



# **AGNICO EAGLE**

**MELIADINE GOLD PROJECT**

## **Noise Abatement and Monitoring Plan**

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**MARCH 2020  
VERSION 3**

## Executive Summary

Agnico Eagle Mines Limited (Agnico Eagle) has developed the Meliadine Gold Project (the Project), located approximately 25 kilometres (km) north from Rankin Inlet, and 80 km southwest from Chesterfield Inlet in the Kivalliq Region of Nunavut. Situated on the western shore of Hudson Bay, the Project site is located on a peninsula between the east, south, and west basins of Meliadine Lake (63°1'23.8" N, 92°13'6.42" W), on Inuit owned land.

This document presents the Noise Abatement and Monitoring Plan (the Plan) for the Project. As noise emissions have the potential to impact the environment, Agnico Eagle has prepared this Plan in accordance with the noise effects assessment outlined in the Final Environmental Impact Statement (FEIS) for the Project. This management program was originally developed by Golder and Associates (Version 0, Golder, 2014), and has been updated to reflect current site conditions. Overall, it aims to confirm the predictions made in the FEIS regarding Project impacts on area noise levels, and in doing so, determine if supplemental or alternative mitigation strategies are required to reduce noise emissions from the Project.

The Plan includes both a Noise Abatement Plan (NAP) and Noise Monitoring Plan (NMP). The NAP describes how noise abatement is incorporated into the Project, while the NMP describes the annual ambient noise monitoring program.

The objectives of the NMP are to:

- determine the effects of the Project on the noise environment;
- evaluate the accuracy of predictions made in the FEIS;
- assess the effectiveness of noise abatement incorporated into Project design; and
- determine the need for supplemental noise abatement.

Data collected through the noise monitoring program will be appropriately processed, and results will be compared to predictions of noise levels presented in the Project FEIS for each monitoring station, as well as site noise criteria.

Agnico Eagle will provide annual reports to the NIRB summarizing the data collected under this program.

This Plan has been prepared in accordance with NIRB Project Certificate No.006 and will be reviewed and updated regularly, as necessary, to reflect changes in site conditions and regulatory requirements. Changes will be documented and updated plans will be provided to the NIRB for review.



## Document Control

Version	Date	Section	Revision	Author
0	April 2014	All	Conceptual Noise Abatement and Monitoring Plan, submitted to Nunavut Impact Review Board as part of the Project FEIS	Golder Associates Ltd.
2	March 2017	All	Adjusted to Agnico management plan format. General update of the document language to reflect current period of operations	Meliadine Environment Department
3	March 2020	All	Updated layout, updated terminology to reflect current site conditions (operations phase)	Meliadine Environment Department
		1.1	Background (formerly Project Description) – identified project location; removed paragraph on site infrastructure construction plans; moved & updated figure of monitoring locations to Section 3.2	
		1.3	Added conformity table to describe Terms & Conditions of the Project Certificate related to noise monitoring & management	
		3	Added headings throughout; consolidated descriptions of monitoring locations; updated figure; added description of alternate location NPOR005 (previously mentioned by name only); expanded descriptions of monitoring locations; added description of data analysis methods. 3.1: Adjusted location of monitoring station NPOR014 based on community concerns. 3.4: Noise data will be filtered on basis of recorded wind speed only, and precipitation if it becomes available, rather than assumed precipitation (RH>90%), which occurred from 2016 - 2018. Filtering on the basis of elevated RH tends to exclude significant portions of data. 3.6.2: The night-time design target will now be compared to results for stations NPOR005 and NPOR008 only. The other stations are too close to the SSA for comparisons to be considered appropriate.	
		4	Added Reporting section	
		5	Added details of adaptive management approach (investigation into intense noise occurrences)	

**ABBREVIATION AND ACRONYM LIST**

Agnico Eagle	Agnico Eagle Mines Ltd.
AWAR	All-weather Access Road
dB	Decibels
dBA	A-weighted decibels
FEIS	Final Environmental Impact Statement
Golder	Golder Associates Ltd.
LAeq	Integrated equivalent A-weighted sound level
Lmax	Maximum sound level in dBA
Lmin	Minimum sound level in dBA
LSA	Local Study Area
NAMP	Noise Abatement and Monitoring Plan
NAP	Noise Abatement Plan
NIRB	Nunavut Impact Review Board
NMP	Noise Monitoring Plan
POR	Point of Reception
Project (the)	Meliadine Gold Project
RSA	Regional Study Area
SSA	Site Study Area

**IMPLEMENTATION SCHEDULE**

This Plan is effective immediately subject to any modifications proposed by the NIRB as a result of the review and approval process.

**DISTRIBUTION LIST**

Agnico Eagle – Environment Department  
Agnico Eagle – Energy and Infrastructure Department

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## 1 INTRODUCTION

### 1.1 Background

Agnico Eagle Mines Limited (Agnico Eagle) is operating the Meliadine Gold Project (the Project), located approximately 25 kilometres (km) north of Rankin Inlet, and 80 km southwest of Chesterfield Inlet in the Kivalliq Region of Nunavut. Situated on the western shore of Hudson Bay, the Project site is located on a peninsula between the east, south, and west basins of Meliadine Lake (63°1'23.8" N, 92°13'6.42" W), on Inuit owned lands.

The Project involves construction, operation, decommissioning and reclamation of a conventional gold mine with open-pit and underground activities. Some facility development will take place at Rankin Inlet, where materials will be received by air and sea transport. Year-round access between Rankin Inlet and the mine site will be facilitated by the All-weather Access Road (AWAR and Rankin Inlet ByPass Road).

For the purposes on this Noise Abatement and Monitoring Plan (the Plan), Project activities have been divided into three phases, as follows:

- Construction Phase – construction of the mine infrastructure and facilities leading to the first production of gold
- Operations Phase – the ongoing operation of the mine and associated facilities to produce gold through the end of the mine life
- Closure and Post-Closure Phase – the post operational period, when gold is no longer being produced; during this phase, the mine and associated infrastructure will be decommissioned, demolished and removed, and reclamation will be underway to return the site to a physically and chemically stable condition.

### 1.2 Objectives

This document presents the Noise Abatement and Monitoring Plan for the Meliadine Gold Project. It has been prepared in accordance with the noise effects assessment outlined in the Project's Final Environmental Impact Statement (FEIS). This management program was originally developed by Golder and Associates (Version 0, Golder, 2014), and has been updated to reflect current site conditions. Overall, it aims to compare site noise conditions with predictions made in the FEIS regarding Project impacts on area noise levels. In doing so, it will determine if supplemental or alternative mitigation strategies are required to reduce noise emissions.

This Plan includes a Noise Abatement Plan (NAP) and Noise Monitoring Plan (NMP). The NAP describes how noise abatement is incorporated into the Project, while the NMP describes the annual ambient noise monitoring program.

The objectives of the NMP are to:

- assess the accuracy of noise predictions in the Project impact assessment;
- measure the relevant effects of the Project on area noise levels; and
- help qualify the effectiveness of the Noise Abatement Plan by identifying causes of impact assessment exceedances.

Together, the NAP and NMP are designed to control potential Project noise impacts on Points of Reception (PORs) located in the Project area. If the noise monitoring confirms excessive Project associated noise levels exist, the monitoring data will be used to determine where the NAP requires improvement and if additional monitoring activities are required.

### 1.3 Conformity with Terms & Conditions of the NIRB Project Certificate

This Plan has been prepared in accordance with Term & Condition 10 of the NIRB Project Certificate No. 006 issued on February 26, 2015 and amended on February 26, 2019. Conformity with the Project Certificate is described in Table 1-1. Noise & vibration monitoring in support of Term 11 (at site accommodations) is a component of the site's Occupational Health and Safety Plan (2014). Blast monitoring conducted in support of Fisheries Act requirements (Term 33) is described in the site's Blast Vibration Monitoring Plan (2017).

Table 1-1. Conformity Table.

Project Certificate No.:006 Term & Condition		Document Location
10	a. Restrictions on blasting and drilling when migrating caribou, birds or local carnivores may be affected;	See Wildlife Protection and Response Plan (January 2019) and Terrestrial Environment Management and Monitoring Plan (November, 2015)
	b. The establishment of strict standards for noise levels; use of equipment and vehicles with the best noise attenuation devices;	Section 2
	c. When practical, the use of fences or berms around noisy machinery or sites;	Section 2
	d. Flight corridor restrictions over sensitive areas with known concentrations of wildlife and birds whenever possible;	See Wildlife Protection and Response Plan (January 2019) and Terrestrial Environment Management and Monitoring Plan (November, 2015)
	e. Requiring, with the exception of take off and approach for landing, a minimum flight altitude of 300 metres above ground level when flights to and from the mine site are passing near sensitive wildlife and bird areas; and,	See Wildlife Protection and Response Plan (January 2019) and Terrestrial Environment Management and Monitoring Plan (November, 2015)
	f. The incorporation of the use of sound metres to monitor sound levels at locations in and around the mine site and local study area. The location and design of the sound metres shall be selected in consultation with Environment and Climate Change Canada and set up immediately upon issuance of the Project Certificate for the purpose of obtaining baseline data, and shall be	Section 3



Project Certificate No.:006 Term & Condition		Document Location
	maintained for data collection during and after operations.	

## 2 NOISE ABATEMENT PLAN

The NAP functions as an integrated abatement program and considers potential Project- environment interactions with respect to noise. The NAP will be implemented during all Project phases (i.e., construction, operation, and closure and post-closure), and will consider potential changes in noise levels during each of these phases.

The NAP is designed to address common noise sources associated with the Project. These common noise sources include stationary equipment at the Mine Site (e.g., generators, compressors, pumps, or plants), mobile equipment at the Mine Site (e.g., loaders, haul trucks, dozer) and equipment associated with the AWAR, ByPass Road, Rankin Inlet, and Marine Shipping activities.

### 2.1 Site Layout

A number of attenuation measures were undertaken during the design of the Project. Wherever possible, the Mine Site infrastructure was laid out to concentrate activities within a small footprint, and the design team strived to locate equipment as far as possible from identified PORs (typically, seasonally occupied cabins, as well as the Meliadine camp). In addition, the operating scenario for the noise sources was considered when maximizing the distance from the identified PORs. The buildings are constructed with building materials and designs such that radiating building noise levels will be minimized. All building are insulated with 'sandwich' panels made of metal cladding with a 3.5" insulation for walls and 5" for roofs. A noise attenuation system was also installed on the roof of the Power Plant to reduce noise emissions. Where equipment is located outdoors, efforts were made in the design phase to locate and operate the equipment behind structures which can provide adequate acoustic shielding, such as acoustic barriers, existing topography, berms, pit faces, stockpiles, and/or buildings.

### 2.2 Noise Source Mitigation

An equipment- specific mitigation plan will be implemented on an ongoing basis, which will supplement the noise attenuation efforts incorporated into the Project design. The equipment- specific mitigation plan includes:

- Procuring equipment that is designed and manufactured to minimize noise emissions;
- Investigate, and implement accordingly, the use of safety equipment (e.g. directional back up alarms) that can maintain a high level of safety but minimize noise nuisance
- Install silencers on inlets and exhausts of certain noisy equipment. These could include generators, underground ventilation systems, compressors and building ventilation for buildings containing noisy equipment and;
- When possible, avoid operating numerous pneumatic tools outdoors at the same time and spread operation throughout working periods (primarily construction-phase mitigation measure).

## 2.3 Administrative Controls

Administrative controls are also incorporated into the Project design. These include but are not restricted to the following:

- Implementing a preventative maintenance program that will include regular inspection and maintenance of equipment and equipment noise control features (e.g., mufflers, acoustic enclosures);
- Limit on-site equipment to only those needed;
- Reduce power operations by using only the size and power rating required;
- Maintain Mine Site roadways to minimize ruts, which will help reduce noise emission of haul truck traveling along the roadways;
- Minimize idling equipment and, when practicable, turn-off equipment when not in use; and
- Avoid trucking operation at nighttime when possible.

The identified noise controls will act to control noise impacts on all receptors in the Project area including those located within Iqalugaarjuup Nunanga Territorial Park.

### 3 NOISE MONITORING PLAN

The NMP will be used to validate noise impact predictions made in the Project's FEIS and understand Project impacts on area noise levels. If ambient noise monitoring confirms excessive Project-associated noise (above site noise criteria), the monitoring data will be used to determine where the NAP requires improvement.

#### 3.1 Monitoring Locations

Noise monitoring locations for the Meliadine site are identified in Table 3-1 and described below. These locations coincide with the identified PORs with the greatest predicted changes in noise levels from baseline conditions, as determined through the noise impact assessment (FEIS Vol. 5, Section 5.5). All PORs are located in close proximity to seasonally occupied cabins. These monitoring locations will be reviewed and may be adapted throughout the construction and/or operations phases of the Project, as necessary.

Table 3-1. Noise monitoring locations for the Meliadine site.

Location ID	UTM (Zone 15V)	Project Area	Monitoring Conditions
NPOR 006	538286E 6991299N	Mine	Monitor during the entire Construction and Operations Phases, and initial stages of Closure when extensive activities are occurring.
NPOR 008	543707E 6987276N	Mine	Monitor during the entire Construction and Operations Phases, and initial stages of Closure when extensive activities are occurring.
NPOR 014	549401E 6982060N	Mine	Monitor only if activities associated with the Discovery Pit are occurring (pre-2020 location).
NPOR 014a	TBD	Mine	Monitor only if activities associated with the Discovery Pit are occurring (2020+ location).
NPOR 017	544203E 6970537N	AWAR	Monitor during the entire Construction and Operations Phases, and initial stages of Closure when extensive activities are occurring.
(NPOR 005)	537978 E 6991742 N	Mine	Alternate to NPOR006 if monitoring at that location is not feasible due to high occupancy rates of the adjacent cabin.

##### 3.1.1 NPOR005

NPOR005 is located approximately 1 km northwest of NPOR006, adjacent to a seasonally occupied cabin (usage rate unknown). It is approximately 1.2 km outside of the SSA, on the southwest side of Meliadine lake.

##### 3.1.2 NPOR006

NPOR006 is located approximately 1 km north of the mine site disturbance area, and approximately 200 m outside the FEIS site study area (SSA). The adjacent cabin is frequently in use with ongoing construction works. The

surrounding terrain is a mix of small rock and lichen. The slope is very minimal towards the SW. Meliadine Lake is ~150 m NE and an unnamed small lake is ~120 m SSW.

### 3.1.3 NPOR008

NPOR008 is located approximately 1.25 km from the SSA, on the east side of the site. A seasonally occupied cabin is nearby. The surrounding terrain is on the summit of a small vegetated hill with very little apparent rock. Meliadine Lake is ~ 51 m to the NNE. The mine camp is approximately 2 km to the northwest, and the all weather road is approximately 2.5 km to the southwest.

### 3.1.4 NPOR014 and NPOR014a

NPOR014 is located approximately 130 m from the traditionally used ATV trail. A seasonally occupied cabin is nearby. This station is at the southern end of Meliadine Lake and is approximately 10 km away from the Meliadine exploration camp and 5 km from the Discovery area. It is located within the SSA. Currently there is no development in this area, so monitoring has only been conducted opportunistically, and measurements are expected to be indicative of background values.

Due to community concerns with the presence of noise monitors at this station that were brought to Agnico's attention in early 2020, Agnico will adjust future monitoring events to another suitable location in the vicinity of the Discovery Pit. The new station (NPOR014a) will be similarly sited with respect to expected noise emissions from future local activities (e.g. similar distance from the proposed roadway, similar distance from the proposed Discovery Pit). The specific location will ultimately be determined in the field by Agnico Environment technicians, in consultation with community relations representatives once activities associated with the Discovery Pit are imminent. Until that time, monitoring will cease in this location since it is not required according to the original intent of this Noise Monitoring Plan.

### 3.1.5 NPOR017

NPOR017 is located at the southern end of the all-weather access road (AWAR). It is approximately 150 m SW of the road. No SSA was assessed for the AWAR.

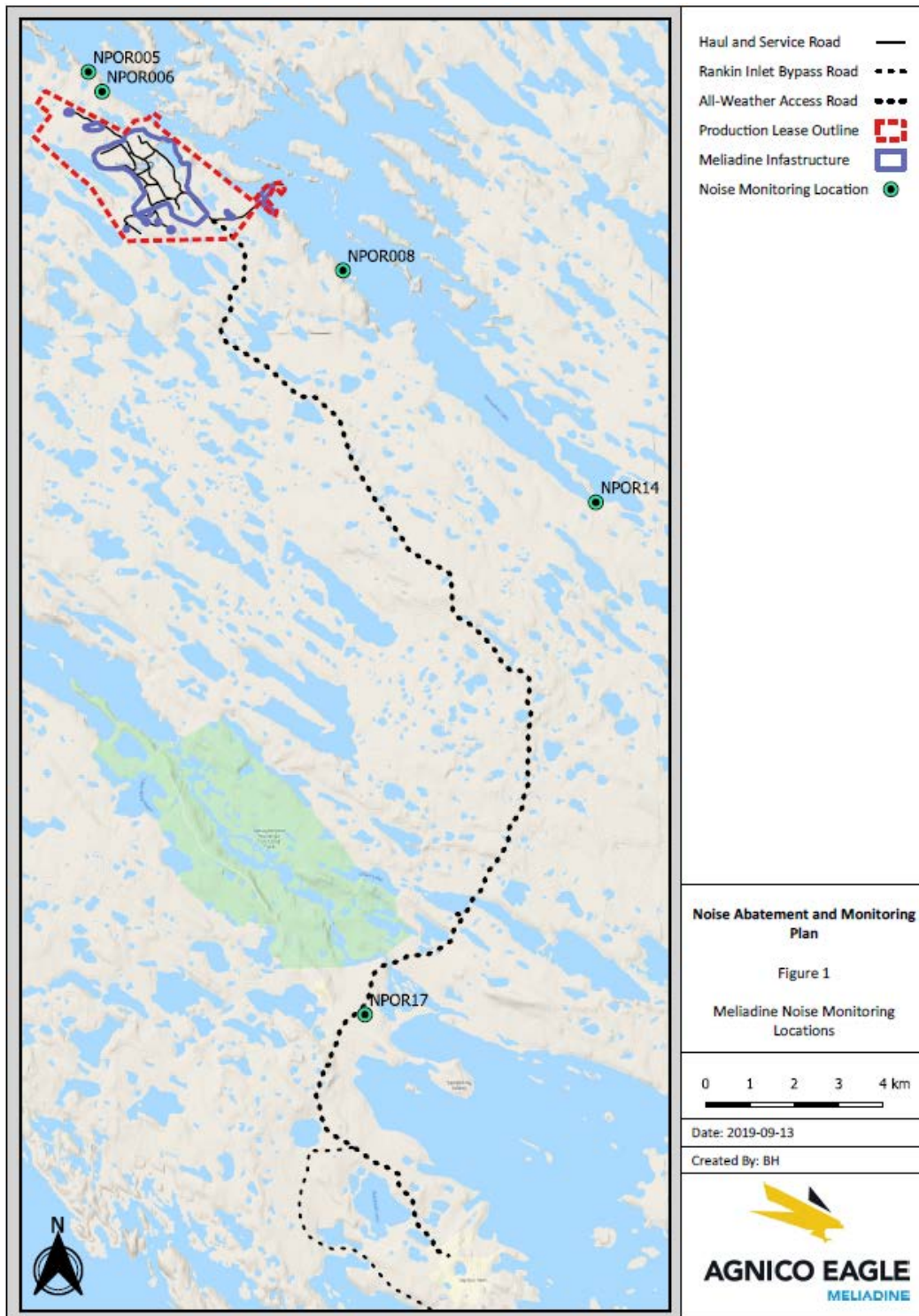


Figure 3-1. Meliadine site noise monitoring locations. NPOR014 is now considered a historical monitoring station.

## 3.2 Monitoring Frequency

Agnico Eagle field staff will aim to conduct a minimum of two noise surveys per year at each of the locations described in Section 3.1. Each survey will be for a 2 - 4 day period to ensure sufficient data is collected under acceptable weather conditions (see Section 3.6), since wind speeds in the area tend to exceed recommended levels. These surveys provide data on average noise levels during a typical day, as well as variability of noise levels within the day.

## 3.3 Monitoring Methods

### 3.3.1 Sound Level Meter

For all stations, a Bruel and Kjaer Model 2250 integrating sound level meter (or equivalent) with secondary wind screen will be used to conduct the noise surveys. The noise logging rate will be set at 1-minute intervals, and sound will be recorded in 10-minute intervals. Logged parameters will include:

- Integrated equivalent A-weighted sound level (LAeq);
- 1/3 octave band sound levels in decibels (dB);
- Statistical data (L10, L90);
- Maximum sound level (Lmax) in dBA; and
- Minimum sound level (Lmin) in dBA.

### 3.3.2 QA/QC

Calibration of the sound level instrument will be performed before and after each monitoring period using a Bruel and Kjaer Type 4231 Calibrator, to ensure variance is within 0.5 dB. Calibration results are recorded in field notes. Estimated uncertainty of the calibrator is  $\pm 0.12$  dB at a 99% confidence level. Professional calibration of the instrument will be performed at a minimum of:

- Sound level meter (B&K Model 2250) – every 2 years;
- Calibrator 4231 - every year; and
- Microphone 4952 - every year.

## 3.4 Weather Data

Weather data for the noise monitoring periods will be collected using the mine site's permanent weather station. Hourly data for wind, temperature, and relative humidity are currently available from this station.

In the event of noise complaint situations, the Alberta Energy Resource Conservation Board Directive 038 (Directive 038) requires noise data to be collected under appropriate weather conditions, which are represented by an absence of steady precipitation, snow, water, or ice ground cover, as well as restrictions on wind speed. To



adhere to these conditions as much as possible during regular routine monitoring, noise data will be filtered out from analyses when wind speeds exceed 15 km/hr. Depending on data availability, results may also be filtered on the basis of elevated relative humidity (>90 or 100%), assuming precipitation occurred. However, since this tends to result in the exclusion of significant portions of the dataset, discretion will be used to determine necessity of that step on an annual basis. If continuous precipitation monitoring is implemented onsite, data will be filtered accordingly. Since only hourly data summaries are available from the onsite weather station, average hourly wind speed and relative humidity values will be used, since filtering based on maximum values has historically resulted in exclusion of nearly the entire noise dataset. Weather data for the monitoring periods (wind speed, wind direction, temperature, relative humidity, and precipitation, as available) will be provided in the annual noise monitoring report (see Section 4).

### 3.5 Field Notes

A pocket weather meter (e.g. WeatherHawk® WindMate™, WM-300) will be used by field staff to record wind speed, direction, and temperature at the beginning and end of each monitoring period. Other observations will include precipitation, cloud cover, and observed noise sources during instrument set-up and take-down.

### 3.6 Data Analysis

Data recorded at the monitoring stations will be downloaded for assessment using the Bruel and Kjaer 5503 Measurement Suite software (or equivalent) with some calculations performed using Microsoft Excel. Since noise levels vary over time, the monitoring instrument used measures near-continuously and reports a single-number value for each minute, representing the “equivalent sound level” ( $L_{eq}$ ). This value is the average sound level occurring over the specified time period (i.e. one minute). Alternatively, it is the sound level that would produce the same total amount of acoustical energy in the specified time period as the measured sound levels. Recorded one-minute  $LA_{eq}$  values will be used to calculate hourly equivalent energy noise levels ( $L_{eq, 1h}$ ), 24-h equivalent energy noise levels ( $L_{eq-24h}$ ) and night-time equivalent energy noise levels ( $L_{eq-night}$ ) for comparison to FEIS predictions and site noise criteria (see Section 3.6.2).

#### 3.6.1 Data Filtering

All datapoints associated with the first hour of measurement will be filtered out to remove noise from technician activity, and to ensure more than 30 min of data contribute to hourly averages. Data will also be filtered on the basis of recorded weather conditions to comply with Directive 038 (see Section 3.4).

When calculated 24-h or night-time  $L_{eq}$  values (see Section 3.6.2) exceed site predictions or noise criteria, sound recordings will be reviewed to identify and if necessary, remove noise data containing recordings of abnormal noise sources clearly unrelated to mine activity (e.g. wind, wave action, animal disturbance, human interference), that produce recorded 1-min  $L_{eq}$  values in excess of criteria. These noise sources were assumed to be minimal in the FEIS process, since a background sound level of 35 dBA was used.

According to Directive 038, a noise monitoring survey is considered to be acceptable when there are a minimum of 180 valid minutes during the daytime period and 180 valid minutes during the nighttime period. When insufficient valid data is available after these filtering steps, 24-h and night-time  $L_{eq}$  values will not be calculated.

### 3.6.2 Noise Monitoring Criteria

After the initial filtering, valid hourly  $L_{eq}$  values for each monitoring period will be used to calculate average 24-h equivalent energy noise levels ( $L_{eq, 24 h}$ ) for comparison to FEIS model predictions and the site's noise monitoring criteria (see Table 3-2). When a data point ( $L_{eq, 1 h}$ ) is available from more than one day within a monitoring period, values will be energy-averaged across calendar days to ensure time points contribute equally to 24-h  $L_{eq}$  values.

Night-time (11 pm – 7 am)  $L_{eq}$  values will also be calculated and compared with the design target of 40 dBA for sites NPOR005 and NPOR008, for reference only. It should be noted that this target was designed to apply at a distance of 1.5 km from the site study area (SSA) in remote areas. NPOR005 and NPOR008 are located approximately 1.2 km from the SSA, so exceedances of this target value may occur at the monitoring stations without exceeding the design target at the 1.5 km distance. All other noise monitoring stations are located too close to (or within) the SSA for comparisons to be considered appropriate. If concerns arise regarding nighttime sound levels around the mine site, one or more stations may be added or moved in future monitoring events to coincide with this design target location to more precisely assess FEIS predictions.

Finally, a noise monitoring criterion of 45 dBA for each monitoring station was proposed in previous versions of this Plan. This value was derived from the impact classifications used in the Project FEIS. As the Project is located in a remote area, a baseline noise level of 35 dBA (24-h  $L_{eq}$ ) was assumed in the FEIS for all PORs. For PORs within the local study area (LSA), impact was classified as “non-significant” when predicted maximum 24 h  $L_{eq}$  values were within 10 dB of baseline (i.e. 45 dB).

**Table 3-2. FEIS predictions for 24-h equivalent sound levels, FEIS design targets for 1.5 km from the site study area perimeter, and proposed noise monitoring criteria.**

Location	FEIS Prediction $L_{eq-24h}$ (dBA)	Design Target (1.5 km from SSA) $L_{eq-nighttime}$ (dBA)	Noise Monitoring Criteria $L_{eq-24h}$ (dBA)
NPOR005	36.3	40	45
NPOR006	39.8	-	45
NPOR008	41.7	40	45
NPOR014	44.7	-	45
NPOR014a	TBD	-	45
NPOR017	43.4	-	45

## 4 REPORTING

Results of the noise monitoring program will be compiled annually and reported to NIRB and Environment and Climate Change Canada. Reports will include, for each station:

- Visual display of one-minute  $L_{eq}$ , one-minute maximum and one-minute minimum values;



- 24 hr  $L_{eq}$  values for all monitoring events at all stations, including number of hours of valid data;
- Night-time  $L_{eq}$  values (11pm – 7am) for NPOR005 and NPOR008;
- Weather data for each monitoring period (temperature, relative humidity, wind speed, direction, and precipitation, as available);
- Audible noises and noise sources noted on field logs and in sound files, especially those corresponding with intense noise occurrences;
- Current year and historical comparison of calculated  $L_{eq}$  values to FEIS predictions and noise monitoring criteria; and
- Recommendations for adaptive management, additional monitoring, or for implementation of additional abatement measures, as needed, when sources of intense noise occurrence are confirmed.

## 5 ADAPTIVE MANAGEMENT AND PLAN REVIEW

As the Project evolves, noise control measures will be adapted and implemented as necessary, based on results of annual monitoring. When measured noise levels exceed the impact assessment criteria of 45 dBA (24 h  $L_{eq}$ ), recorded sound files will be reviewed in conjunction with field notes and staff discussions to determine the sources of intense noises. Supplemental monitoring may be conducted to confirm results, or the monitoring plan may be adjusted if necessary to more accurately determine average daily sound levels at the POR.

When sources of intense noises causing exceedances are confirmed, the Environment Department staff will work with the responsible party to determine whether further abatement of the noise is possible. At a minimum, this will include ensuring the previously identified mitigation measures (Section 2.2 & 2.3) are being applied. If all abatement practices are in use and the source continues to contribute to intense noise occurrences in subsequent monitoring events, the implementation of additional mitigation measures will be investigated in consultation with appropriate experts. This method of intense noise identification means that there will be a continual effort to reduce the sounds contributing to the loudest, most disruptive noise peaks onsite, even as site operations evolve and average noise levels change.

This Noise Abatement and Monitoring Plan will be reviewed and updated as necessary to reflect changing site conditions.

## 6 REFERENCES

Golder (Golder Associates), 2014. Meliadine FEIS – SD 5-2 Conceptual Noise Monitoring Plan, Document No. 374-131480007 Ver.0. April, 2014.