

APPENDIX E AIR QUALITY MONITORING AND MANAGEMENT PLAN



BACK RIVER PROJECT

AIR QUALITY MONITORING AND MANAGEMENT PLAN

DATE

23.03.2026

REFERENCE

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EXECUTIVE SUMMARY

B2Gold Back River Corp.(B2Gold) owns the Back River Project (the Project) a gold mining operation located within the West Kitikmeot region of southwestern Nunavut, 400 kilometres (km) southwest of Cambridge Bay, 95 km southeast of the southern end of Bathurst Inlet, and 520 km northeast of Yellowknife, Northwest Territories.

The Air Quality Monitoring and Management Plan (AQMMP or Plan) for the Project is presented within this document. The Plan's purpose is to outline the B2Gold's strategy to minimize the effects of Project air emissions on human health and the environment.

The AQMMP includes the:

- ◆ applicable legislation and guidelines;
- ◆ roles and responsibilities;
- ◆ environmental protection measures;
- ◆ air quality monitoring components; and
- ◆ mitigation and adaptive management measures.

This Plan has been constructed to meet the requirements of B2Gold Project Certificate No. 007, issued by the Nunavut Impact Review Board (NIRB) and in accordance with current Federal and Territorial statutory requirements. The Plan is a living document and will be reviewed and updated as necessary to reflect changes in operation and technology, as directed by the NIRBs Monitoring Officer responsible for Project Certificate No. 007 or other regulatory authorization where appropriate.

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ACRONYMS AND ABBREVIATIONS

AQMMP	Air Quality Monitoring and Management Plan
B2Gold	B2Gold Back River Corp.
CAAQS	Canadian Ambient Air Quality Standards
CAC	Criteria Air Contaminant
CO _{2e}	Carbon dioxide equivalent
CCME	Canadian Council of Ministers of the Environment
ECCC	Environment and Climate Change Canada
FEIS	Final Environmental Impact Statement
ENV	The Government of Nunavut Department of Environment
GHG	Greenhouse Gas
GHGRP	Greenhouse Gas Reporting Program
NIRB	Nunavut Impact Review Board
NO	Nitric oxide
NO ₂	Nitrogen dioxide
NRPI	National Pollutant Release Inventory
MLA	Marine Laydown Area
OBPS	Output-Based Pricing System
O ₃	Ozone
PDA	Project Development Area
PM ₁₀	Particulate matter with a diameter of 10 microns (µm) or less
PM _{2.5}	Particulate matter with a diameter of 2.5 microns (µm) or less
QAQC	Quality Assurance and Quality Control
SO ₂	Sulphur dioxide
TSP	Total suspended particulate

1. INTRODUCTION

1.1 BACKGROUND

The Back River Project (the Project) is a gold project owned by B2Gold Back River Corp.(B2Gold) within the West Kitikmeot region of southwestern Nunavut. It is situated approximately 400 kilometres (km) southwest of Cambridge Bay, 95 km southeast of the southern end of Bathurst Inlet, and 520 km northeast of Yellowknife, Northwest Territories (Figure 1.1-1). The Project is located predominantly within the Queen Maud Gulf Watershed.

The Project is comprised of two main areas, Goose Property and the Marine Laydown Area (MLA) with interconnecting winter ice roads. The majority of annual resupply will be completed using the MLA situated along the western shore of southern Bathurst Inlet, which is connected seasonally to Goose via an approximately 160 km long winter ice road.

The Air Quality Monitoring and Management Plan (AQMMP or Plan) describes the best management practices, monitoring, management, and mitigation measures that are undertaken to reduce the air quality impacts of the mining operations. The Plan has been constructed to meet the requirements of B2Gold Project Certificate No. 007, issued by the Nunavut Impact Review Board (NIRB) and in accordance with current Federal and Territorial statutory requirements.

This Plan is a living document to be updated upon changes in related regulatory requirements, management reviews, incident investigations, changes to facility operation or maintenance, and environmental monitoring results, best practice updates or other Project specific protocols once construction starts through to Project closure activities. Any updates will be filed with the Annual Report submitted to the Nunavut Impact Review Board (NIRB) in accordance with Project Certificate No. 007.

The information presented herein is current as of March 2026. The Plan will be reviewed as needed for changes in operation and technology and as directed by the NIRBs Monitoring Officer responsible for Project Certificate No. 007 or other regulatory authorization where appropriate. Completion of the updated Plan will be documented through signatures of the personnel responsible for reviewing, updating, and approving the Plan.

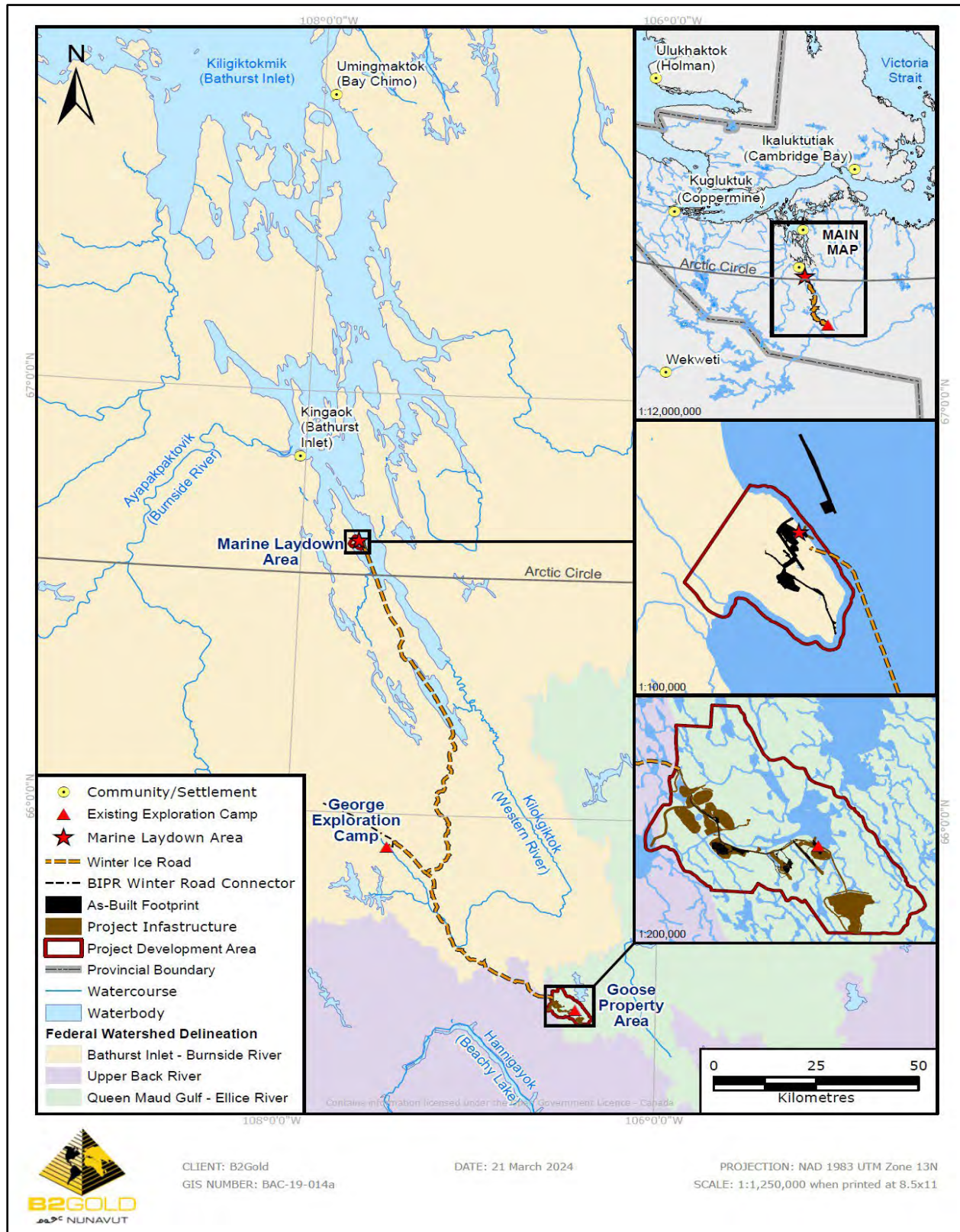


Figure 1: Back River Project Overview

1.2 NIRB PROJECT CERTIFICATE CONFORMITY

Table 1.2-1 summarizes the location of Plan components that are included to comply with Project Certificate No. 007 terms and conditions.

Table 1.2-1: Conformity Table

Project Certificate No. 007 Term and Condition		Document Location
1a	Description of air monitoring stations and proposed timing of installation, location, and any factors considered with regards to planning for the installation.	Section 7.
1b	Plans for collection of total suspended dust samples year-round, including sampling for metals content relevant to the Project.	Section 7.2
1c	Description of dustfall collectors.	Section 7.2.1.2
1d	Description of lichen surveys.	See Vegetation Monitoring Plan (Sabina 2020)
1e	Identification of near field, far field, and reference locations with demonstrated consideration for ambient wind conditions.	Section 7.2.2
1f	Baseline data collected prior to significant construction activity.	See FEIS Volume 4 Appendix V4-1A (Sabina 2015) for 2011-2013 baseline data
1g	A description of the proposed annual reporting mechanism and response framework.	Section 11
2	The Proponent shall demonstrate through monitoring of air quality that all emissions remain within predicted levels and, where applicable, within limits established by all applicable guidelines and regulations. In cases where exceedances occur, the Proponent shall provide an explanation for the exceedance, a description of planned mitigation, and shall conduct additional monitoring to evaluate the effectiveness of mitigative measures.	Section 7
3a	The Proponent shall have in a dust management and monitoring plans that reflect commitments made in the Final Environmental Impact Statement, the Final Environmental Impact Statement Addendum, and through the Nunavut Impact Review Board's impact assessment process.	Section 6.1.2
3b	Verify commitments to use dust suppressants on-site, including a description of the type of suppressant to be used, as well as the frequency and timing of applications to be made throughout the periods of applicable use.	Section 6.1.2
3c	Specify commitments to the use of appropriate dust suppression measures when conducting activities in the landfill such as topping or capping.	Section 6.1.2

3d	Outline the specific adaptive management measures to be considered should monitoring indicate that dust deposition is higher than predicted, specifically where project-related traffic is greater than initially expected or where meteorological events have instigated additional deposition.	Section 8
3e	Demonstrate consideration for the implementation of alternative methods (e.g., windscreens) to limit the deposition of dust generated from the Project.	Section 6.1.2
4	The Proponent shall develop and implement an Incineration Management Plan that demonstrates consideration for the recommendations provided in Environment and Climate Change Canada's Technical Document for Batch Waste Incineration (2010).	Section 6.1.3 and stand-alone Incineration Management Plan (Sabina 2019)
5	The Proponent shall provide the results of all stack testing conducted on temporary or permanent incinerators operated for the Project for the year in which testing was conducted.	Section 11
6	The Proponent shall maintain a Greenhouse Gas Emissions (GHG) Reduction Plan which includes: a. An estimate of the Project's GHG baseline emissions. b description of monitoring measures to be undertaken, including the methods, frequency, parameters, and a description of data analysis. c. A description of mitigative and adaptive strategies planned, and taken, toward reducing the project-related emission of greenhouse gases over the Project's life.	Section 6.1.1
8	The Proponent shall provide a summary report of meteorological conditions experienced within the project area including details related to temperature, wind velocities and patterns, precipitation, as well the onset of seasonal freeze and thaw cycles and highlight extreme or outlying weather events.	Section 11

2. SCOPE AND OBJECTIVES

The main purpose of this Plan is to minimize the effects of Project air emissions on the human health and safety of workers, to protect the surrounding environment, and to limit greenhouse gas emissions to reduce the Project's potential effects on climate change. The Plan describes the best management practices, monitoring, and mitigation measures that are undertaken to reduce the air quality impacts of the mining operations.

The Air Quality Monitoring and Management Plan includes the following:

- ◆ Applicable legislation and guidelines (Section 4).
- ◆ Roles and responsibilities within B2Gold's organization (Section 5).
- ◆ Environmental protection measures that are already in place or that will be established to avoid, control, and mitigate potential adverse effects on air quality associated with all phases of the Project (Section 6).
- ◆ Air quality monitoring program components which are used to collect on-site air quality, source emissions and meteorological data to allow for an adaptive approach to air quality and emissions management (Section 7).
- ◆ Mitigation and adaptive management measures that are either currently in place or that will be added to confirm that air quality levels remain within the Final Environmental Impact Statement (FEIS) predictions and/or applicable standards (Section 8).

Environmental reporting of AQMMP components to territorial and federal agencies (see Section 11).

The monitoring program includes quantification of the following pollutants:

- ◆ Nitrogen dioxide (NO₂).
- ◆ Dust deposition.
- ◆ Total suspended particulate (TSP).
- ◆ Particulate matter with a diameter of 10 microns (µm) or less (PM₁₀).
- ◆ Particulate matter with a diameter of 2.5 µm or less (PM_{2.5}).
- ◆ Greenhouse Gas (GHG).
- ◆ Other air pollutants under other national or territorial regulations such as the National Pollutant Release Inventory (NPRI) and Greenhouse Gas Reporting Program (GHGRP), as prescribed. The annual report will confirm if reporting is required for the NPRI or GHGRP for the respective reporting year.

With the implementation nationwide use of ultra-low sulphur diesel fuel, sulphur dioxide (SO₂) emissions are assumed to be negligible, therefore SO₂ is not included in this AQMMP.

3. IMPLEMENTATION

The November 2015 version of the document was developed based on baseline data collected between 2011 to 2013 for the FEIS and input received during the Environmental Assessment process and Terms and Conditions outlined in the NIRB Project Certificate No. 007. Updates to the plan were later made to address stakeholder feedback and to reflect current operations (see Document History presented after the cover page).

This Plan will continue to be developed and implemented from Project construction through to Closure. Air quality management will be tracked, reviewed, and updated through ongoing maintenance of the Plan. Significance criteria have been developed that assist in identifying priority areas, management criteria and activity-specific mitigation measures. Future updates will continue to incorporate relevant feedback from review by stakeholders.

Monitoring (e.g., continuous, etc., examples) will be the principal mechanism by which the effectiveness of this Plan is determined. In accordance with the Project Certificate, annual reporting of monitoring results will be provided to the NIRB.

Operational control is facilitated through the contractor job-specific standard operating procedures (SOP) work instructions, on-the-job instruction, tailgate meetings where required, contract requirements, and service agreements. The effectiveness of physical operational control will be reviewed according to preventative maintenance and review procedures and schedules.

3.1 RELATIONSHIP TO OTHER MANAGEMENT PLANS

This Plan is intended for use in conjunction with the following Plans:

- ◆ The Incineration Management Plan (Sabina 2019)
- ◆ The Vegetation Monitoring Plan (Sabina 2020)

4. APPLICABLE LEGISLATION AND GUIDELINES

4.1 AIR QUALITY

Canada's federal, provincial, and territorial governments have established ambient air quality thresholds for criteria air contaminants (CAC) that are intended to ensure long-term protection of public health and the environment. The Nunavut Ambient Air Quality Standards (NAAQS) were updated by the Government of Nunavut Department of Environment (ENV) in 2023 to match the Canadian Council of Ministers of the Environment (CCME) Canadian Ambient Air Quality Standards (CAAQS) (ENV 2023). The CAAQS have thresholds for PM_{2.5}, NO₂, SO₂, and ozone (O₃), and include a statistical form for the standards which varies between contaminants and averaging periods. For example, the statistical form for 1-hour NO₂ CAAQS is a 3-year average of the annual 98th percentile of daily maximum 1-hour concentrations. It is important to note, the CAAQS were developed for regional airshed management, not for assessing industrial operation fence-line concentrations.

To assess the changes to air quality from the Project's emission sources, the previous 2011 version of the NAAQS for NO₂, O₃, TSP and PM_{2.5} (ENV 2011), which were used to assess the Project's effects in the FEIS, are more applicable. The 2011 NAAQS are also used in other Nunavut air quality management plans (e.g., Baffinland 2021 and Agnico Eagle 2020).

There are no air quality standards for PM₁₀ nor dustfall in Nunavut, therefore criteria from other jurisdictions in Canada are used instead for these parameters. For PM₁₀, the British Columbia Ministry of Environment and Parks air quality objective (BC MOEP 2021) are used, and for dustfall, the Alberta Ambient Air Quality Guidelines (AAQGL 2024) are used. Note that the fixed portion (non-organic) of dustfall which is caused by mechanical processes is of greater interest than total dustfall (fixed plus organic constituents such as pollen).

Table 4.1-1 summarizes the ambient air quality standards and guidelines relevant to the Project.

Table 4.1-1: Relevant Ambient Air Quality Standards and Guidelines

Contaminant	Averaging Period	NAAQS and CAAQS ^(a)	Previous NAAQS ^(b)	Air Quality Criteria from Other Jurisdictions
Nitrogen dioxide (NO ₂)	1-hour	42 ppb ^(c)	213 ppb	—
	24-hour	—	106 ppb	—
	Annual	12 ppb	32 ppb	—
Coarse Particulate Matter (PM ₁₀)	24-hour	—	—	50 ^(d)
Total Suspended Particulate (TSP)	24-hour	—	120 µg/m ³	—
	Annual	—	60 µg/m ^{3(e)}	—

Fine Particulate Matter (PM _{2.5})	24-hour	27 µg/m ^{3(f)}	30 µg/m ³	–
	Annual	8 µg/m ^{3(g)}	–	–
Dust deposition	30-day	–	–	53 (158) ^(h)

Notes:

“–” = no applicable standard; “CAAQS” = Canadian Ambient Air Quality Standards; “NAAQS” = Nunavut Ambient Air Quality Standards.

^a The NAAQS and CAAQS 2025 standards (CCME 2025; ENV 2023).

^b The 2011 NAAQS (ENV 2011).

^c The 3-year average of the annual 98th percentile of the daily maximum 1-hour average concentrations.

^d British Columbia Air Quality Objective (BC MOEP 2021).

^e Geometric mean.

^f The 3-year average of the annual 98th percentile of the daily 24-hour average concentrations.

^g The 3-year average of the annual average of the daily 24-hour average concentrations.

^h Alberta Ambient Air Quality Guidelines for dustfall in residential and recreational areas, and industrial and commercial areas, in brackets (AEPA 2024).

4.2 GREENHOUSE GAS REPORTING PROGRAM

Facilities emitting over 10,000 tonnes (t) of carbon dioxide equivalent (CO₂e) are required to report GHG emissions annually to the Greenhouse Gas Reporting Program (GHGRP), under the jurisdiction of Canadian Environmental Protection Act, 1999 (Government of Canada 2023).

4.3 OUTPUT-BASED PRICING SYSTEM

Canada’s federal GHG pricing regulation, Output-Based Pricing System SOR/2019-266 (OBPS), is applicable in provinces and territories that do not have their own system, such as Nunavut. Industrial facilities that submit a GHGRP report exceeding 50,000 t of CO₂e for the 2014 calendar year or subsequent calendar years, are subject to the OBPS regulations, provided the primary industrial activity of the facility is specified covered in the regulations. Gold mining at the Project’s Goose Property is OBPS-applicable and has an output-based standard (OBS) of 7.71 t of CO₂e per kilogram of gold. The MLA, however, is not OBPS applicable as warehousing activities that are primarily engaged at the MLA, is not an OBPS-specified industrial activity.

4.4 NATIONAL POLLUTANT RELEASE INVENTORY

Facilities are required to report various pollutants to the National Pollutant Release Inventory (NPRI) when NPRI reporting criteria for contaminants of concern are met, under the jurisdiction of Canadian Environmental Protection Act, 1999 (Government of Canada 2025).

5. ROLES AND RESPONSIBILITIES

The General Manager is accountable for the implementation of the management, mitigation, and adaptive management aspects of this Plan and the ultimate success of the air quality protection measures. The Environment Manager is ultimately responsible for the monitoring program (Section 7) and external reporting described in this plan. The Environment Manager will also ensure any concerning results are communicated to the General Manager for the implementation of adaptive management and will ensure this Plan is reviewed and revised as needed. Moreover, record keeping of monitoring data and visual dust inspection logs is the Environment Manager's responsibility.

The Environment Manager will coordinate with various Department heads (e.g., construction, site services, mining, air traffic control, etc.) to ensure that the Plan's environmental protection measures, outlined in Section 6, are executed appropriately. It is the responsibility of the Environmental Manager to notify appropriate Department heads of conditions observed through the monitoring program that may require a management or mitigation response (e.g., additional road watering).

The Environmental Manager and the Environmental Permitting Manager, along with his/her direct reports are responsible for:

- ◆ Supporting Plan review and revision.
- ◆ Air quality monitoring.
- ◆ Internal and external reporting.
- ◆ Verifying compliance and application of adaptive management.
- ◆ Coordinating with the General Manager and Department heads to assist with the execution of the environmental protection measures presented in Section 6.

It is each Department heads' duty to ensure all staff within their operational post received the necessary training and instruction related the operation of equipment that emit air pollutants or controls air emissions (e.g., the required measures to be implemented during start-up, shut down, and emergency conditions). The Department head will maintain a statement of training requirements for each operational post and keep a record of the training received by each person whose actions may affect the environment. These documents will be made available to the regulator on request. The Department heads are also responsible for record keeping of other information regarding environmental protection measures performed under their operational post, which includes:

- ◆ Maintenance and inspection logs
- ◆ Mitigation response logs
- ◆ Blast logs
- ◆ Fuel consumption tracking

These documents will be made available to the regulator on request.

6. ENVIRONMENTAL PROTECTION MEASURES

6.1 EMISSIONS MANAGEMENT

To eliminate or reduce the potential for adverse effects on air quality during all phases of the Project, an Emissions and GHG Reduction Plan, Fugitive Dust Reduction Plan and Incineration Management Plan has been implemented. The Fugitive Dust Reduction Plan and Emissions and GHG Reduction Plan are discussed in the subsections that follow, and a summary of the Incineration Management Plan is also provided. For additional information on incineration practices refer to the stand-alone Incineration Management Plan (Sabina 2019).

6.1.1 FUGITIVE DUST REDUCTION PLAN

A Fugitive Dust Reduction Plan has been implemented to minimize fugitive dust emissions. Fugitive dust emission sources from the Project will include:

- ◆ Dust from equipment controlled using baghouses and dust collectors (e.g., crushing activities whether portable or fixed (primary/secondary crushers)).
- ◆ Fugitive dust on unpaved roads from fleet vehicles.
- ◆ Fugitive dust emissions from planes landing and departing at the Project's airstrips.
- ◆ Wind erosion emissions from the Project's stockpiles and exposed areas.
- ◆ Other fugitive dust emissions from construction and mining activities such as bulldozing, grading, drilling, material transfers (i.e., loading and unloading), and blasting.

Adherence to all permits, authorizations and approvals including NIRB Project Certificate No. 007, Term and Condition #3 is required to maintain the Fugitive Dust Reduction Plan.

The specific measures of the Fugitive Dust Reduction Plan are presented in Table 6.1-1.

Table 6.1-1: Fugitive Dust Reduction Plan

Category	Measures
Baghouses and Dust Collectors	◆ Routine inspections of baghouses and dust collectors and maintenance logs. ◆ Training for all workers involved in the operation of equipment that use baghouses and/or dust collectors to control dust emissions, such as crushers and conveyors.
Road Dust	◆ Ensuring all-weather roads (local site roads) are regularly compacted and kept in good repair. ◆ Ensuring vehicles will be driven at designated speeds on site roads. ◆ Temporarily reducing speed limits when conditions have deteriorated based on visible dust. ◆ Use of large haul trucks for ore and waste transport to minimize the number of trips required between the source and destination. ◆ Application of water and/or approved chemical dust suppressants along the highest-use segment of roads.

	◆ Regular monitoring of dust suppression effectiveness using visual inspection logs. ◆ Training for all workers involved in the application of dust suppressants (i.e., road watering and chemical dust suppressants).
Airstrip	◆ Ensuring the airstrip is regularly compacted and kept in good repair. ◆ Application of water and/or approved chemical dust suppressants at the airstrip. ◆ Regular monitoring of dust suppression effectiveness using visual inspection logs. ◆ Training for all workers involved in the application of dust suppressants (i.e., road watering and chemical dust suppressants).
Wind Erosion	◆ Application of dust suppression (i.e., watering and/or chemical dust suppressant) as needed when topping or capping the landfill, and to problem stockpiles. ◆ Erection of windbreaks or fences around known problem exposed areas or stockpiles to limit dust released via wind erosion. ◆ Regular monitoring of dust suppression effectiveness. ◆ Training for all workers involved in the application of dust suppressants (i.e., road watering and chemical dust suppressants).
Other Construction and Mining Activities ^(a)	◆ Minimize the discharge heights from the crushers onto conveyers, and conveyors onto stockpiles. In addition, the discharge from crushers onto conveyors or into other equipment should be enclosed as far as is practicable (e.g., free fall of materials from conveyors carrying material should be fitted with a full hood such as a plastic chute where possible). ◆ Erection of windbreaks or fences around known problem areas to limit the dispersion of dust emissions from equipment, or activities likely to generate dust. ◆ Avoid in-pit blasting on low wind speed days. ◆ Blast more frequently using smaller blast areas to minimize the amount of dust released per blast. ◆ Regular monitoring of dust suppression effectiveness.

Notes:

^a Includes bulldozing, grading, drilling, material transfers (i.e., loading and unloading), and blasting.

The use of water sprays or dust suppression fluids compatible with the ambient air temperatures to suppress dust generation will be used to control fugitive dust emissions from sources such as the crushing facility and unpaved roads. Approved dust suppressants that are presented in the Environmental Guideline – Dust Suppressants (ENV 2024) and do not require prior approval. Calcium chloride, DL-10, EK-35 and Dust Stop are all approved dust suppressants. Should an alternative suppressant be used, an approval request will be made to ENV no later than 90 calendar days before it is scheduled to be used.

Prior to use of a chemical dust suppressant, notification will be provided to the ENV (specifically, the Environmental Protection Division of the Department of Environment), the landowner and the NIRB. Application of approved dust suppressants will follow the guidelines in the Nunavut Environmental

Guideline for Dust Suppression (ENV 2024). Application will be monitored to ensure there is no pooling or runoff and that the product is incorporated into the road surface. If a product not currently approved for use in Nunavut will be used, an application for approval will be made to the ENV following the requirements for new product approval which are outlined in the Nunavut Environmental Guideline for Dust Suppression (ENV 2024).

6.1.2 EMISSIONS AND GHG REDUCTION PLAN

An Emissions and GHG Reduction Plan has been implemented to reduce CAC and GHG emission from the Project, including from sources such as:

- ◆ Combustion stacks, such as generators and incinerators.
- ◆ Equipment exhaust emissions from mine fleet vehicles such as dozers, haul trucks, graders, and other mobile fleet equipment.
- ◆ Explosives.

The specific measures of the Emissions and GHG Reduction Plan are presented in Table 6.1-1.

Table 6.1-2:Emissions and GHG Reduction Plan Measures

Category	Sources	Measures
Combustion Stacks	◆ Generators ◆ Heaters ◆ Kilns ◆ Waste oil burners ◆ Incinerators	◆ Procurement policies to identify fuel and equipment specifications. ◆ Implementation of energy efficiency and heat recovery measures. ◆ Preferentially selecting equipment with low emissions that meet latest applicable Canada emissions standards and guidelines, where economically and reasonably feasible. ◆ Regular servicing of equipment to maintain fuel efficiency. ◆ Ensure waste oil burner units are equipped with a settling tank and filter system for particulate removal from the waste oil. ◆ Routine inspections and maintenance logs. ◆ Fuel/energy consumption tracking. ◆ Training for all workers involved in the operation of combustion equipment (e.g., required measures to be implemented during start-up, shut down, and emergency conditions).
Mine Fleet	◆ Haul trucks ◆ Dozers ◆ Shovels ◆ Excavators ◆ Various other supporting equipment	◆ Procurement policies to identify fuel and equipment specifications. ◆ Preferentially selecting equipment with low emissions that meet latest applicable Canada emissions standards and guidelines, where economically and reasonably feasible. ◆ Ensuring vehicles are driven at designated speeds on site roads.

		◆ Use of large haul trucks for ore and waste transport to minimize the number of trips required between the source and the destination. ◆ Regular servicing of equipment to maintain fuel efficiency. ◆ Routine inspections and maintenance logs. ◆ Fuel consumption tracking. ◆ Training for all workers involved in the operation of mine fleet equipment (e.g., required measures to maintain mine fleet emission control systems).
Explosives	◆ Blasting	◆ Procurement policies to identify appropriate explosive materials and devices. ◆ Blast logs that track explosive use. ◆ Training for all workers involved in blasting.

Adherence to all permits, authorizations and approvals, including NIRB Project Certificate No.007, Term and Condition #6 wherein B2Gold is required to maintain a GHG Reduction Plan, which is provided above as the items to increase efficiency and reduce GHG combustion emissions. Note that Term and Condition #6 includes an estimate of the baseline GHG emissions from the Project. Baseline GHG emissions are insignificant from fuel combustion at the existing exploration camp and associated infrastructure in the context of Project GHG emissions during construction and operations, so are considered to be “nil”.

6.1.3 INCINERATION MANAGEMENT PLAN

The 2019 Incineration Management Plan was developed to minimize emissions from incineration activities (Sabina 2019). The Incineration Management Plan includes the following:

- ◆ Installation of incinerators that comply with Nunavut standards (ENV 2023), Canada-Wide Standards for Dioxins and Furans (CCME 2001) and Canada-Wide Standards for Mercury emissions (CCME 2000).
- ◆ Stack testing of permanent incinerators within the first year of operations and then every third year to ensure compliance with standards.
- ◆ Operation of the incinerators include the following measures:
 - ◇ A waste segregation and recycling program (i.e., materials that are unsuitable for incineration, such as chlorinated plastics, will be diverted to alternate waste disposal facilities).
 - ◇ Training of personnel in incinerator operations including how to minimize pollutant emissions during operation of the incinerator.

The stand-alone Incineration Management Plan also addresses the NIRB Project Certificate No.007, Term and Condition #4, wherein B2Gold shall develop and implement an Incineration Management Plan that demonstrates consideration for the recommendations provided in the Environment and Climate Canada (ECCCC) Technical Document for Batch Waste Incineration (ECCC 2010).

6.2 SUMMARY

A summary of the various Project phases and relevant emissions management plan is shown in Table 6.2-1.

Table 6.2-1: Mitigation Schedule

Mitigation Plan	Baseline and Pre-construction	Construction	Operation	Temporary Closure	Care and Maintenance	Reclamation and Closure	Post-Closure
Emissions and GHG Reduction Plan	Not considered necessary	Required	Required	Required	Required	Required	Not considered necessary
Fugitive Dust Reduction Plan	Not considered necessary	Required	Required	Required	Required	Required	Not considered necessary
Incineration Management Plan	Required	Required	Required	Required	Required	Required	Not considered necessary

7. MONITORING PROGRAM

7.1 METHODS AND LOCATION SUMMARY

The Air Quality Monitoring Program consists of the following components:

- ◆ Passive air quality monitoring of NO₂ and dustfall deposition.
- ◆ Continuous air quality monitoring of suspended particulate, nitric oxide (NO), and NO₂.
- ◆ Meteorological monitoring.
- ◆ Incinerator stack emissions testing.
- ◆ Emissions monitoring (e.g., annual fuel use for mobile and stationary equipment and fugitive emissions estimation) to assist in quantification for regulatory reporting (i.e., NPRI, GHGRP).

The design, installation, operation and certification of ambient air quality monitoring programs will comply with the principles contained in the CCME National Air Pollution Surveillance Program, Ambient Air Monitoring and Quality Assurance and Quality Control Guidelines (CCME 2019). Current air quality and meteorological monitoring stations are summarized in Table 7.1-1 and shown in Figure 7.1-1. The following sections provide further details of these monitoring components. Table 7.1-2 shows the monitoring schedule for emissions monitoring. Monitoring is not considered necessary during pre-construction, care and maintenance, or closure phases, as there are not expected to be significant air emissions during these phases.

The air quality monitoring program has been designed to comply with NIRB Project Certificate No.007, Term and Condition #1 and where appropriate #2 through #8. In accordance with NIRB Project Certificate No.007 Term and Condition #1d, dustfall impacts are also monitored through an evaluation of lichen tissue metal concentrations. Lichen surveys will be conducted every three years during construction and operation, see the Vegetation Monitoring Plan (Sabina 2020) for more details on lichen surveys.

Baseline air quality information from 2011 to 2013 used to support the FEIS has not been repeated in this Plan but can be found in the Back River Project FEIS and will be used, where appropriate, in the interpretation of monitoring program results. Baseline FEIS station locations are presented in Figure 7.1-2 for reference purposes.

Table 7.1-1: Back River Project Air Quality and Meteorological Monitoring Stations

Monitoring Station Name	Parameters	Description	UTM Zone 13N ^(a)	
			Easting (m)	Northing (m)
Goose-REF	◆ Dustfall ◆ Passive NO₂	Far field reference station located near the north-northwest edge of Goose Property Area	428,746	7,275,188
Goose-0m	◆ Dustfall ◆ Passive NO₂	Near-field station located immediately adjacent (i.e., 0 m) to the southeast side of the Goose Plant Site pad.	430,683	7,269,453
Goose-150m	◆ Dustfall ◆ Passive NO₂	Near-field station located approximately 150 m southeast of Goose 0m Station.	430,860	7,269,361
Goose-300m	◆ Dustfall ◆ Passive NO₂	Near-field station located approximately 300 m southeast of Goose 0m Station.	430,965	7,269,254
Goose-600m	◆ Dustfall ◆ Passive NO₂	Near-field station located approximately 600 m southeast of Goose 0m Station.	431,176	7,269,040
MLA-0m	◆ Dustfall ◆ Passive NO₂	Near-field station located approximately 0 m southeast of the MLA tank pad.	381,295	7,393,652
MLA-150m	◆ Dustfall ◆ Passive NO₂	Near-field station located approximately 150 m southeast of the MLA tank pad.	381,429	7,393,586
Goose AQ Station	◆ Continuous PM ◆ Continuous NO and NO₂	Continuous air quality monitoring station, located near the southwest corner of the Goose Main Camp pad.	429,892	7,269,845
Hill Meteorological Station	◆ Meteorology ◆ Continuous NO and NO₂ ◆ Continuous PM	10 m tall meteorological tower located near Goose Exploration Camp that includes continuous air quality monitoring equipment.	434,167	7,269,878

Lake Micro-meteorological Station ^(a)	◆ Meteorology	2 m tripod station located near the shore of Goose Lake by Goose Exploration Camp for supporting hydrology program data needs.	434,217	7,269,938
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Notes:

“13N” = zone 13 north; m = metres; “NO” = nitric oxide; “NO₂” = nitrogen dioxide; “PM” = particulate matter; “UTM” = Universal Transverse Mercator coordinate system.

^a Location of the Lake Micro-meteorological Station is approximate and is subject to minor change annually as the station is removed in the fall and redeployed each spring. The UTM coordinates provided is the approximate location of the station during summer months.

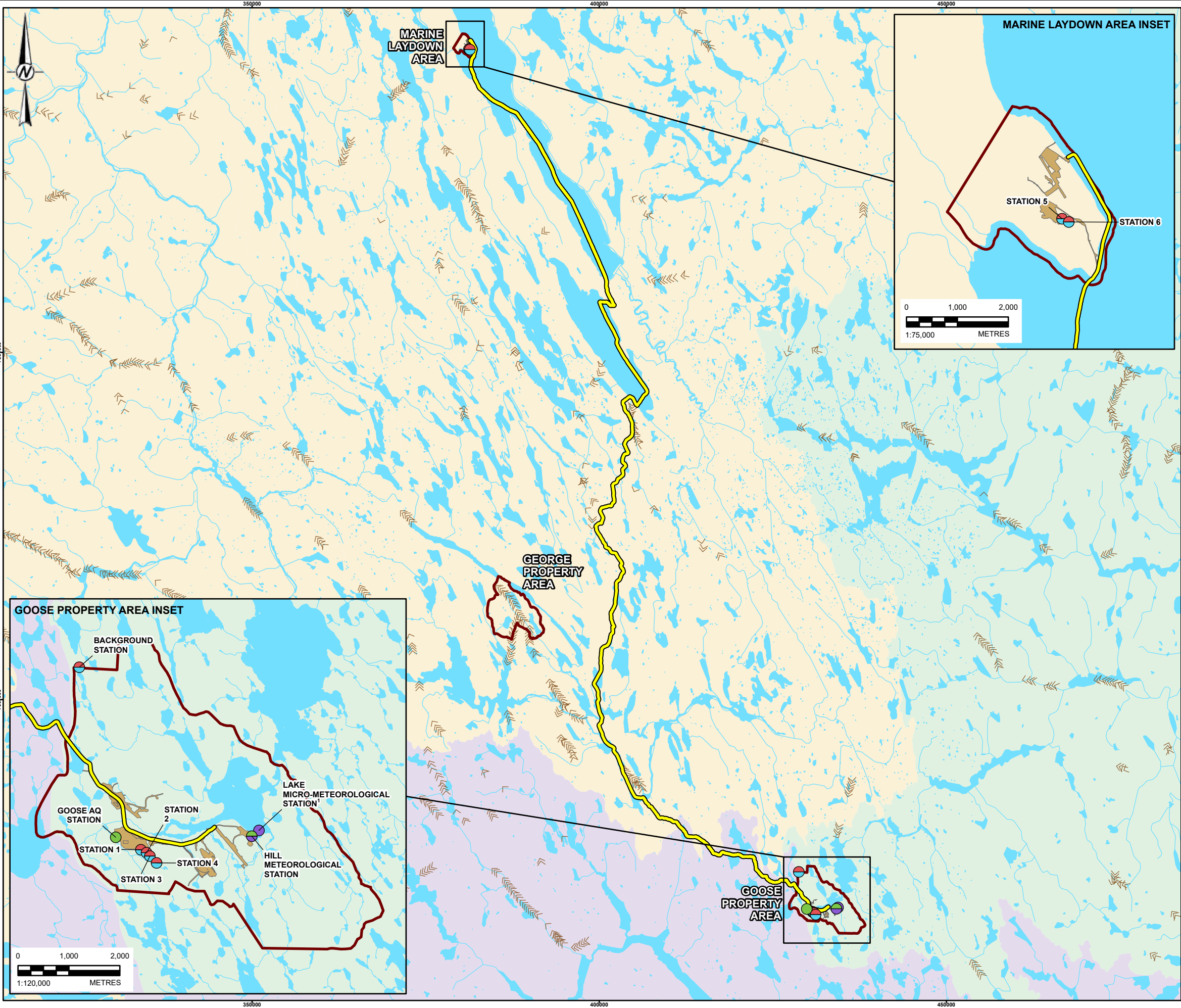
Table 7.1-2: Air Quality Monitoring Schedule

Monitoring Program	Pre-construction	Construction	Operation	Temporary Closure	Care and Maintenance	Reclamation and Closure	Post-Closure
Passive: ◆ NO ₂ ◆ Dustfall	No	Yes	Yes	Monitoring is not considered necessary; however, the plan will be re-evaluated as required.			
Continuous: ◆ PM ◆ NO, NO ₂	No	Yes	Yes				
Meteorological	Yes	Yes	Yes				
Incinerator Stack Testing	No	within the first year of operations	within the first year of operations and then every third year				
NPRI	No	Yes	Yes	Yes ^(a)	Yes ^(a)	Yes ^(a)	No
GHGRP	No	Yes ^(a)	Yes	Yes ^(a)	Yes ^(a)	Yes ^(a)	No
OBPS	No	No	Yes	Yes ^(a)	No	No	No

Notes:

“GHGRP” = Greenhouse Gas Reporting Program; “NO” = nitric oxide; “NO₂” = nitrogen dioxide; “NPRI” = National Pollutant Release Inventory; “OBPS” = Output-based Pricing System; “PM” = particulate matter.

^a Internal assessment, and, if required, annual reporting through national reporting portals.



LEGEND

- ESKER
- WINTER ICE ROAD
- WATERCOURSE
- JUNE 2024 AS-BUILT FOOTPRINT
- POTENTIAL DEVELOPMENT AREA
- WATERBODY

WATERSHED

- BATHURST INLET - BURNSIDE RIVER
- QUEEN MAUD GULF - ELLICE RIVER
- UPPER BACK RIVER

CURRENT MONITORING STATION

- CONTINUOUS GAS MONITORING STATION
- CURRENT DUSTFALL MONITORING STATION
- CURRENT PASSIVE MONITORING STATION
- METEOROLOGICAL STATION

NOTE(S)

1. LOCATION IS APPROXIMATE AND IS SUBJECT TO MINOR CHANGES ANNUALLY AS THE STATION IS REMOVED IN THE FALL AND REDEPLOYED EACH SPRING

REFERENCE(S)

PROJECT DATA SUPPLIED BY CLIENT. ESKER AND HYDROGRAPHY DATA OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED. DATUM: NAD83 PROJECTION: UTM ZONE 13

CLIENT

B2GOLD BACK RIVER CORP.

PROJECT

BACK RIVER PROJECT – AIR QUALITY MONITORING MANAGEMENT PLAN

TITLE

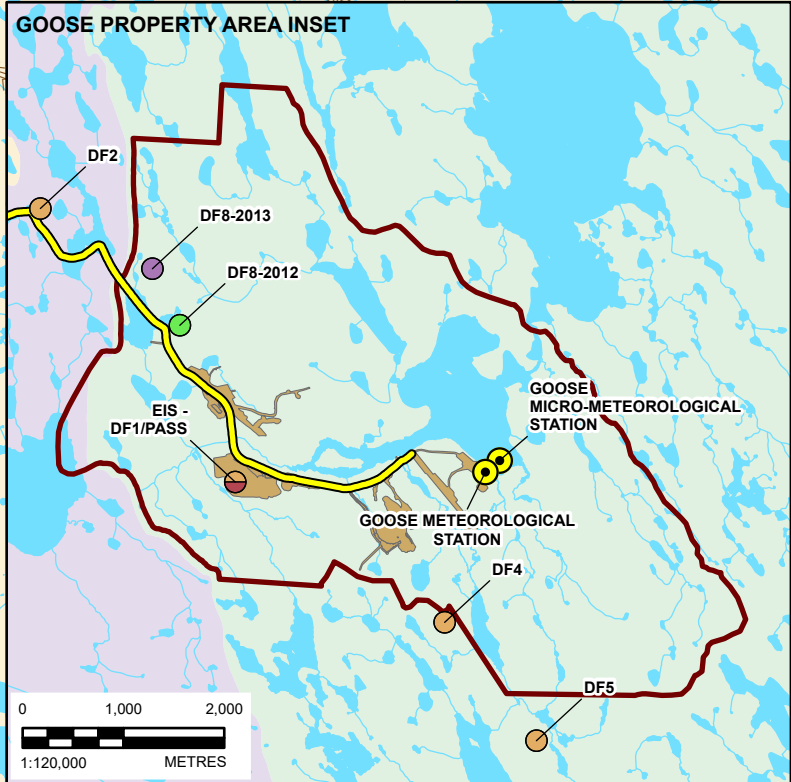
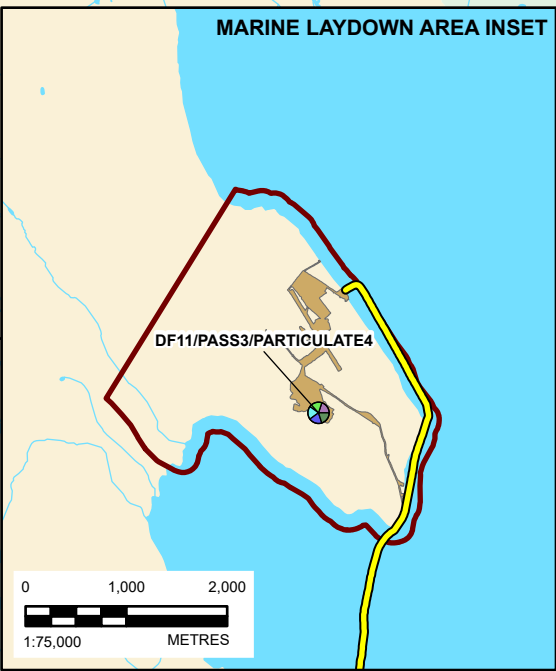
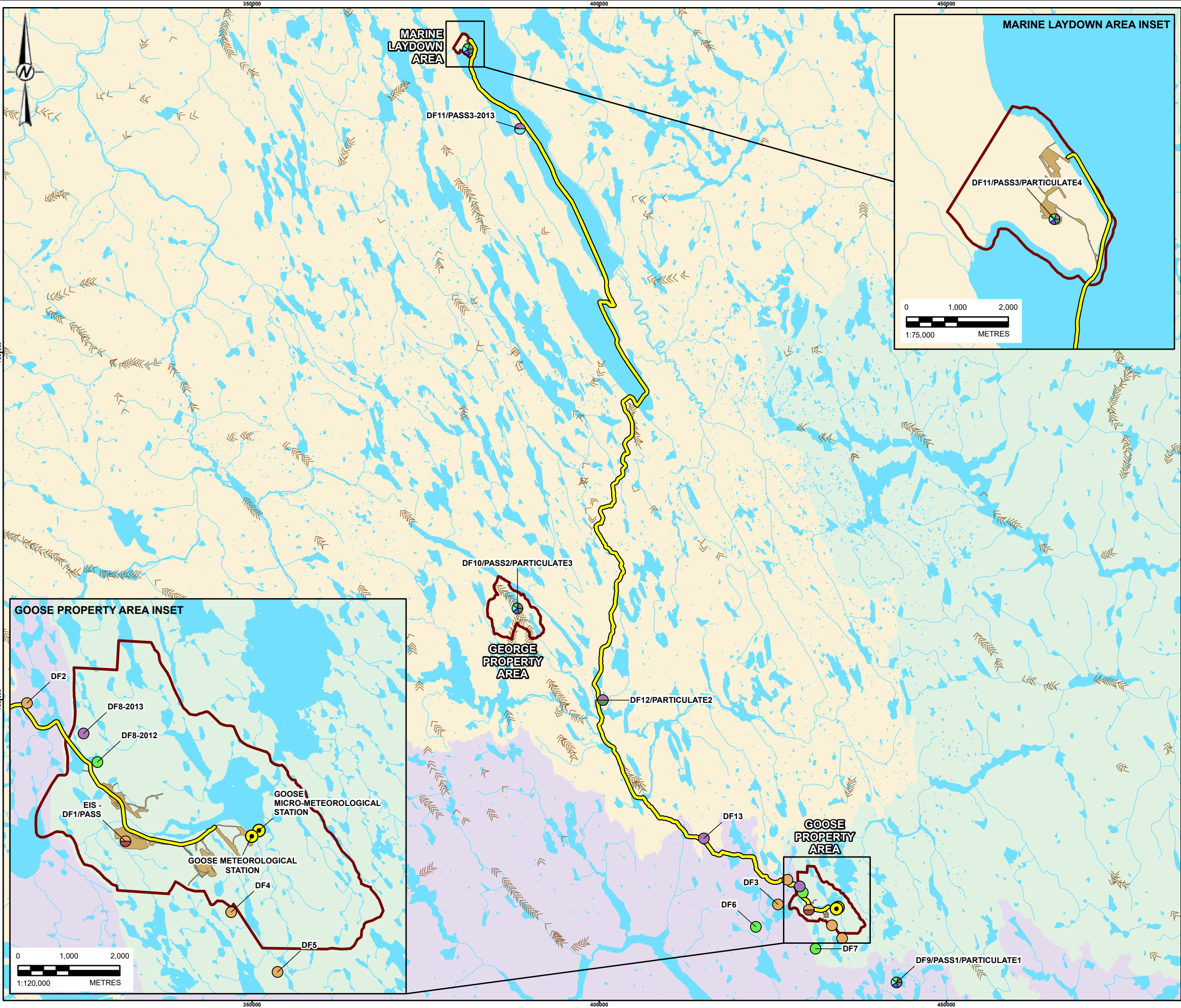
CURRENT METEOROLOGICAL STATIONS AND AIR QUALITY MONITORING STATIONS

CONSULTANT	YYYY-MM-DD	2026-03-20
	DESIGNED	SC/TK
	PREPARED	SP
	REVIEWED	TK
	APPROVED	CM

PROJECT NO.	CONTROL	REV.	FIGURE
CA0054386.2807		0	7.1-1

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LEGEND

- METEOROLOGICAL STATION
- ESKER
- WATERCOURSE
- WINTER ICE ROAD
- JUNE 2024 AS-BUILT FOOTPRINT
- POTENTIAL DEVELOPMENT AREA
- WATERBODY

WATERSHED

- BATHURST INLET - BURNSIDE RIVER
- QUEEN MAUD GULF - ELLICE RIVER
- UPPER BACK RIVER

EIS MONITORING STATION

- DUSTFALL - 2013
- DUSTFALL - 2012
- DUSTFALL - 2011
- PASSIVE AIR QUALITY - 2013
- PASSIVE AIR QUALITY - 2012
- PASSIVE AIR QUALITY - 2011
- PARTICULATE - 2013

0 1,000 2,000
1:75,000 METRES

0 15 30
1:550,000 KILOMETRES

REFERENCE(S)

PROJECT DATA SUPPLIED BY CLIENT. ESKER AND HYDROGRAPHY DATA OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED. DATUM: NAD83 PROJECTION: UTM ZONE 13

CLIENT

B2GOLD BACK RIVER CORP.

PROJECT

BACK RIVER PROJECT – AIR QUALITY MONITORING MANAGEMENT PLAN

TITLE

EIS METEOROLOGICAL STATIONS AND AIR QUALITY MONITORING STATIONS

CONSULTANT	YYYY-MM-DD	2026-03-20
	DESIGNED	SC/TK
	PREPARED	SP
	REVIEWED	TK
	APPROVED	CM

PROJECT NO.	CONTROL	REV.	FIGURE
CA0054386.2807		0	7.1-2

7.2 PASSIVE AIR QUALITY MONITORING

The passive air quality monitoring program measures ambient NO₂ concentrations and dust deposition rates using passive techniques near the Project during construction and operation. Project emissions of NO₂ result from combustion sources (e.g., mobile equipment, generators, waste incineration), whereas Project related dust deposition are generated by activities such as vehicle movements, blasting, and wind erosion of rock piles.

7.2.1 SAMPLING METHODS

7.2.1.1 PASSIVE NO₂

To facilitate comparison with baseline data, a Passive Air Sampling System (PASS) will be used to monitor NO₂. The PASS monitors NO₂ in the ambient air through the process of diffusion across a permeable membrane and can detect very low concentrations of the gas. The sample media are deployed in the field beneath protective shelters for a period of approximately 30 days. Following the exposure period the samples are retrieved and sent to the laboratory for analysis along with meteorological data including air temperature, wind speed and relative humidity, to allow the ambient air concentration of the compound over the sampling period to be determined.

7.2.1.2 DUSTFALL

Dustfall collection is a passive monitoring method which provides a measure of particulates that would be directly deposited onto vegetation or soil. A dustfall jar with a known opening area is exposed in the field to collect ambient dustfall. The jars are then sent to a laboratory for analysis after their exposure period.

The dustfall monitoring program was developed in accordance with sampling method ASTM D1739-98 (ASTM Standard D1739-98 Reapproved 2010). The containers are installed on a tripod or pole and are exposed to the atmosphere for approximately 30 days during the summer months. Winter dustfall monitoring is difficult in northern climates and dustfall is minimal in the winter. As such, longer dustfall monitoring periods (i.e., greater than 30 days) may be used during the winter on occasion.

Samples are sent to the laboratory for analysis of total and fixed particulate matter. Each dustfall station is comprised of two sample jars. One of the containers is analysed for particulates, while the other is analysed for metals. The containers are partially filled with deionized water and algaecide to prevent growth of algae in the containers.

7.2.2 SAMPLE LOCATIONS

Passive NO₂ and dustfall monitoring will be carried out at four near field on-site stations installed in a transect at Goose Property Area, and two near field on-site stations at MLA. Additionally, monitoring will also be conducted at a far field reference station located near the edge of the Goose Project Development Area (PDA), further away from the Project activities, for the purpose of measuring background concentrations. These stations will be located per Project activities and the predictions of highest air quality effects from the FEIS. Stations may be moved periodically during Project development

to best monitor the Project component of highest activity and to facilitate comparison with predictions. Current station locations are summarized in Table 7.1-1 and shown in Figure 7.1-1.

Goose on-site transect stations (Goose-0m, Goose-150m, Goose-300m, Goose-600m) and reference station (Goose-REF) were installed in 2021 and MLA transect stations (MLA-0m, MLA-150m) were installed in 2025. When siting the stations, ambient wind conditions were considered to optimize the duration where transect stations are downwind from Project activities and the reference station is upwind of Project activities. Moreover, site accessibility and FEIS predictions were also considered when siting the stations.

At Goose, where winds are often from the north, north-northwest, and west based on the FEIS Volume 4 Figure 3.1-6, the transect stations were placed south of the ore stockpile pad, which is southeast of the Goose Plant Site area. The first station in the transect was installed adjacent to the ore stockpile pad, and the other stations were installed 150 m, 300 m, and 600 m away in the southeast direction. The Goose reference station was installed five kilometres north of Goose Main Camp near the edge of Goose PDA.

MLA stations were installed southeast of the MLA tank pad, with one station located right beside the pad and the other located a further 150 m away towards the southeast. The installed stations are expected to be generally downwind of MLA activities based on baseline Bathurst Inlet wind data summarized in FEIS Volume 4 Figure 3.1-7.

An additional passive NO₂ and dustfall monitoring transect northwest of the Goose Plant Site Area near Llama or Umwelt pit will be added in 2026 with the intended purpose of monitoring emissions closer to the open-pit mining operations which were predicted in the FEIS to produce greater changes in ambient air quality relative to other Project sources.

7.2.3 DATA ANALYSIS

The passive NO₂ sampling will provide an average concentration for each monthly period deployed, and the dustfall monitoring provides a 30-day average mass of deposited particulate. Results will be compared to air quality standards and guidelines (Table 4.1-1) to assess compliance, noting the following:

- ◆ There are no relevant monthly ambient NO₂ criteria, therefore, monthly NO₂ sampling results will be conservatively compared to the annual NAAQS/CCME annual standards, noting that individual sub-annual results may exceed the annual standard without compromising the full-year monitoring results' ability to meet the annual standard.
- ◆ Nunavut does not have dustfall standards, therefore, the Alberta Ambient Air Quality Guidelines for dustfall will be used instead (AEPA 2024).
- ◆ Care should be taken in comparing dustfall with modelled TSP deposition predictions, as dustfall is a more conservative measurement which includes size fractions larger than TSP.

Temporal trends of ambient NO₂ concentrations and dustfall rates will also be determined, with consideration for meteorological conditions.

The monitoring results will be reported in the annual report and a comparison with air quality standards and FEIS predictions will be included. If results should indicate levels above predictions or above compliance the annual criteria values, then the monitoring data will be used to provide feedback to

modify the air quality management procedures incorporated at the site. This may consist of additional investigation and/or further mitigative efforts.

7.3 CONTINUOUS AIR QUALITY MONITORING

Continuous particulate, NO and NO₂ monitoring began during the construction phase in December 2024, after line power required for monitoring was available. Suspended particulate matter, NO and NO₂ are expected because of mine activities such as fuel combustion, movement of vehicles, crushing, blasting, wind erosion, bulk handling and storage and other associated mineral processing and construction activities.

7.3.1 MONITORING METHODS

Continuous air quality monitoring will be conducted using a Teledyne API T640 PM Mass Monitor (T640) and two Kunak Air Lite (Kunak) monitors. Both the T640 and Kunaks monitor PM₁₀ and PM_{2.5} concentrations. The T640 firmware can also be updated to enable TSP monitoring as well. In addition to PM monitoring, the Kunaks will also be fitted with cartridges for NO and NO₂ monitoring. The T640 will need to be installed in a climate-controlled shelter, whereas the Kunaks need to be deployed outside. Both monitors will need line power to operate reliably.

7.3.2 MONITORING LOCATIONS

Continuous air quality monitoring equipment for suspended particulate matter, NO, and NO₂ will be measured at the Goose Property at an appropriate on-site location based on the FEIS predictions, site accessibility, and feasible access to line power supply. Monitoring will be carried out during the construction and operation of the Project. The location of the station may change with Project activity depending on which pit is operational, however, given that the station requires accessible line power and a shelter, mobility of the station will be limited. The exact location of the site will be selected in the field. Current station locations are summarized in Table 7.1-1 and shown in Figure 7.1-1.

A T640 and Kunak was installed during the construction phase at the Goose AQ Station in December 2024, which is located near the southwest corner of the Goose Main Camp pad. Additionally, another Kunak was also installed at the Hill Meteorological Station primarily used for meteorological monitoring at Goose Exploration Camp.

7.3.3 DATA ANALYSIS

The continuous air quality monitoring program will provide continuous concentration measurements for suspended particulate matter, NO, and NO₂. The concentrations will be analyzed by comparing them to relevant standards (Table 4.1-1) as well as Project FEIS predictions, noting the following:

- ◆ The current NAAQS and CAAQS for hourly NO₂, daily PM_{2.5}, and annual PM_{2.5} require three years of monitoring data to properly compare per the statistical form. See the Table 4.1-1 notes for more information.
- ◆ Nunavut does not have PM₁₀ standards, therefore, the British Columbia Ministry of Environment and Parks air quality objective (BC MOEP 2021) will be used.

Temporal trends of ambient particulate matter, NO, and NO₂ will also be determined, with consideration for meteorological conditions. The monitoring data will also be used to provide feedback to modify the dust and air quality management procedures incorporated at the Project, if required.

7.4 METEOROLOGICAL MONITORING PROGRAM

There are two operational meteorological stations both located at Goose Lake. The 10 m tall Hill meteorological Station will continuously measure hourly meteorological parameters such as temperature, wind speed, wind direction, relative humidity, solar radiation and rainfall. The 2 m tall Lake Micro-meteorological Station, which supports the hydrology program, measures net radiation over Goose Lake for estimating evaporation rates during the open water season.

Meteorological monitoring will occur at these stations during pre-construction, construction and operation of the Project. The locations of the meteorological stations are summarized in Table 7.1-1 and shown in Figure 7.1-1.

7.5 AIR EMISSION ESTIMATION

Project air emissions will be quantified annually for applicable federal reporting programs (NPRI, GHGRP and OBPS). The methods used for estimation will be consistent with reporting requirements. Quantified emissions will be tracked to assess temporal trends and the effectiveness of the Emissions and GHG Reduction Plan measures (see Section 6.1.1).

8. MITIGATION AND ADAPTIVE MANAGEMENT

One purpose of the AQMMP is to document the mitigation measures that will be implemented on site and to outline the monitoring programs that will be in place to confirm success of the mitigation. The plan is intended to ensure air quality levels remain within FEIS predictions and/or applicable standards. Results from the monitoring programs will be reviewed annually to determine if any unanticipated trends are evident and if applicable criteria are being met. The need for any corrective actions to on-site emission management or installation of additional control measures will be determined on a case-by-case basis. Thresholds which trigger the need for response actions may include:

- ◆ Monitoring data showing concentrations greater than predictions and/or applicable standards.
- ◆ Monitoring data showing an un-anticipated significant increasing trend in contaminant concentrations.
- ◆ Issues raised by on-site staff, regulators, or local communities.

Discussions will be initiated to resolve any issues as soon as possible after the issue has been identified.

The monitoring program (Section 7) is intended to monitor the effectiveness of mitigation actions (Section 6). The results of mitigation activities will be reported in an annual report (Section 11). In addition, the results of facility-specific monitoring programs (e.g. incinerator testing) will be reported in the annual report, along with suggestions for further mitigation activities.

This circle of mitigation activities, monitoring and evaluation and new mitigation activities will adaptively manage air quality issues identified and arising because of the Project. For example, if dustfall shows an increasing trend, dust suppression improvement and/or road use modification options will be considered. These may include alterations to dust suppressant application rate, frequency, methodology or type, and/or modifications of road maintenance protocols, and/or reductions in road usage through personnel awareness or use of alternate vehicles.

Adaptive management response will also be triggered in real-time, based on site observations. This includes observations of unusual amounts of visible emissions from the incinerator (which may indicate inefficient incinerator performance), or unusual amounts of dust generated along roadways, airstrip or related to crushing activities (which may indicate dust suppression or alternate mitigation actions are needed). Such observances will trigger application of dust suppressants or a re-assessment of operating conditions by relevant personnel (e.g. incinerator or crusher operator) to re-optimize system performance.

This plan is designed to be adaptive, effective, and achievable in both the short and long term, and includes measurable objectives that will be evaluated in the monitoring program (Section 7). The Management Plan is a “living document.” Components of the AQMMP may need to be revised over the life of the Project, based on field conditions, regulatory changes and/or technological advances. Any modifications made to the overall Plan will be communicated to regulatory authorities where applicable.

9. ASSESSMENT AND CORRECTIVE ACTION

Assessment and corrective action evaluate the predicted effects of the Project and evaluates the compliance of the Project with appropriate guidance. Evaluation of predicted effects will be conducted through facility-specific monitoring (Section 7). The monitoring, quality control, and reporting procedures detailed in this plan are used to:

- ◆ Assess the effectiveness of mitigation and management measures.
- ◆ Identify Project effects requiring further mitigation efforts.
- ◆ Comply with requests from regulators and stakeholders.
- ◆ Adapt to changes in the regulations or the Project.

10. RECORD KEEPING

Record keeping of the following environmental protection measures and monitoring data will be conducted by B2Gold:

- ◆ Maintenance and inspection logs of equipment that emit air pollutants or controls air emissions.
- ◆ Visual fugitive dust inspection logs.
- ◆ Fuel consumption and operation information of stationary combustion and mine fleet equipment.
- ◆ Blasting logs.
- ◆ Air quality monitoring data.
- ◆ Air emission estimation data.
- ◆ Incinerator stack testing results.

Data will be entered into suitable electronic databases, checked for quality control (see Section 13) and stored by B2Gold. Data summaries will be appended to the annual AQMMP report and the report will be transferred for storage with the Government of Nunavut Department of Environment.

11. ENVIRONMENTAL REPORTING

AQMMP monitoring results will be reported annually to the NIRB, and will include information on:

- ◆ Annual meteorological monitoring, including details on ambient temperature, wind velocities and patterns, precipitation, as well as the onset of seasonal freeze and thaw cycle. Extreme and outlying weather events will also be summarized.
- ◆ Annual air quality monitoring, including both passive sampling monitoring results (NO₂ and dustfall) and continuous monitoring results (PM, NO, and NO₂). Any exceedances of predictions or applicable guidelines and regulations will be identified, and an explanation and response actions will be outlined.
- ◆ Annual GHG emission estimates including the estimation methodologies used to quantify emissions. A discussion on trends in annual GHG emissions will also be reported.
- ◆ Incinerator stack testing results (when applicable).
- ◆ Lichen survey results (when applicable).

GHGRP, NPRI and OBPS reporting will be performed annually, when applicable, following federal reporting procedures. Any incinerator stack testing results will also be reported to the Nunavut Water Board in the annual report for Water Licence 2AM-BRP1831 (per Schedule B Item 10).

Any exceedances with FEIS predictions or applicable guidelines and regulations will be identified in these reports, and an explanation and response actions will be outlined.

Air quality mitigation measures will be applied in all project phases. It is not considered necessary to produce an annual monitoring report during pre-construction, care and maintenance, closure, periods of temporary closure and post closure. If significant sources are identified during these phases, reporting will be continued on an annual basis.

12. PLAN EFFECTIVENESS

The AQMMP is intended to ensure that the Project is conducted as proposed, mitigation and management measures are effective at mitigating adverse air quality effects, and relevant laws and regulations are met. As part of environmental reporting, B2Gold will make the annual report available to stakeholders. B2Gold will also conduct an annual (or as necessary) evaluation of the efficacy of mitigation and management activities and of monitoring activities using relevant methods. This Plan will be updated as needed.

13. QUALITY ASSURANCE QUALITY CONTROL

Quality assurance and quality control (QAQC) measures will be undertaken at three key stages during monitoring activities: 1) during data gathering, 2) during data entry and analysis, and 3) during reporting.

The process of data gathering in the field will be QAQC'd through the use of qualified personnel and standard operating procedures (SOP) to ensure that consistent, repeatable data is being gathered. SOPs will be established for all environmental data collection. All personnel will have necessary training. Data entry and analysis will be QAQC'd through the use of standard data entry templates, by using certified laboratories, and checking results by a qualified person. Reporting will be QAQC'd through the use of peer and senior review. SOPs and methods will be reassessed and updated when necessary.

These QAQC processes are important in accurately quantifying the overall adaptive management of Project effects and will support the goals of the Project to minimise, mitigate and/or manage potential adverse effects.

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