8.2 Dust

The following measures will be used to minimise airborne dust exposure at Mt Arthur Coal:

- Automatic sprays on plant feed and clean coal stockpiles. Automatic sprays are to be activated when wind speeds exceed 6 m/s (averaged over a 15 minute period), except during rain.
- Daily HSEC inspections to detect fugitive dust to trigger the adjustment of sprays or other appropriate action including stopping the plant and instigating repairs.
- Maintain unsealed coal handling areas in a moist condition using water carts or alternative means to minimise wind-blown and traffic generated dust.
- Automatic sprays and/or wind shields are used when tipping raw coal that has the potential to contribute to unacceptable dust generation.
- Conveyors will be shielded on top and at least one side, and automatic sprays will be fitted at transfer points.
- Prompt clean-up of any coal spillage.
- Take into account dust generation in design and layout of chutes.
- Seal buildings with air-conditioning.
- Real time air quality monitoring and mechanical ventilation in reclaim tunnels.
- Restriction of access to reclaim tunnels, with access requiring application and signing on to a register.
- Air pollution control equipment will be operated and maintained on all drilling rigs to prevent fines generated during drilling being discharged to the atmosphere.
- Water drill patterns post drilling to minimise dust generation from the fine material collected during drilling.
- Blasting will only occur following an assessment of weather conditions to ensure that wind speed and direction will not result in excess dust emissions from the site.
- Use of water carts on roads used by topsoil stripping scrapers during loading/unloading cycle.
- Positive ventilation in equipment cabins- windows to be fully closed.
- Supervisors have the ability to cease operations under unsatisfactory air quality conditions while also altering operations as needed to reduce and prevent dust generation.
- Compliance to MAC-PRD-PRO-122 Dust Management Procedure and MAC-ENC-MTP-040 Air Quality Management Plan.
- Operations will be modified or ceased, if required, to prevent the generation of unacceptable dust.
- Apply a road sealant or dust suppressant product on all major active coal and overburden haul roads and / or utilise other such technologies and initiatives as required to ensure that the required air quality outcomes are achieved.
- Strategic deployment of water carts to control haul road dust to focused locations/activities.
- Relocation of haul truck routes in response to wind direction and speed.
- Development of minor roads will be limited where possible and locations clearly defined.
- Minor roads used regularly for access will be watered using water carts or sprays to minimise the generation of dust and particulate.
- All roads are speed limited.
- Obsolete roads will be ripped and re-vegetated, as soon as practicable. The ground disturbance permit system restricts unauthorised stripping/clearing
- Targeted monitoring for specific contaminate hazards (Including those identified in the Risk Assessment e.g. weld fumes, fibre glass, diesel particulates, etc.)
- Ventilation of work areas to prevent fume accumulation.
- Use of MAC-STE-PRO-013 Hazardous Materials Management Procedure
- Training in the use and correct fitting of personal protective equipment (PPE) is to be undertaken by all workers potentially affected by airborne contaminates and dust. PPE used for the purpose of protection against airborne contaminates are determined by MAC-STE-STD-014 Personal Protective Clothing and Equipment.
- Use of ancillary water cart/s for dust suppression in maintenance areas such as workshop and service pads
- In addition, the following controls will be in place during drilling and blasting activities:
- Insure adequate availability of water carts for dust suppression are available.
- Improve the existing Pre-Load assessment process to include dust assessment.
- Identify the appropriate Dust Masks for the tasks, i.e. P1 or P2.
- Insure Workers are trained in dust risks and competent to use Dust masks.
- HSE Hygienist to develop a Dust operating guideline and train supervision.
- Insure effective communication between adjacent workgroups.
- Create and distribute an Awareness package to neighbouring property owners
- Drills are to be washed down prior to bit change and /or maintenance activities

8.4 Respirable Silica

The following measures will be used to minimise respirable silica at Mt Arthur Coal:

- Water trucks on all unsealed - dust suppression on roads
- Washing down vehicles/parts prior to working on them
- Positive pressure air-conditioned cabins - filters changed at set service intervals or upon request by operator
- Regular maintenance of all equipment - include seals, air conditioner checks etc.
- Operators conduct prestart checks and housekeeping of cabins prior / end of shift
- Dust suppression - use of water on the crusher conveyor to wet product
- Use of water during drilling activities
- Water sprays
- Dust curtains
- PPE worn as identified by 60 seconds for safety.
- Wet process - water sprays along conveyor belt to minimise dust generation, automatic floor sprays in the ROM, circular sprays around the export stockpile
- The CHP plant is under cover with all conveyor belts covered, dust curtains on conveyor belts
- Regular cleaning/ hosing of CHP plant floors - frequency dependant on job demand and availability of personnel

8.5 Diesel Particulate Emissions

- Natural ventilation - work conducted in open spaces and well-ventilated areas.
- Limited engine operation during servicing

8.6 Welding Fumes

Hot Work Standard MAC-STE-STD-139 sets the minimum requirements to be applied for the management of airborne particulates during the use of cutting and welding equipment including Appendix 5 ‘Atmospheric Monitoring Log’

Document Reference - MAC-STE-MTP-001