Enhance Place Pty Limited
ABN: 31 077 105 867

Air Quality and Greenhouse Gas Management Plan

for the

Pine Dale Coal Mine

(Including the Yarraboldy Extension)

September 2019

Revision History				
Version	**Revision Date**	**Reason for Revision**	**Author**	**Authorised by:**
1	June 2011	First edition	RW Corkery & Co	Hilton Goldinch
2	August 2015	Care and Maintenance	Coleen Milroy	Graham Goodwin
3	September 2019	Care and Maintenance	RCA Australia	Graham Goodwin

TABLES

FIGURES

APPENDICES

ACRONYMS USED THROUGHOUT THIS REPORT

AR	-	Annual Review
AQGGMP	-	Air Quality and Greenhouse Gas Management Plan
AS	-	Australian Standard
Council	-	Lithgow City Council
DECCW	-	Department of Environment, Climate Change and Water
DDG	-	Deposited Dust Gauge
DoP&I	-	Department of Planning and Infrastructure
DPE-RG	-	Department of Planning and Environment – Resources Regulator
HVAS	-	High Volume Air Sampler
OEH	-	Office of Environment and Heritage
PM_{10}	-	Particulate Matter less than 10 microns
TSP	-	Total Suspended Particulates

1. INTRODUCTION

This Air Quality and Greenhouse Gas Management Plan (AQGGMP) has been prepared for the Pine Dale Coal Mine, incorporating the Yarraboldy Extension, ("the mine") in accordance with *Schedule 3 Condition 21* of Project Approval 10_0041 which requires that the AQGGMP:

(a) be prepared in consultation with DECCW and Council, and submitted to the Director-General for approval by the end of April 2011;

(b) describe measures that would be implemented to ensure compliance with the relevant conditions of this approval (see Section 6); and

(c) include an air quality monitoring program that:

- uses a combination high volume samplers and dust deposition gauges to evaluate the performance of the project (see Section 7); and
- includes a protocol for determining exceedances of the relevant conditions of this approval (see Section 8).

It is noted that an extension of the required date for submission of the AQGGMP to 16 May 2011 was provided by the Department of Planning and Infrastructure.

This AQGGMP has been prepared in consultation with the Department of Environment, Climate Change and Water (DECCW) - now Office of Environment and Heritage (OEH), Lithgow City Council and with reference to relevant legislation and guidelines.

This AQGGMP applies for the life of the mine and applies to both the construction and operational phases. It is proposed, however, that the AQGGMP will be reviewed on a bi-annual basis and, if required, updated to reflect any changes to noise management practices. Any significant updates to the AQGGMP will be submitted to the then Department of Planning and Infrastructure (DoP&I) for endorsement.

The Pine Dale Mine has been placed on care and maintenance following the cessation of all coal extraction in April 2014. Rehabilitation activities are proposed during the care and maintenance term only.

2. SCOPE

The scope of the AQGGMP applies to the mine, incorporating ML 1569, ML 1578, and MLA 375, and covers all activities during the care and maintenance term which may impact on, or influence a risk to air quality and greenhouse emission management. The purpose of the AQGGMP is to:

a) Identify potential air emission sources and air quality impacts (Section 7);

b) Implement controls to mitigate particulate emissions (Section 8.1);

c) Implement control measures to mitigate greenhouse gas emissions (Section 8.2);

d) Describe air quality monitoring parameters and criteria (Section 9.1);

e) Identify air quality monitoring locations (Section 9.2);

f) Describe a process for review and reporting (Section 10);

g) Describe a process for complaints (Section 11);

h) Define responsibilities and accountabilities (Section 12).

3. OBJECTIVES

The objectives of this AQGGMP are as follows.

- Identify potential sources of emissions to air and their relative contribution to air quality impacts from the development.
- Identify appropriate air quality mitigation measures for the development and how these air quality mitigation measures will be implemented.
- Specify appropriate intervals for air quality monitoring to evaluate, assess and report dust emissions from operations at the mine.
- Provide direction to appropriately respond to exceedances of air quality criteria or receipt of air quality-related complaints.

4. SITE LOCATION AND DESCRIPTION

The Pine Dale coal mine is owned and operated by Enhance Place Pty Ltd (Enhance Place), located approximately 17 kilometres north-west of Lithgow and 5km north of Wallerawang in New South Wales (see **Figure AQ1**).

Extractive open cut mining operations ceased in April 2014 when Approved mineable resources were exhausted. Rehabilitation activities are currently being undertaken consistent with the Approved Care and Maintenance Mining Operations Plan.

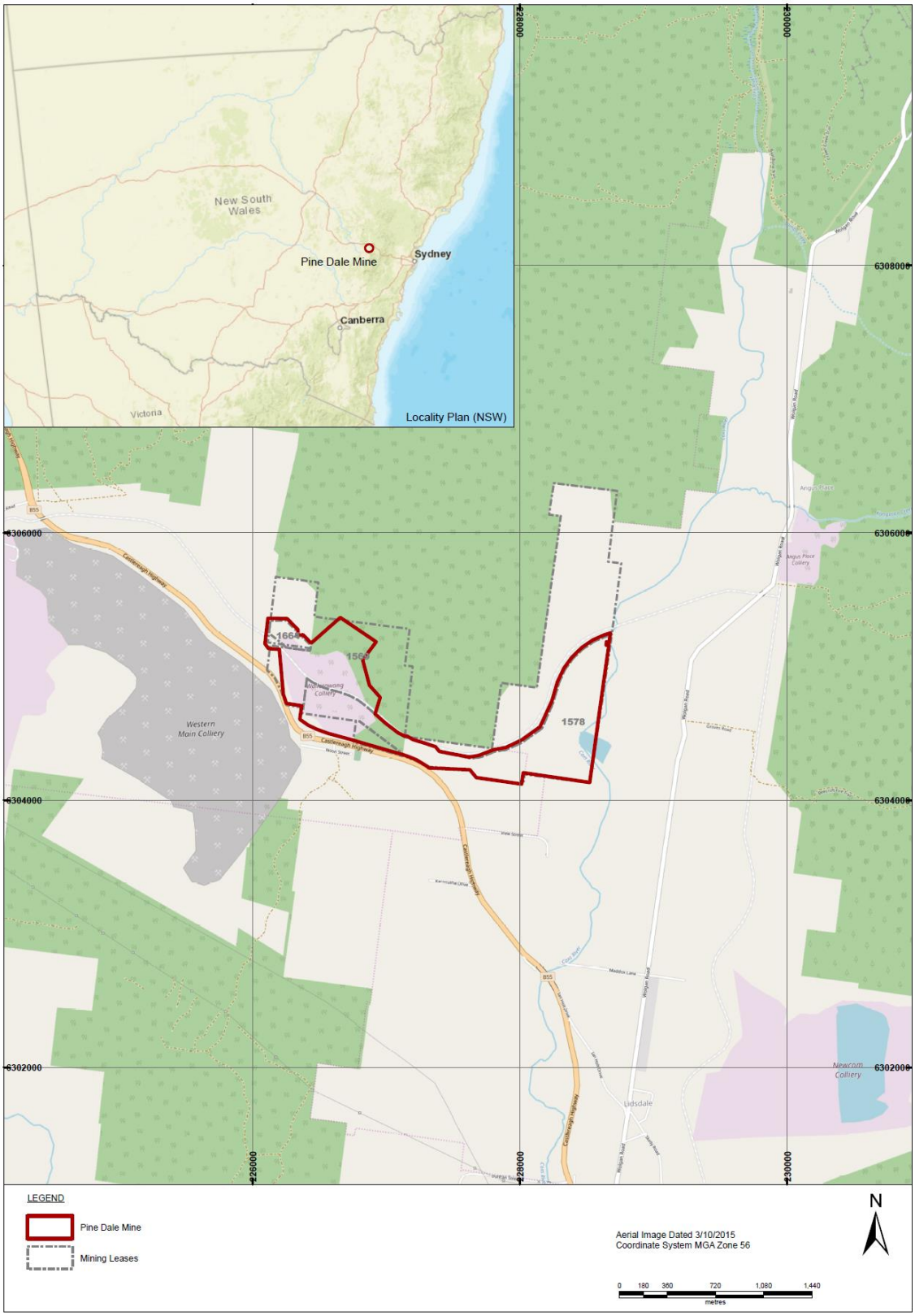

Figure AQ 1 Locality Plan

5. APPROVAL REQUIREMENTS

Conditional requirements within Project Approval 10_0041 relevant to the AQGGMP are detailed in Table 1.

Table 1
Project Approval Conditions

Ref	Project Approval Condition
Odour Schedule 3 Condition 16	*The Proponent shall:* *(a) Ensure that no offensive odours are emitted from the site, as defined under the POEO Act.*
Greenhouse gas emissions Schedule 3 Condition 17	*The Proponent shall:* *a) implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site to the satisfaction of the Director-General.*
Air quality criteria Schedule 3 Condition 18	*The Proponent shall:* *a) ensure that all reasonable and feasible avoidance and mitigation measures are employed so that the particulate emissions generated by the project do not exceed the criteria listed in Tables 6, 7 and 8 (see below) at any residence on privately-owned land or on more than 25 percent of any privately-owned land.*
Air quality acquisition criteria Schedule 3 Condition 19	*If the particulate matter emissions generated by the project exceed the criteria in Tables 9, 10, and 11 (see below)at any residence on privately-owned land or on more than 25 percent of any privately owned land, then upon receiving a written request for acquisition from the landowner the Proponent shall acquire the land in accordance with the procedures in Conditions 6 - 7 of Schedule 4.*
Operating conditions Schedule 3 Condition 20	*The Proponent shall:* *(a) implement best practice air quality management on site, including all reasonable and feasible measures to minimise the off-site odour, fume and dust emissions generated by the project, including those generated by any spontaneous combustion on site; and* *(b) minimise any visible air pollution generated by the project; and* *(c) regularly assess the air quality monitoring and meteorological forecasting data, and relocate, modify and/or stop operations on site to ensure compliance with the relevant conditions of this approval, to the satisfaction of the Director-General.*
Air quality and greenhouse gas managemnt plan Schedule 3 Condition 21	*The Proponent shall prepare and implement a detailed Air Quality & Greenhouse Gas Management Plan for the project to the satisfaction of the Director-General. This plan must:* *(a) be prepared in consultation with DECCW and Council, and submitted to the Director-General for approval by the end of April 2011;* *(b) describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval; and* *(c) include an air quality monitoring program, that uses a combination high*

Ref	Project Approval Condition
	volume samplers and dust deposition gauges to evaluate the performance of the project, and includes a protocol for determining exceedances with the relevant conditions of this approval.
Meteorological monitoring Schedule 3 Condition 22	*During the life of the project, the Proponent shall ensure that there is a suitable meteorological station operating in the vicinity of the site that:* *a) complies with the requirements in the Approved Methods for Sampling of Air Pollutants in New South Wales guideline; and* *b) is capable of continuously recording wind speed and direction, temperature and rainfall.*
Notification of landowners Schedule 4 Condition 2	*Within 2 weeks of obtaining monitoring results showing:* *(a) exceedances of the relevant criteria in Schedule 3, the Proponent shall notify the affected landowners and/or tenants in writing of the exceedance, and provide regular monitoring results to each of these parties until the project is complying with the relevant criteria again;* *(b) exceedances of the relevant criteria in Table 3 of Schedule 3, the Proponent shall notify in writing the applicable owner that they are entitled to ask for additional noise mitigation measures to be installed at their residence; and* *(a) exceedances of the relevant air quality criteria in Schedule 3, send the affected landowners and tenants (including the tenants of any mine-owned land) a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time).*

Table 6: Long term criteria for particulate matter

Pollutant	***Averaging period***	***[d]Criterion***
Total suspended particulate (TSP) matter	Annual	[a]90 µg/m^3
Particulate matter < 10 µm (PM_{10})	Annual	[a]30 µg/m^3

Table 7: Short term criterion for particulate matter

Pollutant	***Averaging period***	***[d] Criterion***
Particulate matter < 10 µm (PM_{10})	24 hour	[a] 50 µg/m^3

Table 8: Long term criteria for deposited dust

Pollutant	***Averaging period***	***Maximum increase in deposited dust level***	***Maximum total[1] deposited dust level***
[c]Deposited dust	Annual	[b]2 g/m^2/month	[a]4 g/m^2/month

Notes for Tables 6-8:

- *[a]Total impact (i.e. incremental increase in concentrations due to the project plus background concentrations due to other sources);*
- *[b] Incremental impact (i.e. incremental increase in concentrations due to the project 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, illegal activities or any other activity agree to by the Director-General in consultation with DECCW.*

Table 9: Long term acquisition criteria for particulate matter

Pollutant	***Averaging period***	***[d] Criterion***
Total suspended particulate (TSP) matter	Annual	[a]90 µg/m^3
Particulate matter < 10 µm (PM_{10})	Annual	[a]30 µg/m^3

Table 10: Short term acquisition criteria for particulate matter

Pollutant	***Averaging period***	***[d]Criterion***
Particulate matter < 10 µm (PM_{10})	24 hour	[a]150 µg/m^3
Particulate matter < 10 µm (PM_{10})	24 hour	[b]50 µg/m^3

Table 11: Long term acquisition criteria for deposited dust

Pollutant	***Averaging period***	***Maximum increase in deposited dust level***	***Maximum total deposited dust level***
[c]Deposited dust	Annual	[b]2 g/m^2/month	[a]4 g/m^2/month

Notes for Tables 9 - 11:

- *[a]Total impact (i.e. incremental increase in concentrations due to the project plus background concentrations due to other sources);*
- *[b] Incremental impact (i.e. incremental increase in concentrations due to the project 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, illegal activities or any other activity agree to by the Director-General in consultation with DECCW.*

6. SURROUNDING RESIDENCES

Table AQ1 identifies the distance of residences for which noise criteria are provided for within PA 10_0041 to the nearest point of the Yarraboldy Extension Area.

Table AQ2
Details of Residences within Approximately 1km of the Yarraboldy Extension Area

Reference Number	Owner	Distance to Yarraboldy Extension Area
2	Centennial Fassifern Pty Limited	2 200m W
5	Centennial Fassifern Pty Limited	1 490m NW
7	K. May	1 470m NW
8	N. & J. Watson	1 120m NW
10	P & E Barnes	890m NW
11	C. Jonkers & J. Favell	940m NW
12	Morris	1 040m NW
13	J. Cope	600m NNW
18	Centennial Fassifern Pty Limited	460m N
20	W. Doherty	420m N
21	Centennial Fassifern Pty Limited	415m N
22	Centennial Fassifern Pty Limited	410m N
23	Centennial Fassifern Pty Limited	410m N
25	Centennial Fassifern Pty Limited	410m N
27	Centennial Fassifern Pty Limited	460m N
28	Centennial Fassifern Pty Limited	470m N
29	Centennial Fassifern Pty Limited	470m N
32	Centennial Fassifern Pty Limited	500m N
33	Centennial Fassifern Pty Limited	510m N
35	Ivanhoe Coal Pty Ltd	2 440m W

7. POTENTIAL AIR EMISSION SOURCES AND AIR QUALITY IMPACTS

7.1 POTENTIAL AIR EMISSION SOURCES

7.1.1 Neighbouring Pollutant Sources

Sources of atmospheric pollution surrounding the mine are predominantly other mining and energy-related activities. The mine is situated approximately 17km northwest of Lithgow and 5 km north of Wallerawang, in the Western Coalfield of New South Wales. The Mt Piper Power Station is located 3km to the west and as of April 2014 the non-operational Wallerawang Power Station is located approximately 5km to the southeast.

7.1.2 Pollutant Sources Associated with the Pine Dale Coal Mine

Emissions from the following activities associated with the Pine Dale Coal Mine are potential sources of air pollutants in the local area (including both particulates and greenhouse gases).

- Clearing operations.
- Soil stripping.
- Drilling operations.
- Coal removal and transport.
- Fugitive emissions from coal seams.
- Blasting activities.
- Coal processing.
- Coal product transport.
- Overburden removal, transport and emplacement

7.2 POTENTIAL AIR QUALITY IMPACTS

The results of air quality modeling (Heggies 2010b) from the *Environmental Assessment*, predicted emissions associated with the Pine Dale Coal Mine (including the Yarraboldy Extension) would be within the relevant air quality criteria for TSP, PM_{10} and dust deposition (refer to Section 5).

8. MANAGEMENT SAFEGUARDS AND MITIGATION MEASURES

A Care and Maintenance Risk Assessment (CMRA) has been undertaken for the Care and Maintenance term (Pine Dale Mine, 2014). Air quality and greenhouse gas emissions were identified to be a low risk due to minimal machinery being operated at the site being utilised for rehabilitation activities only, no blasting or vegetation clearing campaigns being undertaken during the care and maintenance term. There are no methane drainage issues or venting at Pine Dale mine.

8.1 PARTICULATE EMISSIONS

The following air quality management safeguards and mitigation measures will be implemented to ensure that particulate emissions from the Pine Dale Coal Mine (including the Yarraboldy Extension) are minimised.

- Haulage routes will be designated so that vehicles are restricted to the most direct route practicable with minimal manoeuvring.
- Speed limits will be enforced on all areas of the mine site.
- Water will be applied on an as needs basis to unsealed roads, manoeuvring areas and stockpiles at a rate of at least $2L/m^2$ per application.
- Water for dust suppression will be applied when trucks are placing overburden during dry conditions and during periods of potentially high particulate generation (primarily during light to moderate winds blowing towards the residences to the south of the mine).
- The drop heights between machinery buckets and trucks carrying coal or overburden will be minimised through operator training and education on the management of dust.
- The areas of surface disturbance exposed to wind erosion will be minimised through ensuring that groundcover clearing and soil stripping is limited to the area required for immediate mining disturbance and by conducting progressive rehabilitation on available areas.
- Soil stockpiles that are to be retained for periods greater than 3 months will be seeded with a cover crop to minimise wind (and water) erosion from these areas.
- Any dust–generating activity/(ies) will be ceased if strong winds are blowing dust towards surrounding residences and dust suppression appears visually ineffective.
- All coal transportation trucks that leave the mine will be appropriately covered to minimise dust emissions.
- Maintenance of mobile equipment engines according to manufacturers' guidelines and keeping tyres at optimum pressure.
- Minimisation of mobile equipment idling time.
- In the unlikely event that adverse air quality is experienced from the site in care and maintenance, Enhance Place will have access to a water cart to assist in dust suppression of dust from exposed areas.

8.2 GREENHOUSE GAS EMISSIONS

The following air quality management safeguards and mitigation measures will be implemented to ensure that greenhouse gas emissions from the Pine Dale Coal Mine (including the Yarraboldy Extension) are minimised.

- Haulage routes will be designated so that vehicles are restricted to the most direct route practicable with minimal manoeuvring.
- Maintenance of mobile equipment engines according to manufacturers' guidelines and keeping tyres at optimum pressure.
- Minimisation of mobile equipment idling time.

9. AIR QUALITY MONITORING PROGRAM

Enhance Place will continue to operate in accordance with the monitoring requirements provided herein whilst in care and maintenance. Air Quality Monitoring parameters and Criteria

The most significant emission from the mine will be dust in various forms, namely total suspended particulate matter (TSP), particulate matter with aerodynamic diameter less than 10µm (PM_{10}) and deposited dust. The air quality monitoring program will therefore monitor TSP, PM_{10} and deposited dust.

The air quality criteria as discussed in Section 3 that the Pine Dale Coal Mine will be monitored against are summarised in **Table AQ2**.

Table AQ3
Air Quality Monitoring Criteria

Pollutant	Averaging Period	Criterion
Total Suspended Particulate Matter (TSP)	Annual Average	90µg/m^3
Particulate Matter < 10µm (PM_{10})	Annual Average	30µg/m^3
	24hr Average[1]	50µg/m^3
	24hr Average[2]	150 µg/m^3
Deposited Dust	Annual Average	4g/m^2/month

Notes: 1. Short-term acquisition criteria – incremental impact (ie. from mining operations alone).
2. Short-term acquisition criteria – total impact (ie. incremental impact plus background levels) – refer to Schedule 3 Condition 19.

9.1 AIR QUALITY MONITORING LOCATIONS

The Pine Dale Coal Mine ambient air quality monitoring network consists of five dust deposition gauges and two High Volume Air Samplers (HVAS), one measuring TSP and the other PM_{10}. The locations of the monitoring sites are shown in **Figure AQ2**.

Figure AQ1 Air Quality Monitoring Locations

9.2 MONITORING FREQUENCY

Table AQ3 presents the air quality monitoring sampling frequencies and methods that will be undertaken for the Pine Dale Coal Mine.

Table AQ4
Air Quality Monitoring – Sampling Method and Frequency

Pollutant	Units of measure	Averaging Period	Frequency	NSW DEC Sampling Method
Particulate matter – TSP	µg/m^3	24 hour, annual	1 day in 6	AM-18 (AS3580.9.3:2003)
Particulate matter – PM_{10}	µg/m^3	24 hour, annual	1 day in 6	AM-18 (AS3580.9.6:2003)
Deposited Dust	g/m^2/month	Month, annual	Continuous	AM-19 (AS3580.10.1:2003)

9.3 AIR QUALITY MONITORING PROCEDURES

9.3.1 Dust Deposition

All deposited dust samples once collected will be analysed by a suitably accredited laboratory. Sample bottles are to be collected and replaced on a monthly basis from the dust deposition monitoring locations shown on **Figure AQ2**. The procedure for collecting and replacing the sample bottles is as follows.

1. The sample bottle and funnel are to be removed from the sample holder.
2. The inside surface of the funnel is to be washed down with a limited (50mL) amount of distilled water into the sample bottle.
3. The stopper and funnel is to be removed from the replacement sample bottle and a cap immediately placed on the removed sample bottle.
4. The date of collection, the sample location, funnel number and site are to be written on the removed sample bottle and field sheet form.
5. Any additional information such as overflow of the sample bottle or extraneous matter such as bird droppings within the funnel should be written on the form in **Appendix 1**.
6. Any insects/cobwebs or obstructions are to be removed from within the neck of the funnel and the inside of the funnel wiped out.
7. The stopper and funnel is then to be replaced on the new sample bottle.
8. The new sample bottle is to be properly numbered and the first date of the sampling period is recorded on the new sample bottle.
9. Replace the new sample bottle and funnel in the sample holder.

9.3.2 TSP and PM_{10}

All TSP and PM_{10} samples once collected will be analysed by a suitably accredited laboratory. TSP and PM_{10} is to be sampled on a 1 in 6 day cycle in accordance with the standard OEH 'run days' at the location shown on **Figure AQ2**. The procedure for collecting TSP and PM_{10} samples is as follows.

Filter Removal

1. The machine is to be switched off using the appropriate button on the electronic timer. The lid is then to be unlocked and lifted.
2. The clips that hold down the filter cassette are to be loosened.
3. The filter is to be carefully removed from the filter holder by only touching only the outer edges. The sample is to be rejected if there is evidence of filter misalignment, blockage or breakthrough.
4. If large debris or insects are trapped on the filter paper, these are to be carefully removed with clean forceps.
5. The filter is to be folded so that only the surfaces with collected particulate matter are in contact and place. The folded filter is then to be placed into a 'zip lock' plastic bag.
6. All specified information is to be recorded on the field sheet in **Appendix 2**.
7. The indicated instrument time is to be checked to ensure that is correct to within 15 minutes of actual time and that the high volume sampler time clock was in the correct sample sequence.

Filter Replacement

1. Pre-weighed filters will be supplied to the mine by a suitably accredited laboratory.
2. A paint brush or rag is to be used to clean the lid of the high volume air sampler. Care should be taken around the pop rivets since these areas are usually laden with dust.
3. The filter cassette including the rubber seal and the top of the high volume air sampler is to be cleaned.
4. A new filter is to be placed squarely onto cassette and the cassette lid replaced.
5. The filter cassette is then to be placed into position and the cassette clamped down firmly.
6. The machine is to be run for 5 minutes for it to stabilize. The flow reading from the flow controller is then to be noted (the reading must be between $60m^3$/hr and $96m^3$/hr) and recorded on the field sheet in **Appendix 2**.
7. The machine is then to be switched off and checked that it has been pre-programmed according to the manufacturer's specifications to sample 1-day-in-6, for a period of 24-hours (from midnight to midnight).

A flow calibration is to be conducted on the units at two monthly intervals by an appropriately qualified technician.

9.4 METEOROLOGICAL MONITORING

All air quality monitoring results will be accompanied by quantitative measurements of prevailing local meteorological conditions throughout the monitoring period.

Local meteorological conditions will be measured using the automatic weather station situated on the Pine Dale Mine which records wind speed, wind direction, rainfall and temperature at 15 minute intervals. Meteorological measurements will be guided by the requirements of AS/NZS 3580.14:2014 *Methods for sampling and analysis of ambient air – Part 14: Meteorological monitoring for ambient air quality applications* and the *Approved Methods for Sampling of Air Pollutants in New South Wales guideline* (or their latest versions).

10. AIR QUALITY MONITORING PROTOCOL

10.1 REVIEW AND REPORTING OF MONITORING RESULTS

The air quality monitoring results will be incorporated into a report by the attending consultant on a monthly basis and will be reviewed by the Mining Engineering Manager. A summary report of the air quality monitoring data is to be included within the Annual Review (AR). It is noted that, in the event of a recorded exceedance, the attending consultant will notify the Manager Mining Engineering immediately upon receipt of the laboratory results and provide a copy of the certificates of analysis. The Manager Mining Engineering will then follow the response and reporting measures outlined within Section 12.

A summary of any exceedance and response measures will also be documented within the respective AR and any non-compliance documented in the Annual Return for Environment Protection Licence 4911.

10.2 AIR QUALITY MONITORING TRIGGERS AND RESPONSE MEASURES

The following responses will be triggered by the results of air quality monitoring. It is noted any air quality-related complaints received would be handled in accordance with the Complaints Receipt and Response Procedures (see Section 11).

All Locations are Compliant with Air Quality Criteria

- Operations and monitoring to continue as normal.

Single Exceedance of Short Term Air Quality Criteria (*Schedule 3 Condition 18*)

In the event that air quality monitoring results exceed the air quality criteria specified in *Schedule 3 Condition* 18 of PA 10_0041 and the likely source is related to the mine operations:

- where possible, the activity causing the exceedance will be identified and actions will be formulated to reduce the emitting potential of the source of the elevated emissions such as additional dust suppression or modification of the conduct of that particular activity. It is noted the actions formulated and their timeframe for implementation will be dependent on the type of activity and level of the exceedance;
- the DPE-RG and OEH will be notified as soon as practicable and a report will be prepared and submitted to the DPE-RG and OEH within 7 days of the exceedance in accordance with *Schedule 5 Condition 6* of PA 10_0041;
- in accordance with *Schedule 4 Condition 2* of PA 10_0041, within 2 weeks of obtaining the monitoring results, the affected landowner will be notified in writing of the exceedance, provided with a copy of the monitoring results and the NSW Health fact sheet entitled *"Mine Dust and You"* (https://www.health.nsw.gov.au/environment/factsheets/Pages/mine-dust.aspx)

- any nominated mitigation measures to minimise the potential for future exceedances should be completed; and
- ongoing monitoring, at appropriate intervals will be undertaken to assess the effectiveness of the mitigation measures.

Ongoing Exceedance of Acquisition Criteria (Schedule 3 Condition 19)

In the event of continuing exceedances (three successive mine-related exceedances) of deposited dust criteria (annual average) or TSP / PM_{10} greater than the acquisition criteria in *Schedule 3 Condition 19* (refer Tables 8, 9 and 10) resulting from the operation of the mine and following the implementation of all reasonable measures on site, the Company would attempt to negotiate an appropriate arrangement with the land owner(s) to further mitigate or compensate for the air quality impacts.

In the event a negotiated agreement is reached, the DPE-RG and OEH would be informed in writing of the terms of the agreement.

In the event that a negotiated agreement cannot be reached the matter would be referred to the Director-General of the Department of Planning and Infrastructure for resolution through the independent review process outlined within *Schedule 4 Condition 3* to *5* of PA 10_00741.

Should it be determined that the exceedances are the result of the mine and the landowner requests in writing that their property be acquired, the land acquisition procedure outlined within *Schedule 4 Conditions 6* and *7* of PA 10_0041 would be followed.

11. COMPLAINTS HANDLING AND REPSONSE

In order to effectively manage any requests for information or respond to any public concerns in relation to the site operations at the Pine Dale Coal Mine, the following systems will be maintained.

- The Company will supply OEH and DPE-RG with up to date names and appropriate contact numbers for the Pine Dale Coal Mine's Manager Mining Engineering and one other senior staff member.
- An Environmental Hotline / Complaints Phone Number will be maintained to allow contact with the Company in relation to any environmental matter including those relating with noise issues. Currently the Environmental Hotline / Complaints Phone Number is 02 63 55 1761.

Any air quality-related complaints will be received and acted upon in accordance with the complaints handling process outlined within the Environmental Management Strategy. In the event that a complaint cannot be resolved despite monitoring indicating compliance, the matter would be referred to the dispute resolution process outlined within the Environmental Management Strategy.

12. RESPONSIBILITIES AND ACCOUNTABILITES

The procedures and management measures presented in the AQGGMP will be made available to all members of the workforce on site. The responsible workforce will be made aware of the procedures through inductions, training (as required) and regular toolbox talks / meetings. The ultimate responsibility for air quality management is the Manager Mining Engineering.

Table AQ4 outlines the accountable positions and tasks relating to air quality management at the Pine Dale Coal Mine.

Table AQ5
Accountable Positions and Tasks

Position	Accountable Task
Manager Mining Engineering	• Ensure dust suppression is undertaken on site, appropriate to the weather conditions. • Coordinate air quality monitoring in accordance with the AQGGMP. • Report any exceedances of relevant air quality criteria to DPE-RG and OEH as soon as possible and coordinate a written report within 7 days. • Notify employees of any additional mitigation measures to be implemented as a result of any complaints or exceedances. • Ensure that the automated weather station is operating correctly and contact a technician should any faults be identified (e.g. missing data records). • Accurately report air quality monitoring data in the AR and Annual Return. • Review this plan on an annual basis and revise if required.
Plant Operator	• Ensure air quality mitigation measures are implemented as directed by the Manager Mining Engineering.
All Employees	• Record all required information in the event an air quality complaint is received (refer to Environmental Management Strategy). • Report to the Manager Mining Engineering any dust generating activities for which the dust mitigation measures proves ineffective.
The Company Conducting Air Quality Monitoring	• Ensure air quality monitoring is undertaken in accordance with these procedures and relevant Australian Standards. • Analyse air quality and relevant weather monitoring data to ensure compliance. • Complete a quarterly air quality monitoring report and compliance assessment during operations. • Inform the Manager Mining Engineering should any non-compliances be identified.

Form ML-LM004-1

STATIC DUST GAUGES: FIELD SHEET

Metford Laboratories
environmental & acoustic solutions

'TECHNICIAN': _____

DATE ON: _____ **SAMPLE NO.** _____

DATE OFF: _____

Location	Time Serviced	Funnel Number (if replaced)	Approx. Volume	Notes & Comments

Notes Interpretation: B = Bird Droppings, I = Insects (and spiders), T = Tree Litter (twigs, leaves, gumnuts), G = Grass (and seeds), F = Feathers, A = Animals (frogs, lizards, snakes), O = Organic Matter (specify)

Appendix 1
Deposited Dust Field Sheet

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Appendix 2
TSP and PM_{10} Field Sheet

HVAS FIELD SHEET

RUN DATE:	
BLANK NO:	

Location				
Sample No				
Calibration Date				
Filter No				
Time Filter On				
Date Filter On				
'Technician' On				
Hour Meter On				
Flow Reading On				
Time Filter Off				
Date Filter Off				
'Technician' Off				
Hour Meter Off				
Flow Reading Off				
Analyte (circle)	TSP PM10	TSP PM10	TSP PM10	TSP PM10

Note: Please write comments on next page.

HVAS FIELD SHEET
COMMENTS

Location: _____

Location: _____

Location: _____

Location: _____