaneous combustion and blast fume.

Overburden material that is prone to spontaneous combustion is capped with inert material. Coal stockpiles are constructed and maintained in a manner that reduces the risk of spontaneous combustion. The *MAC-CPP-PRO-016 Management of Product Coal Stockpiles* nominates maximum stockpile level,, stockpile height and 'shelf life' for coal type. Further details on how Mt Arthur Coal manages spontaneous combustion can be found in *Spontaneous Combustion Control Program (MAC-ENC-PRG-002)*. Details on management of blast fume can be found in *Blast Management Plan (MAC-ENC-MTP-015)*.

4. Air Quality Monitoring Program

4.1. Rationale

An Air Quality Monitoring Program has been established to evaluate and report on:

- the effectiveness of the AQMS;
- compliance with air quality criteria; and
- compliance with air quality operating conditions.

Monitoring is conducted in accordance with relevant standards as outlined in Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA, 2016). All statutory monitoring locations will conform to the requirements of *AS 3580.1.1:2007 Methods for sampling and analysis of ambient air – Part 1.1: Guide to siting air monitoring equipment*, subject to local site constraints. Effectiveness of the AQMS will be evaluated in accordance with the formal review process outlined in Section 5.2.

4.1.1. Predictive Meteorological Forecasting

The MAC Dust Forecast Summary is employed to inform the planning for each 12 hour shift and the next 72 hours. The tool provides an assessment of risk of elevated dust concentrations at offsite receptors, based on forecasted wind speed and wind direction at a local scale. The tool includes operational emission estimations that are updated regularly. Details on the inputs into the forecasting model are included in the Dust Management Procedure (MAC-PRD-PRO-122).

MAC-ENC-MTP-040

AIR QUALITY MANAGEMENT PLAN

4.1.2. Particulate Matter

The Project Approval criteria for particulate matter are defined for TSP and PM₁₀ and are referred to as long-term (annual average) and short-term (24-hour average) criteria. The TSP and PM₁₀ criteria that apply to Mt Arthur Coal are presented in Table 1.

Real-time particulate monitoring is conducted using tapered element oscillating microbalance analysers (TEOMs) to measure real-time PM₁₀ concentrations to guide day to day mining operations. Rolling averages are measured to demonstrate compliance. Refer to Figure 1 for the locations of Mt Arthur real time particulate monitoring. Of the TEOMs shown in Figure 1, sites DC10 to DC13 are near mine edge monitors (where the criteria does not apply) set up for an eventual introduction of upwind/downwind compliance triggers required by the EPL, not for monitoring the 50µg/m³ limit as they do not represent the closest privately owned residential areas. The remaining TEOMs (where the criteria applies) have been located for representative monitoring of privately owned receivers and are used to assess compliance with the criteria presented in Table 1.

Monitoring for particulate matter using a TEOM must comply with *AS 3580.9.8-2001 Determination of suspended particulate matter – PM₁₀ continuous direct mass method using a tapered element oscillating microbalance analyser*, where reasonable and feasible.

4.1.3. Deposited Dust

Particles larger than 50 µm are measured as deposited dust. The Environment Protection Authority (EPA) expresses dust deposition criteria in terms of an acceptable increase in dust deposition over the existing background deposition levels to represent both an incremental (project alone) and cumulative criterion. The long-term (annual average) EPA criteria for depositional dust that apply to Mt Arthur Coal are provided in Table 1. Dust deposition gauges are installed upwind and downwind of the mine site (see Figure 1) and are generally representative of sensitive receptors in these locations.

Dust deposition gauges are exposed for 30 days (+/- 2 days) and analysed for insoluble solids and ash residue. Monitoring for depositional dust is conducted to comply with *AS 3580.10.1-2003 Determination of particulates – Deposited Matter – Gravimetric Method*.

4.1.4. Meteorology

Automated weather stations (see Figure 1) compliant with Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA, 2016) provide representative weather data for the mine site including wind speed and direction, solar radiation, humidity, rainfall and temperature. All air quality, dust deposition and meteorological monitoring stations covered by this AQMP are listed in Table 3.

Table 3: Mt Arthur Coal statutory air quality, dust deposition and meteorological recording stations

| Site ID | Site name/ location | Monitored variable | Instrument | Frequency | Coordinates (E, N) |
|---------|---------------------|--------------------|------------|------------|--------------------|
| DC02 | Sheppard Avenue | PM ₁₀ | TEOM | Continuous | 299169, 6426451 |
| DC04 | South Muswellbrook | PM ₁₀ | TEOM | Continuous | 301618, 6425732 |
| DC05 | Roxburgh Road | PM ₁₀ | TEOM | Continuous | 290210, 6424790 |
| DC06 | Edderton Homestead | PM ₁₀ | TEOM | Continuous | 295900, 6413100 |
| DC07 | Antiene | PM ₁₀ | TEOM | Continuous | 304233, 6422344 |
| DC09 | Wellbrook | PM ₁₀ | TEOM | Continuous | 290285, 6422256 |
| DC10* | Edinglassie West | PM ₁₀ | TEOM | Continuous | 294417, 6423492 |

MAC-ENC-MTP-040

AIR QUALITY MANAGEMENT PLAN

| | | | | | |
|-------|--------------------------------|---|---------------------------|----------------------|-----------------|
| DC11* | Hunter River Pump | PM ₁₀ | TEOM | Continuous | 297079, 6424951 |
| DC12* | Drayton Void | PM ₁₀ | TEOM | Continuous | 300862, 6415287 |
| DC13* | Bayswater | PM ₁₀ | TEOM | Continuous | 303216, 6419154 |
| DD08 | Edderton Homestead | Deposited dust | Dust gauge | 30 days (+/- 2 days) | 295733, 6413104 |
| DD14 | Roxburgh Road | Deposited dust | Dust gauge | 30 days (+/- 2 days) | 290962, 6424585 |
| WS09 | Mt Arthur Coal Industrial Area | Wind speed and direction, solar radiation, humidity, rainfall and temperature | Automatic weather station | Continuous | 301201, 6420326 |
| WS10 | Wellbrook | Wind speed and direction, solar radiation, humidity, rainfall and temperature | Automatic weather station | Continuous | 290285, 6422256 |

* Assessment criteria do not apply; site established to comply with EPL requirement.

4.2. Data Quality Assurance

- TEOM data is screened periodically to identify erroneous data.
- Depositional dust samples are analysed by a National Association of Testing Authorities accredited laboratory to determine the mass deposition rate of insoluble solids, ash, combustible matter, soluble solids and total solids from ambient air.
- Monitoring equipment is maintained and calibrated in accordance with manufacturer's specifications and relevant standards.

4.3. Incident Notification

An email notification will be provided to the DPE as soon as practicable after becoming aware of an exceedance of criteria included in Table 1. An investigation will be conducted to validate the monitoring result in accordance with exceedance protocols described within the *Dust Management Procedure (MAC-PRD-PRO-122)*. Investigation includes estimating the contribution from Mt Arthur Coal mining activities and the recording of the reasonable and feasible mitigation measures implemented. The method for estimating the incremental contribution from Mt Arthur Coal mining activities includes determining the background dust concentrations for the 24 hour period using upwind and downwind concentrations together with meteorological data. An incident is defined when contribution from Mt Arthur Coal mining activities (incremental contribution) exceeds the criteria included in Table 1. A written report on the incident will be provided to the DPE within 7 days of becoming aware of the incident (or as otherwise directed by the DPE).

4.4. Complaint Handling

All complaints received regarding operational air quality will be responded to in accordance with *Community Complaints Handling Response and Reporting (MAC-ENC-PRO-042)*. This procedure details Mt Arthur Coal's obligations in regards to receiving, handling, responding to, and recording details of all community complaints. Mt Arthur Coal records all community complaints in the site event management database.

5. Reporting and Review

5.1. Reporting

Mt Arthur Coal will report on the performance of the Air Quality Monitoring Program and management of GHG emissions and energy consumption on the BHP Mt Arthur Coal website and periodic updates will be provided to members of the CCC. GHG emissions (including emissions from coal seams and emissions caused by

MAC-ENC-MTP-040

AIR QUALITY MANAGEMENT PLAN

fuel and electricity consumption) are quantified and reported annually in accordance with the *National Greenhouse and Energy Reporting Act 2007 (Cth)*.

5.2. Review

This AQMP will be reviewed and evaluated to assess its adequacy and effectiveness, to the satisfaction of the Secretary (in consultation with relevant government agencies) in accordance with Condition 4 of Schedule 5 of the Project Approval. This requires that this is undertaken within 3 months of:

- (a) The submission of the annual review
- (b) The submission of an incident report
- (c) The submission of an audit
- (d) Any modifications to the conditions of the Approval.

If necessary this AQMP will be revised to incorporate any recommended measures to improve the environmental performance of Mr Arthur Coal resulting from audits, community complaints (Section 4.4) and incident investigation findings (Section 4.3). In addition, the review process will include ongoing evaluation of operational modifications, alternative methodologies and new technologies that become available for their potential to lessen air quality impacts.

6. References

6.1. External Documents

Commonwealth of Australia (2012), National Pollutant Inventory Emission Estimation Techniques Manual for Mining, Version 3.1.

Environment Protection Authority (2016), Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales.

Environmental Protection Licence 11457.

Hansen Bailey (2009), Mt Arthur Coal Consolidation Project Environmental Assessment. Prepared for Hunter Valley Energy Coal Pty Ltd.

Mount Arthur North Coal Project Environmental Impact Statement (URS Australia Pty Limited, 2000).

Mt Arthur Coal Open Cut Consolidation Project Approval 09_0062 MOD 1 (dated 26 September 2014).

Resource Strategies (2013), Mt Arthur Coal Open Cut Modification Environmental Assessment. Prepared for Hunter Valley Energy Coal Pty Ltd.

Standards Australia (2008) AS 3580.9.8-2008: Methods for sampling and analysis of ambient air - Determination of suspended particulate matter - PM₁₀ continuous direct mass method using a tapered element oscillating microbalance analyser.

Standards Australia (2007) AS 3580.1.1:2007: Methods for sampling and analysis of ambient air - Guide to siting air monitoring equipment.

Standards Australia (1987) AS 2923-1987: Ambient air - Guide for measurement of horizontal wind for air quality applications.

6.2. Mt Arthur Coal Internal Documents

MAC-CPP-PRO-026 Train Loading Spillage Clean-up Procedure

MAC-ENC-MTP-015 Blast Management Plan (Publicly available)

MAC-ENC-MTP-041 Environmental Management Strategy

MAC-ENC-MTP-122 Dust Management Procedure

MAC-ENC-MTP-040 AIR QUALITY MANAGEMENT PLAN

MAC-ENC-PRG-002 Spontaneous Combustion Control Program

MAC-ENC-PRO-001 Air Quality, Dust and Other Airborne Contaminants Principal Hazard Management Plan

MAC-ENC-PRO-012 Land Management Procedure (Publicly available)

MAC-ENC-PRO-042 Community Complaints Handling, Response and Reporting procedure

MAC-PRD-PRO-120 Water Cart Operations Procedure

MAC-STE-MTP-027 Surface Transport Management Plan

MAC-STE-PRO-005 Risk Management Procedure

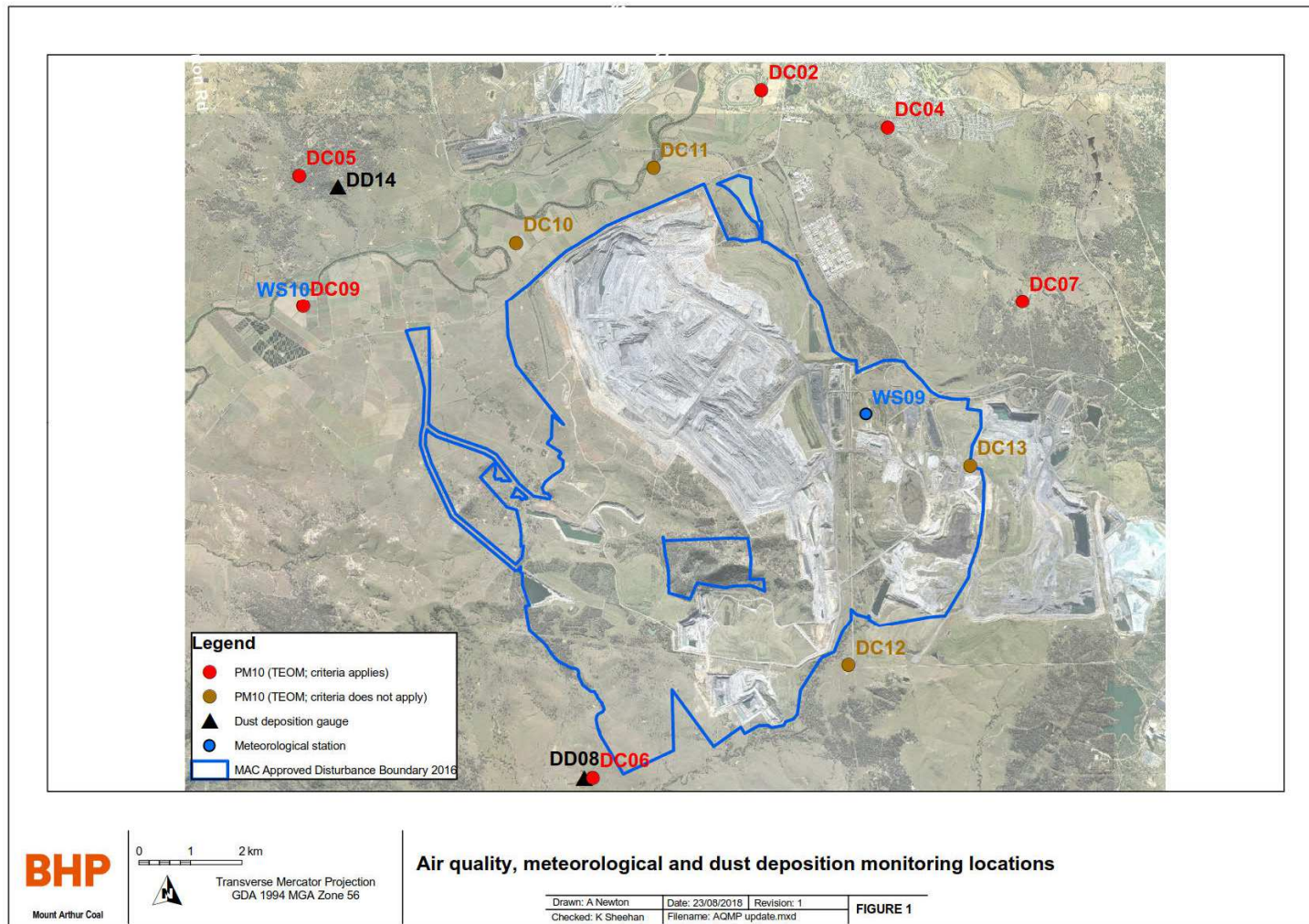
NEC-STE-PRO-030 Management of Change procedure

MAC-STE-STD-002 Mine Haul Road Standard

NEC-STE-STD-016 Risk Management Standard

**These internal documents are not publicly available due to containing commercially sensitive information*

Figure 1: Air Quality Monitoring Locations



Appendix A: Dust Trigger Action Response Plan (TARP)

| Trigger | Business as Usual Mining | Level 1 (1 hour alert) | Level 2 (3 hour alert) | Level 3 (Rolling 24 hour alert) |
|--|---|--|---|--|
| Action Response Plan | <p>Standard dust control measures include:</p> <ul style="list-style-type: none"> • Water cart scheduling to ensure active haul roads are routinely watered • Roads are speed limited • Assessment of weather conditions prior to blasting • Conveyors shielded • Water spray fitted at conveyor transfers • Water sprays on plant feed • Water sprays on clean coal stockpiles • Raw coal hopper bins shielded and water sprays fitted | <p>MAC use an average 1 hour trigger to proactively identify areas at risk of dust generation due to mining activity.</p> <p>Following notification the OCE or supervisor should:</p> <p>1. Assess dust risk based on information within the Dust Control System:</p> <ul style="list-style-type: none"> • Real time dust concentrations and trends • Adverse weather conditions • Real time dust source identification • Links to onsite cameras • Real time tracking of mining activity <p>2. Conduct visual inspections</p> <p>3. Determine reasonable mitigation measures:</p> <ul style="list-style-type: none"> • Request water cart/s to identified areas • Modify grader operation | <p>MAC use average 3 hour trigger to react to the identified areas at risk of dust generation due to mining activity.</p> <p>Following notification the OCE or supervisor should:</p> <p>1. Assess dust risk based on information within the Dust Control System:</p> <ul style="list-style-type: none"> • Real time dust concentrations and trends • Adverse weather conditions • Real time dust source identification • Links to onsite cameras • Real time tracking of mining activity <p>2. Conduct visual inspections</p> <p>3. Determine reasonable mitigation measures from available controls:</p> <ul style="list-style-type: none"> • Request water cart/s to identified areas • Modify grader operation • Reschedule blast • Modify dumping operations | <p>MAC use available information over the previous 24 hours to react to the risk of dust generation due to mining activity.</p> <p>Following notification the OCE or supervisor should:</p> <p>1. Assess dust risk based on information within the Dust Control System:</p> <ul style="list-style-type: none"> • Real time dust concentrations and trends • Adverse weather conditions • Real time dust source identification • Links to onsite cameras • Real time tracking of mining activity <p>2. Conduct visual inspections</p> <p>3. Determine reasonable mitigation measures from available controls:</p> <ul style="list-style-type: none"> • Communicate dust risk to whole of site • Request water cart to identified area • Modify grader operation • Reschedule blast • Modify dumping operations |
| OCE can manually trigger the Dust TARP Level required on observing excessive dust where reasonable | | | | |

MAC-ENC-MTP-040
AIR QUALITY MANAGEMENT PLAN



Resource Assessments
Planning Services
Contact: Melissa Anderson
Phone: 02 8275 1392
Email: melissa.anderson@planning.nsw.gov.au

Kris Sheehan
Health, Safety and Environment Superintendent
Mt Arthur Coal
Private Mail Bag No. 8
MUSWELLBROOK NSW 2333
Kris.Sheehan@bhpbilliton.com

Dear Kris

**Mount Arthur Coal Mine – Open Cut Consolidation Project (PA 09_0062)
Approval of Air Quality Management Plan**

I refer to your email of 24 January 2019, submitting the revised Air Quality Management Plan (plan), as required under condition 24 of Schedule 3 of the Mount Arthur Coal Mine Project's approval.

The Department has carefully reviewed the plan and finds that it meets the requirements of the condition, and as such the Secretary has approved the revised plan.

Please place a final version of the plan on your website at your earliest convenience.

If you have any enquiries about this matter, please contact Melissa Anderson at the details above.

Yours sincerely

A handwritten signature in blue ink that reads 'Howard Reed'.

Howard Reed 25.1.19
Director
Resource Assessments
as nominee of the Secretary