



# Ambient Air Quality Monitoring Plan

**Mountain Ash Limited Partnership Summit Pit**

SLR Project No: 212.06650.00006

April 2021



## Ambient Air Quality Monitoring Plan

Mountain Ash Limited Partnership

Rocky View County, Alberta

SLR Project No: 212.06650.00006

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## 1.0 INTRODUCTION

Mountain Ash Limited Partnership (Mountain Ash) is planning to develop the Summit Pit (the Project) along Highway 567 within NW and SW 31-026-03 W5M, northeast of the Town of Cochrane, in Rocky View County (RVC), Alberta (Figure 1). The Project will encompass approximately 208 acres (84 ha) excluding existing road rights-of-way. Mountain Ash is applying for Phase 1 of a six-phase mining plan. This land is currently owned by 1410266 Alberta Ltd. (a general partner of Mountain Ash). Summit Pit received land use and a master site development plan (MSDP) approval on March 2, 2021 (Land Use Bylaw C-8051-2020).

An air quality assessment was undertaken as part of the MSDP application to assess the potential air pollution from the Project operations in relation to sensitive receptors. Project operations will produce anthropogenic emissions and dust into the ambient air. Diesel combustion from engines on heavy trailer and haul trucks and other vehicles emit sulphur dioxide ( $\text{SO}_2$ ), fine particulate matter with aerodynamic diameter below 2.5 micrometer ( $\text{PM}_{2.5}$ ), carbon monoxide ( $\text{CO}$ ), and oxides of nitrogen ( $\text{NO}_x$ ). Additionally, fugitive dust emissions from wheel entrainment and pit operations produce suspended particulates (TSP). Since these contaminants can pose potential negative effect to human health at high ambient ground-level concentrations, they are regulated and should not exceed their prescribed Alberta Ambient Air Quality Objectives (AAQOs). As a requirement for the Code of Practice (COP) for Pits and Development Permit (DP) applications, this report details the Ambient Air Quality Monitoring Plan (AQMP) in relation to the operation of the Summit Pit.

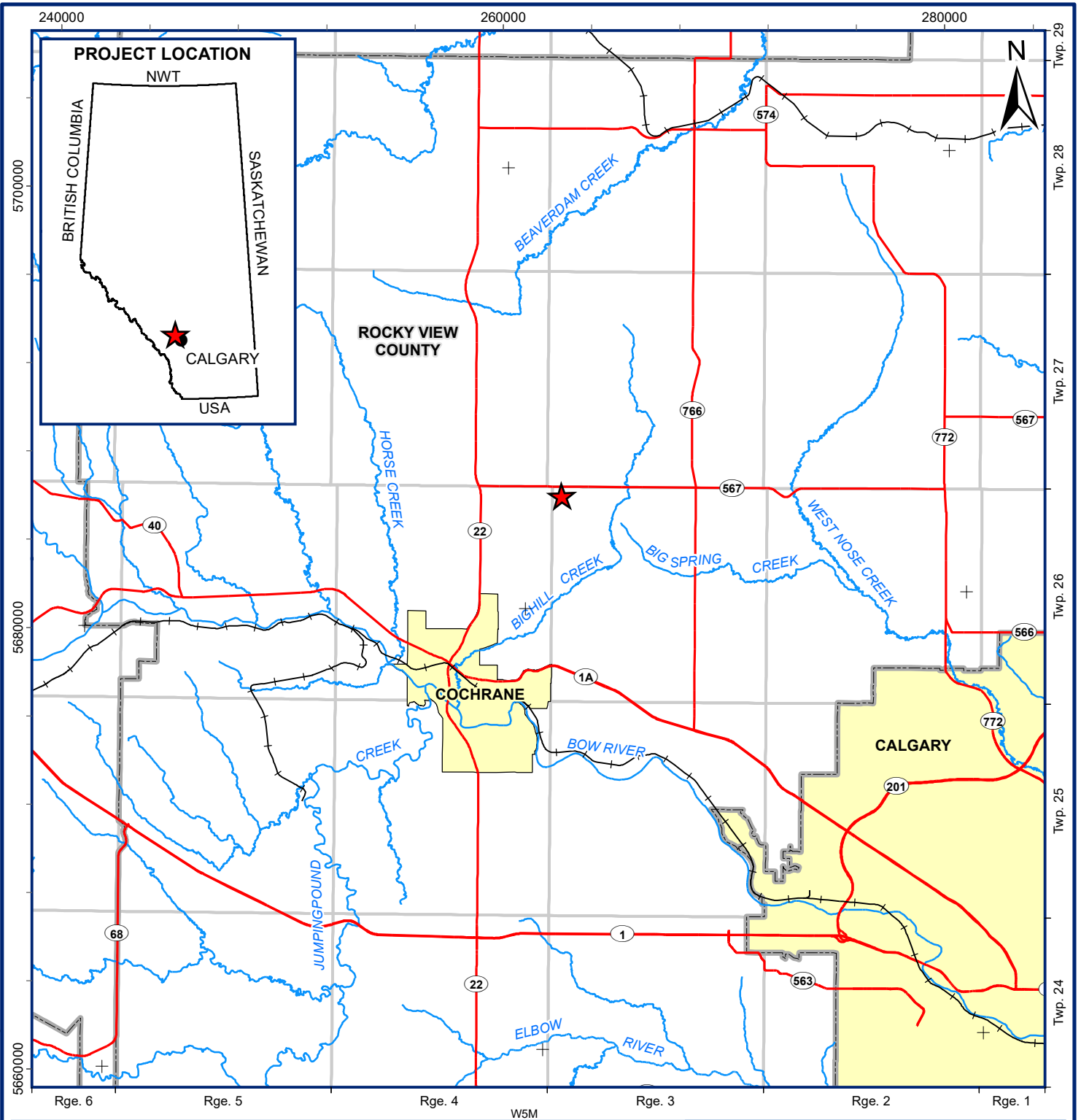
Following the Air Quality Modeling Guideline (AQMG), CALPUFF dispersion modeling was done to assess the effects of Project operations on AAQOs. Modelling was completed for the three key pit operations defined as: overburden removal and backfill, aggregate mining/crushing, and hauling/trucking. Maximum Daily Emission and Annual Average Emission cases were estimated. The results at the Project boundary showed there were no predicted exceedances of AAQOs for any modelled compounds and any averaging period when the Dust Control Plan is executed appropriately. The predicted maximum concentrations at residence receptors are all less than the AAQOs for all modelling scenarios and all contaminants.

While Project operations are not expected to exceed ambient air quality objectives beyond the property boundary, Mountain Ash has committed to monitoring for  $\text{PM}_{2.5}$  and TSP at the property boundary to ensure dust suppression techniques are working and for the protection of their neighbors. Although several pits have been proposed for the area, no additional pits have been approved with a development permit that have the potential to add to the air emissions from Summit Pit operations at adjacent receptors. There is an agreement between future operators to ensure that a cumulative impacts mitigation management agreement is in place to minimize emissions from their respective operations with respect to cumulative effects. Mountain Ash will participate with those operations to address cumulative effects/impacts in the area prior to submitting future development permit applications.







### 1.1 Facility Location and Geographical Area

The Project area is northwest of the City of Calgary south of Highway 567 (Figure 1). The closest major community of Cochrane is approximately 9 km SSE, and the nearest neighbor is approximately 250 m to the East, from the property line, excluding self-imposed setbacks as contained herein. Figure 2 provides the site plan. The area is sparsely populated and surrounded by farmland and rolling terrain.

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## LEGEND

- |   |                  |   |             |   |                 |
|---|------------------|---|-------------|---|-----------------|
|  | PROJECT LOCATION |  | HIGHWAY     |  | COUNTY BOUNDARY |
|   |                  |  | RAILWAY     |  | URBAN           |
|   |                  |  | WATERCOURSE |   |                 |

## NOTES

This map is for conceptual purposes only and should not be used for navigational purposes.  
Basedata: AltaLIS Government of Alberta under the Alberta Open Data License.

5 0 5  
SCALE: 1:250,000 KILOMETRES  
WHEN PLOTTED CORRECTLY AT 8-1/2 x 11  
NAD 1983 UTM Zone 12N

**MOUNTAIN ASH LIMITED PARTNERSHIP  
SUMMIT PIT  
NW & SW 31-26-03 W5M  
ROCKY VIEW COUNTY, ALBERTA**

**NOISE MONITORING PLAN**

**AMBIENT AIR QUALITY  
MONITORING PLAN**

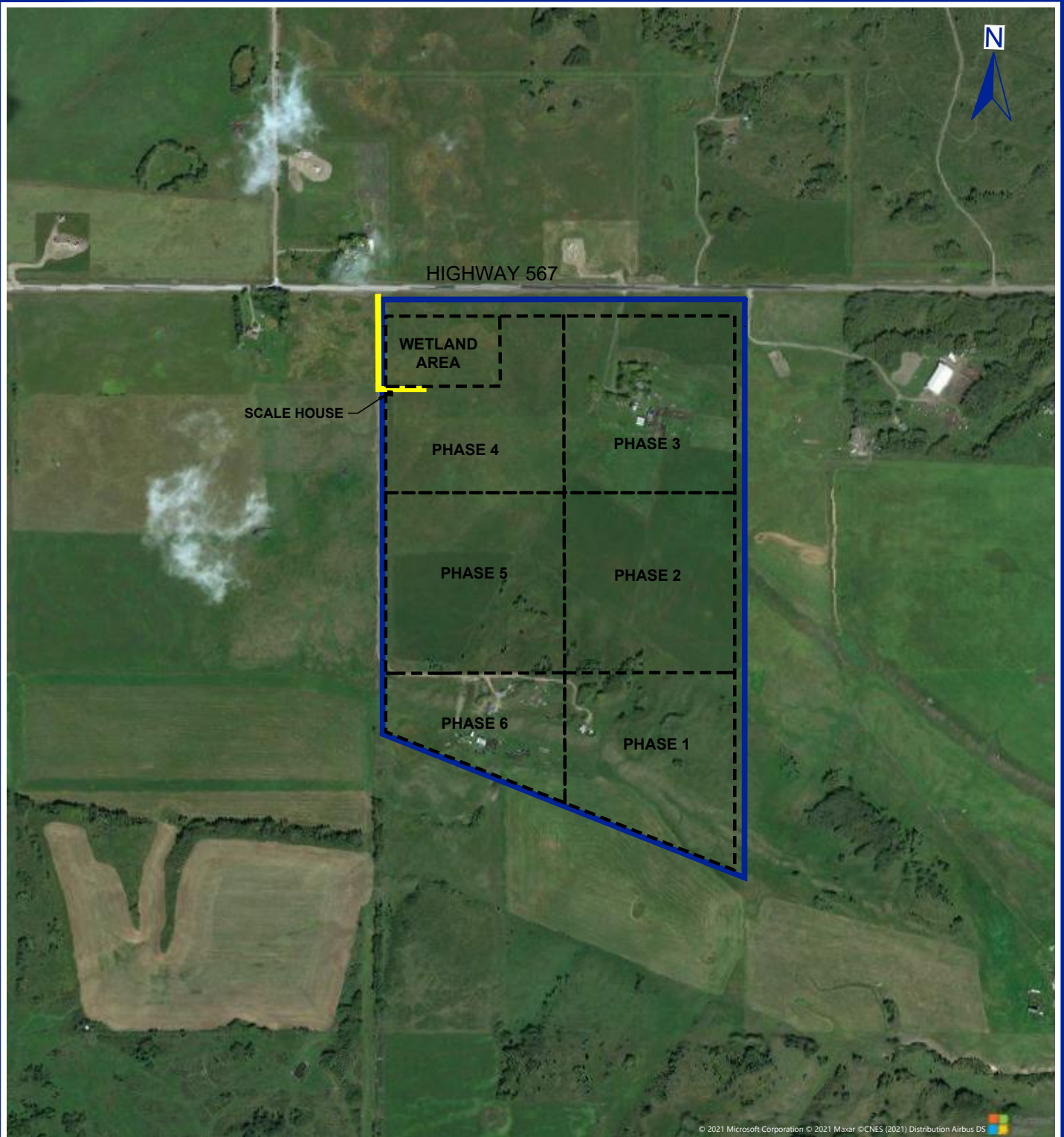
April 9, 2021

Project No. 212.06650.00006

Figure No.

**1**





NOTES:  
DRAWING COMPILED FROM DATA AS PROVIDED BY THE CLIENT.

LEGAL DESCRIPTION:  
W 1/2 SEC 31 TWP 026 RGE 03 W5M  
ROCKY VIEW COUNTY, ALBERTA

LEGEND:



SITE LOCATION

EXTRACTION PHASE  
BOUNDARIES



MOUNTAIN ASH PAVED  
ACCESS ROAD

0 100 200 400 600 800 m

SCALE 1:12,500

WHEN PLOTTED CORRECTLY ON A 8.5 x 11 PAGE LAYOUT  
NAD 1983 UTM ZONE 11N

THIS DRAWING IS FOR CONCEPTUAL PURPOSES ONLY. ACTUAL  
LOCATIONS MAY VARY AND NOT ALL STRUCTURES ARE SHOWN.

MOUNTAIN ASH LIMITED PARTNERSHIP  
SUMMIT PIT  
NW & SW 31-26-03-W5M  
ROCKY VIEW COUNTY, ALBERTA

AMBIENT AIR QUALITY MONITORING PLAN

PLAN OVERVIEW OF SUMMIT PIT SITE

Date: April 12, 2021

Project No. 212.06650.00006

Figure No.

2

## 1.2 Ambient Air Quality or Issues in the Area

The airborne contaminants of primary concern discharged from the facility are particulate matter, specifically, PM<sub>2.5</sub> and dust or TSP. PM<sub>2.5</sub>. The major emission source of PM<sub>2.5</sub> particulates from the Project is machinery and vehicle emissions. TSP sources are gravel roads, mining and crushing operations and wind transport over bare ground. While TSP is often seen as less harmful due to its larger size.

Regional emissions in the area can also come from two active pits and one single point source located within 5 km of the Project. The sources were included in the modelling and are shown in Figure 3. The closest pit is Hillstone Gravel Pit, which is located around 2 km west of the Project while Lafarge Glendale Gravel Pit is around 3.7 km southeast of the Project. The nearby point source emission is Lochend Oil Battery which is about 3.5 km south of the Project.

## 1.3 Documentation of Monitoring Objective(s)

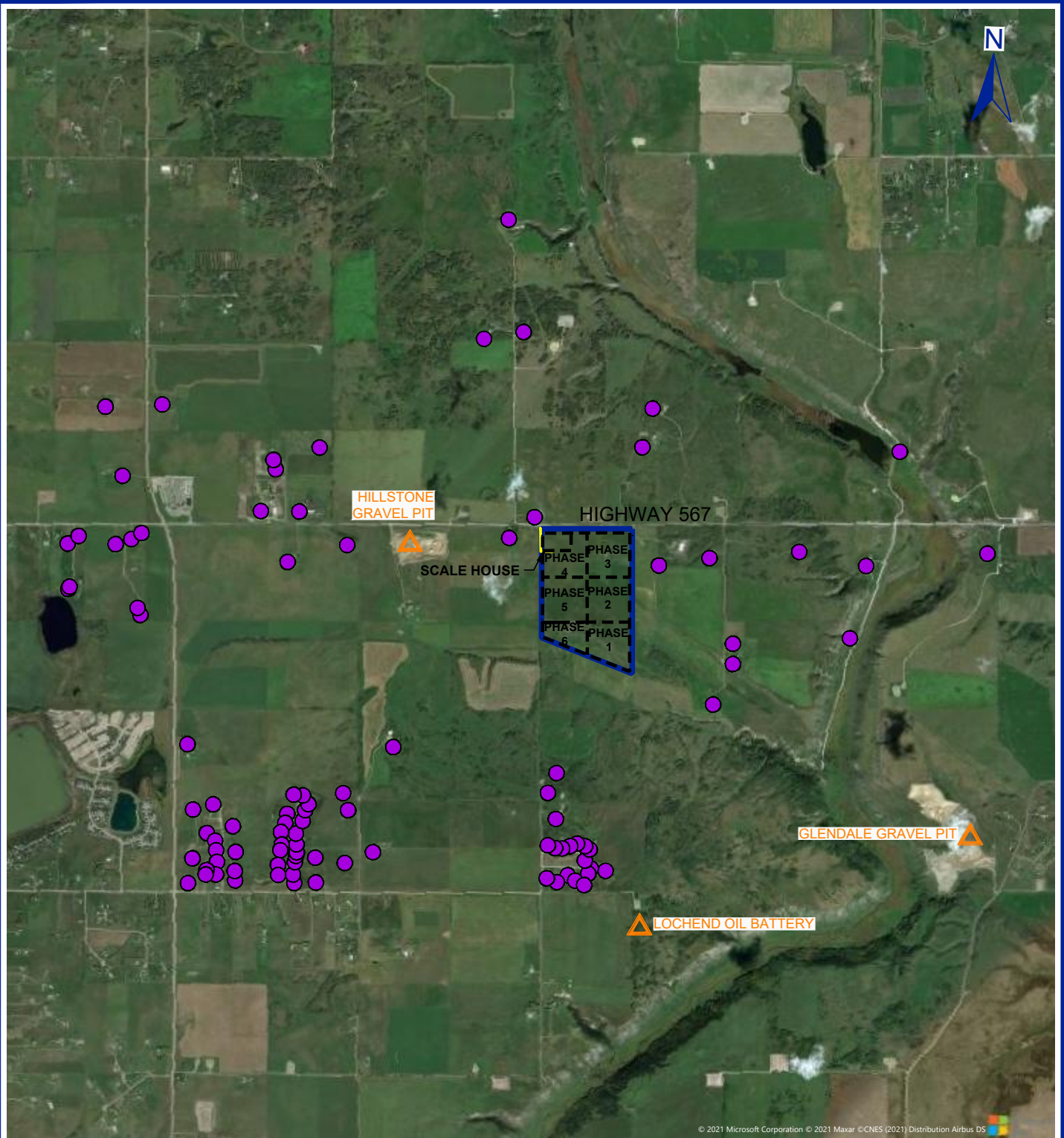
The objective of the AQMP is to design an ambient PM<sub>2.5</sub> and TSP monitoring plan to obtain local air quality data that is suitable for comparison with applicable standards.

Alberta's ambient air quality objectives and guidelines are developed under the Alberta *Environmental Protection and Enhancement Act* (EPEA), and its objective is to protect Alberta's air quality. The AAAQOs shown in Table 1 include SO<sub>2</sub>, NO<sub>2</sub>, CO, PM<sub>2.5</sub>, TSP and the averaging periods for each pollutant varies from 1-hour to annual.

**Table 1: Alberta Ambient Air Quality Objectives (AAAQOs)**

Pollutant	Averaging Period	AAAQOS (µg/m <sup>3</sup> )
SO <sub>2</sub>	9 <sup>th</sup> Highest 1-hour	450
	Maximum 24-hour	125
	Maximum 30-day	30
	Annual	20
NO <sub>2</sub>	9 <sup>th</sup> Highest 1-hour	300
	Annual	45
CO	9 <sup>th</sup> Highest 1-hour	15,000
	Maximum 8-hour	6,000
PM <sub>2.5</sub>	Maximum 24-hour	29
TSP	Maximum 24-hour	100
	Annual	60





NOTES:  
REFER TO FIGURE 2.

LEGEND:



SITE LOCATION

EXTRACTION PHASE  
BOUNDARIES



MOUNTAIN ASH PAVED  
ACCESS ROAD



AIR QUALITY SOURCE



AIR QUALITY RECEPTOR

0 0.5 1 2 3 km

SCALE 1:50,000

WHEN PLOTTED CORRECTLY ON A 8.5 x 11 PAGE LAYOUT  
NAD 1983 UTM ZONE 11N

THIS DRAWING IS FOR CONCEPTUAL PURPOSES ONLY. ACTUAL  
LOCATIONS MAY VARY AND NOT ALL STRUCTURES ARE SHOWN.



MOUNTAIN ASH LIMITED PARTNERSHIP  
SUMMIT PIT  
NW & SW 31-26-03-W5M  
ROCKY VIEW COUNTY, ALBERTA

AMBIENT AIR QUALITY MONITORING PLAN

LAYOUT OF MODELLING RECEPTORS

Date: April 12, 2021

Project No. 212.06650.00006

Figure No.

3

## 1.4 Responsible Authorities

The overall commitment of the AQMP is to ensure that appropriate measures and precautions will be implemented at the facility continuously and effectively, in a manner that is protective of the local airshed and human health. Table 2 lists the various responsibilities that are required by the Project operator in implementing the AQMP.

**Table 2: Key Responsibilities**

Key Role	Responsibilities
Project Manager	Responsible for overseeing and coordinating all aspects of the Project.
Station Operator	Responsible for operating the monitoring station and conducting routine monitoring activities such as routine site visits, calibrations, and resolving system errors.
	Responsible for regular data downloads and review, data validation, and preparing data reports.
Data Manager	Responsible for reviewing the data analyst's work products.
Quality Assurance Manager	Responsible for ensuring that established QA/QC procedures are followed and will review results of all QA/QC activities.

## 2.0 MONITORING INFORMATION

### 2.1 Local Climatology

Climatological data is available from the nearby Springbank Airport located south-southeast of the Project. Wind is predominantly from the west and northwest at the Project location with an average speed of 15 km/h. A wind rose from April 2015 through October 2020 is provided in Figure 4. The wind rose only represents months of expected operations (approximately April-October).

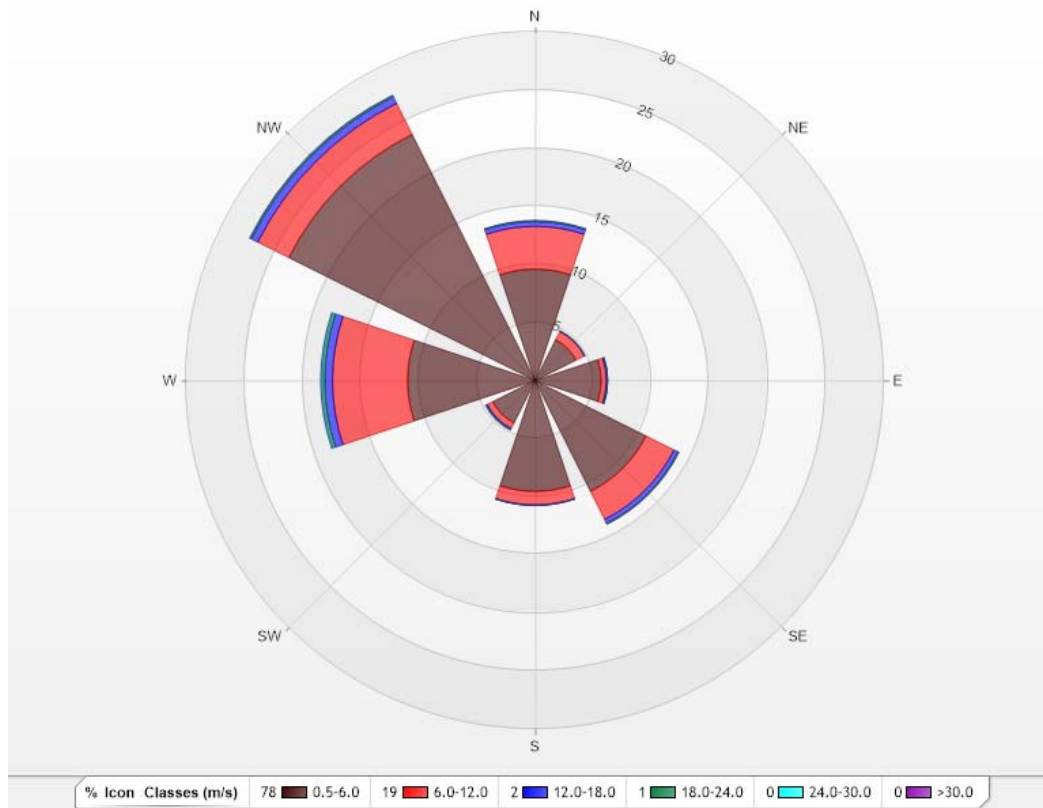
### 2.2 Substance(s) to be Monitored

As the airborne contaminant of primary concern discharged from the Project is particulate matter, Mountain Ash has committed to establishing an air quality monitoring program. This program is designed to monitor and evaluate ambient PM<sub>2.5</sub> and TSP concentrations related to potential particulate emissions from the Project. Additionally, wind speed and wind direction will be recorded.

### 2.3 Method of Monitoring

Mountain Ash will monitor for PM<sub>2.5</sub> and TSP using the TSI Dusttrak Aerosol Monitor or similar. The Dusttrak uses a light scattering laser photometer to provide real time aerosol readings corresponding to PM<sub>1</sub>, PM<sub>2.5</sub>, PM<sub>10</sub> and PM total. The Dusttrak is suitable for both indoor and outdoor use, has an internal datalogger, alarm capabilities, automatic zeroing for instrument drift, low power usage, and can be equipped with remote communications and additional peripherals. The Dusttrak will also be housed in a temperature and environment-controlled shelter for additional protection from the elements. Additionally, the Dusttrak monitor will be equipped with a wind speed and direction monitor to record

the source of particulate readings. A summary of the proposed instrument specifications is provided in Table 3.



**Figure 4 Wind Rose from Springbank Airport**

**Table 3: Method of Monitoring and Performance Specifications**

Monitoring / Instrumentation Method	Resolution	Full Scale	Precision	Accuracy	Data Output Rate
<b>PM<sub>2.5</sub> and TSP Measurements</b>					
TSI Dusttrak	± .1% or 1 µg/m <sup>3</sup>	150,000 µg/m <sup>3</sup>	± 1.0 µg/m <sup>3</sup>	n/a	1-second
<b>Wind Measurements</b>					
Wind Speed / Luft WS600-UMB	0.1 m/s	75 m/s	n/a	±0.3 m/s or 3%	1-second
Wind Direction / Luft WS600-UMB	n/a	360 degrees	n/a	±3 degrees	1-second

## 2.4 Instrument Siting Criteria

The location should be based on an objective procedure that will provide the best monitoring results for the needs of the program. The Alberta Air Monitoring Directive provides a list of siting criteria that is applicable to the proposed monitoring objectives and are listed below.

- PM<sub>2.5</sub> and TSP Sampling Inlet
- sample inlet must be 2 to 15 m above ground
- the inlet must be located greater than 20 m from structures or trees
- no nearby furnace or incinerators
- air flow must be unrestricted in three of the four wind quadrants

The proposed air monitoring location will satisfy the criteria referenced above.

## 2.5 Monitoring Location

Based on the modelling results, predominant wind direction, and the close proximity of the neighbor east of the Project property line, the location for the PM<sub>2.5</sub> and TSP monitoring station is determined to be immediately inside the eastern property boundary in line with the Project and nearest neighbor. During the various phases of operations, the location will need to be moved occasionally to remain in line with the nearest neighbor and operations. The eastern boundary resides downwind from the Project during most of the year and will provide a point of maximum for particulate leaving the Project property. The eastern boundary also meets the required clearing from structures and trees and has unrestricted air flow in all four quadrants throughout the entirety of the eastern property boundary. Pictures of the eastern property line are in Appendix A.

## 2.6 Limitations on Monitoring Site Access

The PM<sub>2.5</sub> and TSP instrumentation will be located immediately inside the property boundary on the eastern property line between the nearest neighbor and Project operations. There are no roads along the eastern property boundary. Limited vehicle access may be possible depending on ground conditions and fencing but is easily accessible by foot.

## 2.7 Monitoring Schedule

Continuous monitoring for PM<sub>2.5</sub>, TSP, wind speed and wind direction will be conducted at the monitoring station during mining operations (approximately April through October). Data will be logged in 15-minute increments and will be obtained on an ongoing basis from the instrumentation. Monitoring is proposed to be conducted during the period of mining operations.

# 3.0 EMISSIONS AND RECEPTORS

## 3.1 Nearby Industrial Sources

Regional emissions in the area come from two active pits and one single point source located within 5 km of the Project. Hillstone Gravel Pit, which is located around 2 km west of the Project and Lafarge Glendale

Gravel Pit, which is around 3.7 km southeast of the Project. The nearby point source emission is Lochend Oil Battery which is about 3.5 km south from the Project.

### 3.2 Sensitive Receptors

A number of receptors were included in the modeling. Most of them are human-inhabited areas, ecosystems, or other sites that are more susceptible to emissions. Figure 3 shows the layout of gridded receptors, as black dots, and discrete receptors, marked as black asterisks for more sensitive receptors. The largest residential area in the region is the Town of Cochrane, located approximately 9 km to the Southwest. The nearest residence is located approximately 250 m to the east of the Project property boundary/line.

## 4.0 QUALITY ASSURANCE AND QUALITY CONTROL

### 4.1 Ambient Monitoring Operations

In general, operations will include regular scheduled station visits, zero and span verifications, calibrations, preventative maintenance and documentation. Instrument specific standard operating procedures (SOPs) will be developed to ensure operators are aware of all detailed information and follow the correct installation, operation and detailed calibration and maintenance procedures for each monitor and sensor.

#### 4.1.1 Monitor Operation

Continuous PM<sub>2.5</sub>, TSP, wind speed and wind direction monitoring are expected to be operational at least 90% of the time on a monthly basis. Operating procedures will be described in the specific monitoring instruments operations manual. Performance specifications are listed in Table 3.

#### 4.1.2 Site Visits

To verify proper operation of the monitoring equipment, scheduled station visits are proposed to be conducted on a quarterly basis. Typical activities to be performed during site visits will include the following and will be documented in a site logbook:

- perform preventative maintenance as recommended by operations and maintenance manuals
- completion of flow rate verifications and leak checks
- cleaning of inlet heads and equipment as required
- removal of tall grass or trees
- instrument calibrations, as required

#### 4.1.3 Instrument Calibration

As many variables can affect the performance of particulate monitoring instruments, instrument calibration at regular intervals is necessary. All calibration checks will be performed by a trained technician or station operator by following the requirements of the maintenance and calibration procedures in the instrument operation manual. Flow checks will need to be performed with a certified calibration device.



Routine calibration checks of the monitoring equipment will be performed quarterly, during operations, for PM<sub>2.5</sub> and TSP monitoring. Calibration checks for the particulate instruments will include a flow, zero verification and span test. On an annual basis the Dusttrak will need to be returned to the manufacturer for a comprehensive maintenance and calibration verification check. Calibration criteria for each measured parameter are provided in instrument manuals and listed below:

- flows should not deviate by more than 5% of the designated flow rate (3LPM)
- zero checks should be passing
- span (bump check) should be responsive
- verify time is correct

Additional calibration checks are required if any one of the following criteria is met, as appropriate:

- after initial installation
- after major repairs
- if an instrument is physically relocated
- when any maintenance activity that may alter the response of the instrument is conducted
- prior to the removal, repair or replacement of any instrument if it is still operational
- immediately following the installation of a replacement instrument
- immediately prior to project takedown

All test equipment used for calibrations will be maintained and certified on a regular basis. Records that provide traceability to authoritative standards of all equipment used for adjusting monitoring systems will be maintained by operator.

## 4.2 Data Acquisition and Management

### 4.2.1 Data Acquisition

Data acquisition will include the collection of electronic data and the generation of hand-written or electronic documentation and records. Data acquisition can be completed either remotely through the modem and instrument or may be downloaded from the instrument directly. Documents and records generated for this project are listed in Table 5.

A data acquisition and data management system will be used. The system will maintain an ongoing real-time log of one-hour data averaging periods for particulate concentrations and wind. This system will store data in an organized manner for reporting purposes and can be used to record maintenance and calibrations within a logbook.

### 4.2.2 Data Validation

#### 4.2.2.1 Validation Process

Validation of continuous sensor data occurs several times before data is finally archived.



### Daily Validation

Daily data validation will be conducted on the one-hour averages using the following steps:

- At a minimum, daily validation should ensure the instruments are running and properly functioning.
- Daily validation should consistently be performed at the same time of day, usually in the morning.
- Daily validation involves the review of the previous 30 hours of data from all monitors. Data is examined for negative baseline, missing data, power failures, rate of change flags or any other data anomalies.
- If the validation process detects an error, investigation should occur.
- A data error may result in the data point being declared invalid.
- A data error may result in instrument repair followed by a recalibration of the monitor/sensor. If the monitor/sensor is replaced, it must be recalibrated immediately following installation.
- The daily check also involves verifying that all communication systems are operational. Corrections or repairs are carried out as required.

### Monthly Validation

Monthly data validation will be conducted on one-hour averages using the following steps:

- Monthly data validation involves examination of the daily data.
- The data set is reviewed for the entire month and reasons for missing data is explained, or the data is replaced if available.
- A second review of data from all stations should be performed, preferably by another technician.
- After second review, the dataset is checked for minimums, maximums, averages, data recovery and trends, etc.

### Annual Validation

Annual data validation will be conducted on the one-hour averages and will be examined using the following steps:

- As part of the annual data validation, minimums, maximums, averages, data recovery and trends, etc. are calculated and identified. Anomalies are identified and further verification is performed.
- An annual data report is generated and reviewed.
- The dataset is archived.
- The three levels in the verification process coupled with the application of high-quality QA/QC standards provide a defensible dataset.

Data review evaluates incoming data for conformance with predetermined project criteria. Data validation and QA/QC will be performed on a daily, monthly and annual basis with screening criteria that is established to identify data integrity and quality issues early so they can be corrected. The operator will ensure that:

- data observations are within the operating limits of the monitoring equipment

- data continues to be collected and transmitted as designed
- apparent outliers are identified and investigated to determine if they represent a malfunction or some other issue

Data validation evaluates data against a set of criteria to provide assurance that the data are adequate for their intended use. Data validation is intended to confirm the degree of truth in an analytical sense. The data analyst will confirm that:

- the instruments were operated and calibrated in accordance with the manufacturer's specifications
- automated and manual QC procedures meet acceptance criteria
- corrective actions are documented, and their effectiveness is verified
- log books are kept current and accurately record significant station events
- method specific screening and data validation criteria are applied

Data verification evaluates the completeness, correctness, conformance, and compliance of a specific data set against the method, procedural, or contractual specifications. The operator will ensure that:

- data quality and completeness meets or exceeds program requirements
- data is reviewed to identify long term trends
- calibration documentation is reviewed to ensure timeliness of field activities and review the performance of the station sensors
- invalidated data periods are documented and investigated and provide recommendations for improvement as needed.

#### **4.2.2.2 Validation Process Records**

As part of the data validation process, data validation codes will be entered for any data value deemed to be invalid, or that need to be qualified.

Whenever any data are invalidated or qualified the monitoring program requires that a data validation log entry be made. The log entries will include the following information:

- who performed the validation action
- when the validation action was completed
- the parameter(s) affected
- the identification of, and justification for, any data adjustments or invalidations
- a brief description of any corrective action performed to address data issues
- the identification of, and justification for, the validity of anomalous data or outliers
- any additional entries for post-validation changes

A 24-hour average will be deemed to be valid if at least 18 hours of sampling occurred from midnight to midnight Local Standard Time.

### 4.2.3 Documents and Records

Data will be automatically backed up to an online storage folder. Data will be reviewed at regular intervals to check the function of the instruments and to ensure that the data collected is reasonable and valid.

Raw data along with all data reduction and validation procedures will be retained. Raw data will be archived separately and distinct from validated data.

## 4.3 Non-Compliance, Preventive, and Corrective Action

Documentation of all site visits will be provided through several forms. Station logs and checklists, which detail inspection, calibration, and repair activities, will be maintained by the operator. Records and measurements taken during calibrations will be recorded on forms designed specifically for the instrument. The archive location for these project documents is provided in Table 4.

The monitoring system has been designed to require minimal preventive maintenance. All system components have been selected based on dependability and stability through extensive field application and will be purchased new. The preventive maintenance tasks and schedules recommended by each equipment manufacturer will be followed. Records will be maintained of all preventive maintenance activities.

A collection of spare parts will be maintained for the instrumentation. Inlet filters, O-rings, pumps, and inlet head replacements will be maintained for the particulate samplers. In the event of an instrument failure beyond the repair of the operator, the instrument will be sent to the manufacturer for repair and calibration. In this event, a temporary replacement instrument will be obtained to prevent excessive data loss on the Project.

The station operator will maintain the following support documentation at the monitoring location:

- copies of manufacturer's operation and service manuals for each piece of monitoring equipment
- copies of applicable SOPs covering tasks to be performed in the operation and servicing of the monitoring system
- station logs, and checklists for recording site visits and maintenance activities
- a copy of the Project AQMP

Any monitoring equipment problems or issues that are identified during calibration or regular site visits, or during the data review process, or that may affect the quality of the data collected, will be documented and reported to the project manager. All monitoring equipment problems that may affect data quality, and the corrective actions taken to resolve them, will be documented using corrective action request forms and will be detailed in the data reports.

**Table 4: Summary of Project Documentation and Records**

Type of Documentation Generated	Frequency Generated	Preparer	Archive Location
Raw data (digital)	1-hour averages logged hourly and downloaded regularly	Station operator	Data Acquisition System
Validated data	Monthly and annual	Station operator	Data Acquisition System
Station logs	Each station visit	Anyone visiting the site	On site logbook or Data Acquisition System
Equipment checklists	Each station visit	Station operator	On-site or Data Acquisition System
Calibration checks	Quarterly	Station operator	On-site or Data Acquisition System
Maintenance logs	As needed	Station operator	On-site or Data Acquisition System
Spare parts inventory	Quarterly	Station operator	On-site
Monthly data report	As needed	Station operator Project Manager	On-site or Data Acquisition System

#### 4.4 Evaluation and Improvement

The operator will conduct an annual review of the monitoring program following the end of the calendar year to evaluate whether the objectives of the monitoring program have been met. The results of the review will be reported in the relevant data report.

The project manager will reassess the AQMP if:

- the review shows that the objectives of the monitoring project are not being met
- the data are inconsistent or fail to meet the criteria or objectives of the monitoring project
- new monitoring objectives are identified
- there are change(s) in emissions and/or receptors in the area, changes in ambient air quality, changes in monitoring technology, audit results, or public concerns within the area monitored

#### 4.5 Reporting

Quarterly or annual reports will be prepared as needed. The contents of the reports will include the following:

- a station performance summary with data recovery statistics and a discussion of significant events (e.g., audits, calibrations, repairs)
- documentation of the reasons for any missing, invalidated, or adjusted data
- tabular listings of all validated hourly data with daily and monthly summaries
- results of audits and/or calibrations performed
- copies of calibration data forms for all instrument calibrations conducted

## 5.0 STATEMENT OF LIMITATIONS

This report has been prepared and the work referred to in this report has been undertaken by SLR for Mountain Ash Limited Partnership., hereafter referred to as the “Client”. The report has been prepared in accordance with the Scope of Work and agreement between SLR and the Client. It is intended for the sole and exclusive use of the Client. Other than by the Client and as set out herein, copying or distribution of this report or use of or reliance on the information contained herein, in whole or in part, is not permitted without the express written permission of SLR.

This report has been prepared for specific application to this site and site conditions existing at the time work for the report was completed. Any conclusions or recommendations made in this report reflect SLR’s professional opinion.

Information contained within this report may have been provided to SLR from third party sources. This information may not have been verified by a third party and/or updated since the date of issuance of the external report and cannot be warranted by SLR. SLR is entitled to rely on the accuracy and completeness of the information provided from third party sources and no obligation to update such information.

Nothing in this report is intended to constitute or provide a legal opinion. SLR makes no representation as to the requirements of compliance with environmental laws, rules, regulations, or policies established by federal, provincial, or local government bodies. Revisions to the regulatory standards referred to in this report may be expected over time. As a result, modifications to the findings, conclusions, and recommendations in this report may be necessary.



## Appendix A

### Photolog

#### **Ambient Air Quality Monitoring Plan**

Mountain Ash Limited Partnership Summit Pit

SLR Project No: 212.06650.00006





Pictures look North, East, South, and West (Clockwise from top left) along the eastern property boundary.

