



Queensway Gold Project

Environmental Preview Report Appendices

November 2026

NEWFOUNDGOLD

Appendix A Table of Concordance

Table of Contents	Description	EPR Reference
1. NAME OF UNDERTAKING	The undertaking has been assigned the name "Queensway Gold Project" for the purpose of the environmental assessment	Section 1
2. PROPONENT	a. Name of the Proponent and the corporate body, if any.	Section 2
2. PROPONENT	b. Name of the chief executive officer if a corporate body.	Section 2
2. PROPONENT	c. Provide the name and official title of the principal contact person for purposes of environmental assessment.	Section 2
3. THE UNDERTAKING	a. State the nature of the Project.	Section 3
3. THE UNDERTAKING	b. State the purpose/rationale/need for the Project. If the proposal is in response to an established need, this should be clearly stated. Identify needs that are immediate as well as potential future needs. Identify any broader public sector policies, plans or programs to which the objectives of the Project contribute, i.e. job creation programs, equal opportunity employment plans, local employment, recruitment and training strategies, economic development plans, and any potential opportunities to partner with local business.	Section 3
4. DESCRIPTION OF THE UNDERTAKING	Provide a complete overview of the Project, including information about the preferred choice of location and design of Project components and the construction, operation and maintenance standards and procedures, and proposed decommissioning, closure and rehabilitation plans.	Section 4
4.1. Geographical Location/Physical Components/Existing Environment	Further to the description of Project components found in section 4 of the registration document, the EPR shall include a description and mapping/aerial imagery of concrete batch plants (if applicable) and work camps and infrastructure associated with the Project. The EPR shall update information provided in the registration document and include in the EPR a description of the existing environment that may be affected by Project components, including, but not limited to, the following:	Section 4.1.1 to 4.1.5
4.1.Geographical Location/Physical Components/Existing Environment	a. information regarding ownership/zoning of the land upon which Project components are to be located, and any restrictions imposed by that ownership (e.g., private or Crown or land within a municipal boundary and associated zoning);	Section 4.1.2
4.1.Geographical Location/Physical Components/Existing Environment	b. proximity of Project components to key boundaries and receptors, including: i. municipal boundaries	Section 4.1.2
4.1.Geographical Location/Physical Components/Existing Environment	b. proximity of Project components to key boundaries and receptors, including: ii. dwellings, cabins, institutions	Section 4.1.2
4.1.Geographical Location/Physical Components/Existing Environment	b. proximity of Project components to key boundaries and receptors, including: iii. tourist and commercial establishments, including farms, hotel and outfitter operators	Section 4.1.2
4.1.Geographical Location/Physical Components/Existing Environment	b. proximity of Project components to key boundaries and receptors, including: iv. Gander River and its tributaries	Section 4.1.2

Table of Contents	Description	EPR Reference
4.1.Geographical Location/Physical Components/Existing Environment	b. proximity of Project components to key boundaries and receptors, including: v. Gander River Watershed	Section 4.1.2
4.1.Geographical Location/Physical Components/Existing Environment	b. proximity of Project components to key boundaries and receptors, including: vi. trails, the T'Railway Provincial Park, and roads	Section 4.1.2
4.1.Geographical Location/Physical Components/Existing Environment	b. proximity of Project components to key boundaries and receptors, including: vii. recreational areas, including fishing, hunting, trapping, plant and berry harvesting areas, and	Section 4.1.2
4.1.Geographical Location/Physical Components/Existing Environment	b. proximity of Project components to key boundaries and receptors, including: viii. protected areas, ecologically sensitive areas, and sensitive wildlife habitat.	Section 4.1.2
4.1.Geographical Location/Physical Components/Existing Environment	c. site-specific noise modelling for nearby residences, farms and other sensitive receptors;	Section 4.1.3
4.1.Geographical Location/Physical Components/Existing Environment	d. mapping of scheduled salmon rivers, freshwater streams, waterbodies and wetlands located within and adjacent to the Project footprint;	Section 4.1.4
4.1.Geographical Location/Physical Components/Existing Environment	e. further details regarding location and design of ditching and water control infrastructure around the industrial terrace and site access road;	Section 4.1.4
4.1.Geographical Location/Physical Components/Existing Environment	f. details of any potential alterations to natural and stormwater drainage patterns and runoff within and adjacent to the project boundary;	Section 4.1.4
4.1.Geographical Location/Physical Components/Existing Environment	g. delineation of groundwater flow directions and hydrogeology in the southern area of the project boundary and role of the Appleton Fault Zone and related structures in groundwater movement;	Section 4.1.4
4.1.Geographical Location/Physical Components/Existing Environment	h. historical sampling results for Sampling Site SW-8;	Section 4.1.4
4.1.Geographical Location/Physical Components/Existing Environment	i. water quality sampling of surface water bodies in the Gander Lake Tributary 1 Watershed;	Section 4.1.4
4.1.Geographical Location/Physical Components/Existing Environment	j. additional information on flora and fauna, as follows: i. digital geospatial data to support the assessment, including but not limited to survey sites, survey tracks, dates, observational records for all species surveyed for the Project (e.g., raptors, lichen, bats, marten, muskrat, avifauna insects, and plants),	Section 4.1.5
4.1.Geographical Location/Physical Components/Existing Environment	j. additional information on flora and fauna, as follows: ii. field verification (e.g. diagnostic photos) to support the assessment of plant species of conservation concern such as Black Chokeberry, Cyperus-like Sedge, Woodland Strawberry, Old-field Cinquefoil, Smooth Blackberry, and Starved Sedge,	Section 4.1.5
4.1.Geographical Location/Physical Components/Existing Environment	j. additional information on flora and fauna, as follows: iii. the Project area and area of influence, and	Section 4.1.5

Table of Contents	Description	EPR Reference
4.1.Geographical Location/Physical Components/Existing Environment	j. additional information on flora and fauna, as follows: iv. characterization of fish and fish habitat, including fish species and habitat types, spawning and rearing areas, and migration corridors.	Section 4.1.5
4.2.Construction	This section of the EPR shall describe the Project construction period (if staged, list each stage and its estimated duration), and proposed date of first physical construction-related activity. Clearly indicate pre-construction related activities and provide details on materials, methods, and timing windows proposed for construction, including, but not limited to:	Sections 4.2.1 to 4.2.7
4.2.Construction	a. source water supporting facilities and infrastructure that will be used, including, but not limited to:	Section 4.2.2
4.2.Construction	a. source water supporting facilities and infrastructure that will be used, including, but not limited to: i. location and description of all temporary or permanent water intakes for the Project including end-of-pipe screening size and design, water withdrawal rates, and water drawdown levels,	Section 4.2.2
4.2.Construction	a. source water supporting facilities and infrastructure that will be used, including, but not limited to: ii. water quality and quantity monitoring locations, and	Section 4.2.2
4.2.Construction	a. source water supporting facilities and infrastructure that will be used, including, but not limited to: iii. a description and mapping of the protected public water supply area in relation to construction activities;	Section 4.2.2
4.2.Construction	b. design, construction and upgrades (if planned) of all existing and proposed dams, water management ponds, and associated water control infrastructure;	Section 4.2.3
4.2.Construction	c. design and construction details for proposed new and modified waterbody crossings, including bridges, culverts, and associated infrastructure to support DFO review requirements under the Fisheries Act;	Section 4.2.4
4.2.Construction	d. infilling, blasting, piling, and other in-water construction works planned in the freshwater aquatic environment (if applicable);	Section 4.2.5
4.2.Construction	e. all access, crossings, and construction activities proposed within and adjacent to the T'Railway Provincial Park, in consultation with the Provincial Parks Division; and	Section 4.2.6
4.2.Construction	f. verification as to whether air emissions during Project construction will be compliant with the Air Pollution Control Regulations.	Section 4.2.7
4.3.Operation and Maintenance	The following aspects of the operation and maintenance phase of the Project shall be presented in detail, including scheduling details and timing of each phase, where applicable, for at least the following:	Sections 4.3.1-4.3.11
4.3.Operation and Maintenance	a. source water supply and any supporting facilities and infrastructure, if the water supply for operations and maintenance is different from that of the construction phase, including but not limited to: i. proximity of the source water supply, facility and supporting infrastructure to the protected public water supply area,	Section 4.3.2

Table of Contents	Description	EPR Reference
4.3.Operation and Maintenance	a. source water supply and any supporting facilities and infrastructure, if the water supply for operations and maintenance is different from that of the construction phase, including but not limited to: ii. location and description of all temporary or permanent water intakes and outfalls for the Project including water withdrawal rates and drawdown levels, available yield, and water balance assessment including drawdown levels for any surface water source; and	Section 4.3.2
4.3.Operation and Maintenance	a. source water supply and any supporting facilities and infrastructure, if the water supply for operations and maintenance is different from that of the construction phase, including but not limited to: iii. source water quality and quantity monitoring locations and details;	Section 4.3.2
4.3.Operation and Maintenance	b. activities that may interact with fish and fish habitat, including blasting, noise, water withdrawals, water discharges, habitat alteration, and watercourse crossings;	Section 4.3.3
4.3.Operation and Maintenance	c. activities that may interact with migratory birds, including species at risk, such as blasting, noise-generating activities, artificial lighting and habitat alteration;	Section 4.3.3
4.3.Operation and Maintenance	d. activities and infrastructure that may interact with roosting bat species at risk, including blasting, noise-generating activities, artificial lighting, and habitat alteration;	Section 4.3.3
4.3.Operation and Maintenance	e. operation and maintenance procedures for settling ponds, sediment ponds, diversion channels, and other water control infrastructure, including their purpose, design capacity, inspection procedures, and performance objectives;	Section 4.3.4
4.3.Operation and Maintenance	f. clarification on the separation of PAG/non-PAG waste rock that will facilitate the removal and deposition of PAG sub-aqueously;	Section 4.3.5
4.3.Operation and Maintenance	g. an outline of the footprint of all stockpiles and consideration that segregation of the material into a standalone stockpile may be required should the process and tracking be deemed insufficient;	Section 4.3.5
4.3.Operation and Maintenance	h. use of the provincial road network for the transportation of materials, equipment, supplies, and personnel, including transportation routes, anticipated traffic volumes, and any expected overweight or over-dimensional loads;	Section 4.3.6
4.3.Operation and Maintenance	i. clarification as to whether any new access roads constructed on Crown land for Project use will remain open for public access, including forestry, mineral exploration, agriculture, cottage owners, outfitters, and other approved land users, in consultation with Crown Lands and other applicable regulators;	Section 4.3.6
4.3.Operation and Maintenance	j. maintenance plans for upkeep of access roads, stream crossings, bridges, culverts, and other transportation infrastructure;	Section 4.3.6
4.3.Operation and Maintenance	k. identification of dust suppressants to be used throughout the Project site and acknowledgement that all chemical dust suppressants must be approved by the Water Resources Management Division of the Department of Environment, Conservation and Climate Change, and other authorities if applicable, prior to use;	Section 4.3.7
4.3.Operation and Maintenance	l. identification of all chemicals and hazardous materials to be used in Project operations;	Section 4.3.8

Table of Contents	Description	EPR Reference
4.3.Operation and Maintenance	m. quantification of air emissions during Project operations and details as to whether the Management of Greenhouse Gas Act applies to the Project;	Section 4.3.9
4.3.Operation and Maintenance	n. verification as to whether air emissions during Project operations will be compliant with the Air Pollution Control Regulations;	Section 4.3.9
4.3.Operation and Maintenance	o. characterization, prior to discharge, of any effluent planned to be discharged into the environment and verification as to whether the effluent is compliant with the Environmental Control Water and Sewer Regulations. Environment and Climate Change Canada advises that the definition of effluent found in the Metal and Diamond Mining Effluent Regulations includes any seepage containing any deleterious substance that flows over, through or out of the site of a mine;	Section 4.3.10
4.3.Operation and Maintenance	p. Project activities that may affect existing land uses, recreational access, tourism activities, outfitting operations, use of the T'Railway Provincial Park, and other transportation corridors, including any proposed access and traffic management; and	Section 4.3.11
4.3.Operation and Maintenance	q. procedures for sharing information regarding Project activities, road use, temporary access restrictions, and other operational matters with potentially affected stakeholders.	Section 4.3.11
5. POTENTIAL ENVIRONMENTAL EFFECTS AND MITIGATION	Provide detailed information in the following sections regarding the potential effects of the Project on the existing environment, and the proposed measures that will be implemented to avoid and/or mitigate adverse environmental effects, including, but not limited to the following:	Section 5
5.1.Land Ownership, Land Use Planning, and Adjacent Receptors	a. Assess the potential effects of the Project on nearby residences, institutions, cabins, tourist and commercial establishments, farms and other land users, including the effects of noise, light, vibrations and mining vehicles and equipment, and identify measures to avoid or mitigate adverse effects and land-use conflicts.	Section 5.1
5.2 Air Quality and Climate	a. Conduct a best available control technologies (BACT) analysis for significant sources of particulate and associated metals, and assess the predicted state of compliance with the air quality standards in the Air Pollution Control Regulations, 2022, with BACT employed.	Section 5.2.2
5.2 Air Quality and Climate	b. Assess potential air quality effects associated with project-related dust and metal-containing particulate matter, including generation, transport, deposition, and accumulation and identify measures to avoid or mitigate adverse effects.	Section 5.2.3
5.2 Air Quality and Climate	c. Evaluate potential air quality effects on human health and ecological receptors, including residential, tourist, commercial and recreational areas, sensitive habitats and vegetation, ecological reserves, species of conservation concern, wildlife and livestock.	Section 5.2.4
5.2 Air Quality and Climate	d. Address greenhouse gas reporting obligations and implementation of identified BACT measures for GHG emissions in the registration document.	Section 5.2.5
5.3 Surface Water, Groundwater and Water Resources	a. Assess potential effects of heavy metals on surface water and groundwater resources, including effects of arsenic, antimony, lead, and sulphur mobilization from waste rock, ore stockpiles, pit water and mine runoff.	Section 5.3.2

Table of Contents	Description	EPR Reference
5.3 Surface Water, Groundwater and Water Resources	b. Describe long-term groundwater contamination pathways and seepage to the Gander River Watershed.	Section 5.3.3
5.3 Surface Water, Groundwater and Water Resources	c. Assess the potential effects of mine effluent, seepage, contact water, wastewater, and water control infrastructure failures (including flooding, dam failures, and high-water events) on downstream water quality, aquatic environments, and water users, and identify appropriate mitigation and contingency measures.	Section 5.3.4
5.3 Surface Water, Groundwater and Water Resources	d. Provide a detailed mine water treatment strategy, including: i. treatment methods for mine contact water,	Section 5.3.5
5.3 Surface Water, Groundwater and Water Resources	d. Provide a detailed mine water treatment strategy, including: ii. expected influent and effluent water quality,	Section 5.3.5
5.3 Surface Water, Groundwater and Water Resources	d. Provide a detailed mine water treatment strategy, including: iii. removal of dissolved metals (e.g., arsenic, lead),	Section 5.3.5
5.3 Surface Water, Groundwater and Water Resources	d. Provide a detailed mine water treatment strategy, including: iv. contingency measures for treatment failures, and	Section 5.3.5
5.3 Surface Water, Groundwater and Water Resources	d. Provide a detailed mine water treatment strategy, including: v. post-closure water management and treatment requirements.	Section 5.3.5
5.3 Surface Water, Groundwater and Water Resources	e. Assess potential environmental effects associated with acid rock drainage and metal leaching, including potential effects on groundwater, surface water, and downstream receptors, and identify mitigation, monitoring, and contingency measures.	Section 5.3.6
5.3 Surface Water, Groundwater and Water Resources	f. Assess predicted effects of construction and operation activities associated with potential changes to drainage patterns and runoff within catchment areas associated with provincial transportation infrastructure.	Section 5.3.7
5.4.Aquatic Environment	Describe the potential environmental effects of the Project on fish and fish habitat, including Atlantic salmon, in consultation with the Department of Forestry, Agriculture and Lands (FAL) and the Department of Fisheries and Oceans Canada (DFO), (refer to Best Management Practices for the Protection of Freshwater Fish Habitat in Newfoundland and Labrador at https://www.dfo-mpo.gc.ca/publications/pnw-ppe/nfl-freshwater-eaudouce-tnl/protection-eng.html).	Section 5.4.2
5.4.Aquatic Environment	A description of the potential effects and proposed mitigation measures shall consider, but not be limited to the following:	Sections 5.4.2 to 5.4.8
5.4.Aquatic Environment	a. sensitive times of the year (e.g. migration, feeding and spawning) and the use of work windows to mitigate adverse effects.	Section 5.4.2
5.4.Aquatic Environment	b. areas where fish, fisheries, or species at risk could be directly or indirectly affected by the Project;	Section 5.4.3
5.4.Aquatic Environment	c. all in-water works, including, but not limited to the following: i. fording,	Section 5.4.4

Table of Contents	Description	EPR Reference
5.4.Aquatic Environment	c. all in-water works, including, but not limited to the following: ii. removal of aquatic and/or stream-side vegetation and habitat alteration,	Section 5.4.4
5.4.Aquatic Environment	c. all in-water works, including, but not limited to the following: iii. installation, maintenance and removal of culverts, bridges, dams, water crossing infrastructure, and water withdrawal structures,	Section 5.4.4
5.4.Aquatic Environment	c. all in-water works, including, but not limited to the following: iv. infilling,	Section 5.4.4
5.4.Aquatic Environment	c. all in-water works, including, but not limited to the following: v. in-water site isolation,	Section 5.4.4
5.4.Aquatic Environment	c. all in-water works, including, but not limited to the following: vi. water withdrawal and dewatering, and	Section 5.4.4
5.4.Aquatic Environment	c. all in-water works, including, but not limited to the following: vii. changes to natural flow regime and water withdrawals;	Section 5.4.4
5.4.Aquatic Environment	d. blasting activities, assessed according to the DFO Guidelines for the Use of Explosives in or Near Canadian Fisheries Waters;	Section 5.4.5
5.4.Aquatic Environment	e. increased public access to fish-bearing waters;	Section 5.4.6
5.4.Aquatic Environment	f. the Gander River and tributary streams of the Gander River; and	Section 5.4.7
5.4.Aquatic Environment	g. fish relocation plans and a commitment to relocate fish within the same watershed.	Section 5.4.8
5.5.Wildlife, Wetlands and Species at Risk	In consultation with ECCC and the Wildlife Division of FAL, the EPR shall describe the potential effects of Project construction and operations activities on the following:	Sections 5.5.2 to 5.5.5
5.5.Wildlife, Wetlands and Species at Risk	a. sensitive habitats (e.g., raptor nest sites, migratory bird breeding habitat, bat habitat, red pine, etc.	Section 5.5.2
5.5.Wildlife, Wetlands and Species at Risk	b. migratory birds, nests, eggs, and species at risk;	Section 5.5.3
5.5.Wildlife, Wetlands and Species at Risk	c. nesting birds and species at risk;	Section 5.5.3
5.5.Wildlife, Wetlands and Species at Risk	d. roosting bats, maternity colonies, and bat species at risk;	Section 5.5.3
5.5.Wildlife, Wetlands and Species at Risk	e. insects of conservation concern, including bumble bees and other listed invertebrates;	Section 5.5.4
5.5.Wildlife, Wetlands and Species at Risk	f. wildlife; and	Section 5.5.3
5.5.Wildlife, Wetlands and Species at Risk	g. wetlands identified in section 4.1, including wetland areas, functions, hydrology, groundwater interactions, available habitat, and carbon storage.	Section 5.5.5
5.5.Wildlife, Wetlands and Species at Risk	Project construction and operations activities considered in this section shall include, but not be limited to, the following:	Sections 5.5.2 to 5.5.6
5.5.Wildlife, Wetlands and Species at Risk	a. vegetation clearing, grubbing, earthworks, including the effects of habitat fragmentation and restriction of movements and habitat alteration and loss;	Sections 5.5.2 to 5.5.6

Table of Contents	Description	EPR Reference
5.5.Wildlife, Wetlands and Species at Risk	b. blasting, crushing, hauling and other high impact activities, and effects resulting from associated noise and vibration;	Sections 5.5.2 to 5.5.6
5.5.Wildlife, Wetlands and Species at Risk	c. the effects of artificial lighting at construction and operations; and	Sections 5.5.2 to 5.5.6
5.5.Wildlife, Wetlands and Species at Risk	d. the potential introduction and spread of invasive plant and animal species through the movement of construction equipment and operational activities.	Sections 5.5.2 to 5.5.6
5.5.Wildlife, Wetlands and Species at Risk	The EPR shall describe measures that will be implemented to avoid or mitigate the effects of the Project on wildlife, wetlands and species at risk, as noted above, and shall consider the application of work timing windows, setback distances/ buffer zones, monitoring, and adaptive management.	Sections 5.5.2 to 5.5.6
5.6.Socio-economic and Land Use	a. Describe the potential effects and mitigation measures of all access, crossings, and construction activities proposed within and adjacent to the T'Railway Provincial Park in consultation with the Provincial Parks Division;	Section 5.6.2
5.6.Socio-economic and Land Use	b. Assess potential blasting-related vibration, air overpressure, and structural impacts on nearby residences, cabins, drinking water wells, and infrastructure.	Section 5.6.3
5.6.Socio-economic and Land Use	c. Assess potential effects on traditional harvesting, country foods, cultural practices, and cultural heritage resources.	Section 5.6.4
5.6.Socio-economic and Land Use	d. Assess Project effects on community well-being, mental health, community services, housing affordability, and quality of life.	Section 5.6.5
5.6.Socio-economic and Land Use	e. Assess the potential effects of the Project on tourism operations and recreational fishing (including those directly reliant on the salmon river), outfitting businesses, hotel operators, T'Railway users, recreational land access, Crown land users, cottage owners, and other stakeholders, and identify proposed mitigation, monitoring, and follow-up measures.	Section 5.6.6
5.6.Socio-economic and Land Use	f. Assess traffic-related safety risks associated with the proposed new mine access road and increased mine-related vehicle movements and identify appropriate mitigation measures.	Section 5.6.7
5.6.Socio-economic and Land Use	g. Assess potential changes to drainage patterns and runoff within catchment areas associated with provincial transportation infrastructure.	Section 5.6.7
5.6.Socio-economic and Land Use	h. Assess the effects of the Project on the natural landscape and aesthetic appeal of the region, including viewscapes and identify appropriate mitigation measures.	Section 5.6.8
5.7.Cumulative Effects Assessment	a. Identify and assess the Project's cumulative environmental effects over the life of the Project. Cumulative effects are defined as changes to the environment and resident species and their habitat in the area due to the Project and combined with the effects of past, present, and reasonably foreseeable future planned projects and/or developments and activities in the area. A project causes a cumulative effect if the potential impacts associated with the Project will cause an additive effect when added to other projects in the region and in consideration of climate change.	Section 5.7

Table of Contents	Description	EPR Reference
5.7.Cumulative Effects Assessment	b. Justify the geographic and temporal boundaries of the cumulative effects assessment and shall describe measures to mitigate adverse environmental effects.	Section 5.7
5.8.Accidents, Malfunctions and Emergencies	a. Assess environmental effects of accidental releases of fuels, lubricants, hazardous materials, wastewater, process water, and sediment-laden water on wetlands, fish and fish habitat, wildlife, migratory birds, and species at risk, and identify mitigation measures.	Section 5.8.1
5.8.Accidents, Malfunctions and Emergencies	b. Describe proposed emergency preparedness and response measures for operational activities, including spills of hazardous materials, water management failures, wildlife incidents, and extreme weather events.	Section 5.8.2
5.8.Accidents, Malfunctions and Emergencies	c. Provide monitoring and dam safety information for all existing and proposed dams, water management ponds, and associated water control infrastructure, including inspection, maintenance, and emergency preparedness measures.	Section 5.8.3
5.8.Accidents, Malfunctions and Emergencies	d. Environmental Emergency Response Plan (EERP) that includes, but may not be limited to, a specific response plan for a fuel/oil spill, or high-water events that cause water control infrastructure failures in areas that overlap the Gander Lake PPWSA (including the industrial terrace and site access road).	Section 5.8.4
6. DECOMMISSIONING AND REHABILITATION	Describe aspects of the proposed decommissioning, reclamation, and rehabilitation and closure plans for the Project. Discuss how mine infrastructure, the open pit, waste rock storage areas, water management infrastructure, access roads, and other disturbed areas will be managed and monitored to achieve a safe, stable, and environmentally acceptable post-closure condition and support the intended post-closure land use, including:	Section 6.1
6. DECOMMISSIONING AND REHABILITATION	a. Post-closure pit lake water quality and overflow	Section 6.2
6. DECOMMISSIONING AND REHABILITATION	b. Long-term environmental effects associated with residual contamination, water treatment requirements, watercourse crossings, and long-term infrastructure management.	Section 6.3
7. PUBLIC ENGAGEMENT	At minimum, an Open House Public Information Session shall be held at a place adjacent to or in the geographical area of the undertaking, or as the minister may determine, in order to:	Section 7
7.1. Open House Public Information Session	a. provide information concerning the undertaking to the people (including, but not limited to residents, commercial and tourist establishments and operators, farmers and other stakeholders) whose environment may be directly affected by the undertaking;	Section 7.1
7.1. Open House Public Information Session	b. incorporate traditional knowledge, land use and cultural practices into Project design	Section 7.1
7.1. Open House Public Information Session	c. and mitigation planning;	Section 7.1
7.1. Open House Public Information Session	d. record and respond to the concerns of the local community regarding the environmental effects of the undertaking, and describe those concerns and how the Proponent is addressing the concerns in a separate chapter of the EPR;	Section 7.1

Table of Contents	Description	EPR Reference
7.1. Open House Public Information Session	e. describe the proposed approach for ongoing engagement with residents and commercial and tourism operators during construction, operation and maintenance, rehabilitation and decommissioning, and post-closure of the Project, including a complaints-resolution process so that issues may be addressed as they arise. The description should clearly outline how residents, land users and other stakeholders will be informed of Project activities, consulted on matters of interest or concern, and provided opportunities to participate in decision-making processes where appropriate;	Section 7.1
7.1. Open House Public Information Session	f. notify the Minister and the public of the scheduled meeting not fewer than 7 days before that meeting, in accordance with Section 10(2) of the Environmental Assessment Regulations, 2003. Public notification specifications are outlined in Appendix A.	Section 7.1
7.1. Open House Public Information Session	The Proponent is encouraged to hold additional public information sessions or meet with stakeholder organizations or groups of concerned citizens, as needed, to ensure the public concerns are heard and understood and are addressed in the EPR.	Section 7.2
8. PROJECT- RELATED DOCUMENTS	Provide a bibliography of all Project-related documents already generated by or for the Proponent (e.g., feasibility/environmental/socio-economic studies, engineering reports, etc.).	Section 8
9. PLANS AND PROGRAMS	Plans and programs noted in the following sections shall be updated/provided in the EPR.	Section 9
9.1.Environmental Protection Plan	An updated table of contents for the Environmental Protection Plan (EPP) for all phases of the Project shall be provided in the EPR and shall include, but may not be limited to, the following:	Section 9.1
9.1.Environmental Protection Plan	a. a commitment to submit a comprehensive EPP prior to the commencement of each phase of the Project (construction, operation and maintenance, decommissioning and rehabilitation);	Section 9.1
9.1.Environmental Protection Plan	b. a commitment to conduct pre-clearing survey of trees and snags with a diameter at breast height of greater than 25 cm for potential active bat colonies for tree removal from May 1 to September 1, and a commitment to apply a 250-metre-no-cut buffer until September 1 should an active bat colony be detected;	Section 9.1
9.1.Environmental Protection Plan	c. a commitment to apply an undisturbed (no cutting or ground disturbance) buffer zone of at least 300 metres of the high water mark around Gander Lake, at least 100 metres from the high water mark around major lakes and ponds and along both sides of all streams and main tributaries running into Gander Lake, and at least 30 metres around all other water bodies including wetlands and along both sides of field identified streams. Activity or development within these buffer zones is prohibited unless otherwise authorized by the Water Resources Management Division. All buffer zones must be marked with signs or flagging tape to avoid encroachment into the buffer zones.	Section 9.1
9.1.Environmental Protection Plan	d. a commitment that no vegetation clearing will occur within: i. 800 metres of a bald eagle or osprey nest between March 15 and July 31; 200 metres during the remainder of the year,	Section 9.1

Table of Contents	Description	EPR Reference
9.1.Environmental Protection Plan	d. a commitment that no vegetation clearing will occur within: ii. 800 metres of a short-eared owl (ground) nest between March 15 and July 31	Section 9.1
9.1.Environmental Protection Plan	d. a commitment that no vegetation clearing will occur within: iii. 200 metres of any other raptor nests between March 15 and July 31;	Section 9.1
9.1.Environmental Protection Plan	e. a commitment to report the location of any raptor nest site to the Wildlife Division (WildlifeReferrals@gov.nl.ca).	Section 9.1
9.2.Wildlife and Wetland Environmental Effects Monitoring Program	The EPR shall include a commitment to develop an Environmental Effects Monitoring Plan (EEMP) that discusses the preventative measures, long-term monitoring objectives, performance indicators, reporting requirements, and adaptive management measures that will be undertaken for all species listed under the Newfoundland and Labrador Endangered Species Act, species of conservation concern, and wetlands for the life of the Project, including the decommissioning and reclamation phase.	Section 9.2
9.3.Groundwater and Surface Water Environmental Effects Monitoring Plan	The EPR shall provide a commitment to establish and maintain, in consultation with the Water Resources Management Division, an environmental effects monitoring and reporting program for the life of the Project that includes real-time monitoring of surface water and groundwater quality and quantity and climate parameters, with ongoing adaptive management where it is determined that mitigations measures are not effective. The monitoring plan shall demonstrate how the proposed monitoring program will detect, evaluate, and support mitigation of potential Project-related effects on surface water, groundwater, aquatic habitats, and downstream receptors throughout all phases of the Project.	Section 9.3
9.4.Erosion and Sediment Control Plan	The EPR shall include an Erosion and Sediment Control Plan that describes measures that will be undertaken to mitigate the effects of erosion and sedimentation on the receiving environment prior to the commencement of, and adapted throughout all Project phases, including pre-construction, construction, operations and maintenance, and decommissioning and rehabilitation. Mitigation measures shall consider the use of diversion ditching and settling ponds.	Section 9.4
9.5.Outfitter Environmental Effects Mitigation and Monitoring Program	An Outfitter Environmental Effects Mitigation and Monitoring Program shall be developed in consultation with the Department of Tourism, Culture, Arts and Recreation (TCAR) and the Newfoundland and Labrador Outfitting Association to mitigate potential Project effects on the outfitting sector. A list of licensed Outfitters in and near the Project area is available from TCAR.	Section 9.5
9.6 Blast Management Plan	The EPR shall provide a Blast Management Plan that includes readily available information from the Proponent and a commitment to submit an updated plan in consultation with its blasting contractor. The Blast Management Plan shall focus on, but may not be limited to, a description of the following effects and shall clearly describe measures that will be implemented to mitigate adverse effects:	Section 9.6

Table of Contents	Description	EPR Reference
9.6 Blast Management Plan	a. motorists using provincial, municipal and local roads and ATV trails in close proximity to the proposed blasting areas, and how blasting times and potential traffic delays will be communicated;	Section 9.6
9.6 Blast Management Plan	b. local residents, business and tourism operators and employees, farms, and schools and institutions in close proximity to the proposed blasting areas.	Section 9.6
9.7.Wildlife Monitoring, Management and Contingency Plan	The EPR shall include a commitment to develop a Wildlife Management Contingency Plan that describes procedures for wildlife monitoring and reporting wildlife observations, maintains a geospatial database of monitoring results, and includes a wildlife emergency response plan. The Plan shall be developed in consultation with the FAL-Wildlife Division.	Section 9.7
10. TABLE OF COMMITMENTS	The EPR shall provide a table of all commitments made in the EPR regarding environmental effects mitigation, monitoring and follow-up. Each commitment shall be cross-referenced to the section of the EPR where it was made.	Section 10
11. APPROVALS, AUTHORIZATIONS AND PERMITS	The EPR shall include and update the Approvals, Authorizations, And Permits information provided in Section 3 of the registration document.	Section 11
12. FEE FOR ENVIRONMENTAL ASSESSMENT	Undertakings with an estimated capital cost greater than $5 million are subject to the Department's fees for environmental assessment found at https://www.gov.nl.ca/ecc/env-assessment/fees/. Fees may be paid in two installments, with the first installment due prior to the issuance of EPR guidelines and the second installment due on submission of the EPR.	Sent
13. SUBMISSION OF EPR	The Proponent shall provide a searchable electronic version of the EPR to the environmental assessment committee and with a navigation panel feature (headings), which may be submitted by email as follows: EAProjectComments@gov.nl.ca Subject: EPR submission (Queensway Gold Project) The Minister reserves the right to require paper copies of the EPR, and additional digital copies on a USB or other external drive if needed. Paper copies and digital drives may be mailed to: Department of Environment, Conservation and Climate Change Environmental Assessment Division P.O. Box 8700 100 Prince Philip Drive St. John's, NL, A1B 4J6	This EPR

Appendix B Environmental Protection Plan

Environmental Protection Plan

Queensway Gold Project

New Found Gold Corp.
300 Garrett Drive
Gander, NL, A1V 1W8

November 2026

TABLE OF CONTENTS

1 Introduction 4
1.1 Project Location 4
1.2 Project Overview 6
1.3 Purpose of the EPP 8
1.4 Environmental Protection Plan Organization 8
1.5 Roles and Responsibilities 9
1.5.1 Management Commitment 9
1.5.2 Health, Safety, and Environment Manager 9
1.5.3 Senior Project Manager 9
1.5.4 Mine Manager 9
1.5.5 Site Personnel and Contractors 10
1.6 Reporting 10
1.6.1 Internal Communication 10
1.6.2 External Communication 10
1.7 Orientation 11
2 Environmental Protection Procedures 12
2.1 Sensitive Timing Windows 12
2.2 Buffer Zones 14
2.3 Surveying 15
2.4 Laydown and Storage Areas 16
2.5 Clearing Vegetation 17
2.6 Grubbing 19
2.7 Trenching 20
2.8 Rock and Soil Management 21
2.9 Erosion and Sediment Control 22
2.10 Blasting 23
2.11 Water Withdrawal / Supply 24
2.12 Watercourse (Stream) Crossings 25
2.13 Dewatering Work Areas and Site Drainage 28
2.14 Pumps and Generators 29
2.15 Equipment Use and Maintenance 30
2.16 Storage, Handling and Transfer of Fuel, and Other Hazardous Material 31
2.17 Propane Storage and Use 33
2.18 Waste Management 34
2.19 Hazardous Waste Disposal 35
2.20 Sewage Disposal 36
2.21 Vehicle Traffic 37
2.22 Dust Control 38
2.22.1 Inspections and Reporting 39
2.23 Noise and Light Control 40
3 Resource-Specific Mitigation and Management Plans 41
3.1 Historic Resources 41
3.2 Avifauna Management Plan 41

3.3 Wildlife and Wetland Environmental Effects Monitoring Program 43
4 Environmental Contingency Plan 45
4.1 Fuel and Hazardous Material Spills 45
4.2 Water Control Infrastructure Failures 47
4.3 Wildlife Encounters 48
4.4 Forest Fires 49
4.5 Discovery of Historic Resources 50
5 EPP Control Revisions 51
6 Contact List 52
7 Reference Material 54
8 Signature Page 55

LIST OF TABLES

Table 2.1 Recommended Buffer Zones for Queensway Project Early Works and Construction 14

LIST OF FIGURES

Figure 1.1 Project Location 5
Figure 1.2 Site Layout 7

LIST OF APPENDICES

Appendix A List of Abbreviations and Acronyms
Appendix B Controlled Copy Distribution List
Appendix C Air Quality Monitoring Plan
Appendix D Spill Report Form
Appendix E Revision Request Form
Appendix F Revision History Log

1 Introduction

New Found Gold Corp. (New Found Gold) is developing the Queensway Gold Project (the Project), a new open pit gold mine, located east of the Town of Appleton, Newfoundland and Labrador (NL). New Found Gold is a publicly traded (NFG:TSX-V) emerging gold producer, exploring for gold and developing assets in the central portion of the Island of Newfoundland (Figure 1.1).

The Project involves the extraction of mineralized ore from four open pits, a waste rock and overburden storage facility, a run-of-mine pad containing multiple ore stockpiles, a modular crushing and sorting plant, and associated operational facilities including water management facilities, office, and maintenance shops. The on-site crushing and sorting plant is designed to produce 700 tonnes per day of pre-concentrated product feed. Ore will be transported and processed at the existing, permitted Pine Cove processing facility. The Project has a Life of Mine plan for 7 years of operations, based on current production rates and gold price estimates. Progressive rehabilitation at the Queensway site will occur during mining, with final rehabilitation and closure after operation's end.

This Environmental Protection Plan (EPP) has been developed for early works and construction activities associated with the Project to guide the environmental management during these activities. The EPP outlines the environmental protection measures, mitigation commitments, and response procedures that will be implemented to prevent or reduce adverse environmental effects during early works and construction. This Plan has been prepared to satisfy applicable conditions of Project release and regulatory approvals associated with early works and construction activities. New Found Gold plans to commence early works activities as early as Q1 2027 and is committed to conducting work in a manner that protects the environment and complies with applicable federal and provincial regulatory requirements.

1.1 Project Location

The Project is located just east of the Town of Appleton and approximately 15 kilometres west of the Town of Gander in central Newfoundland (Figure1.1). The Project is situated within the Queensway North block, located north of Gander Lake and the Trans-Canada Highway.





Notes

1. Coordinate System: NAD 1983 CSRS MTM 2
2. Data Sources: Stantec
3. Background: Government of Newfoundland and Labrador; NRCan CanVec; Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Esri, USGS, Esri, CGIAR, USGS

Legend

Project Location

0 10 20 30 km

(At original document size of 8.5x11)
1:1,500,000

N

Stantec

Project Location
Appleton,
Newfoundland and Labrador

Prepared by NW on 2025-07-28
TR by EW on 2025-07-28

Client/Project
New Found Gold Corp.
Queensway Gold Project

121418830_003

Figure No.
1.1

Title
Project Location

\\ca0151-PPFSS01\work_group\1214\active\121417598\03_data\gis_cad\mapping\ArcGIS Pro\121418830_NewFoundGold\121418830_NewFoundGold.aprx Revised: 2026-10-19 By: niwhite

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1.2 Project Overview

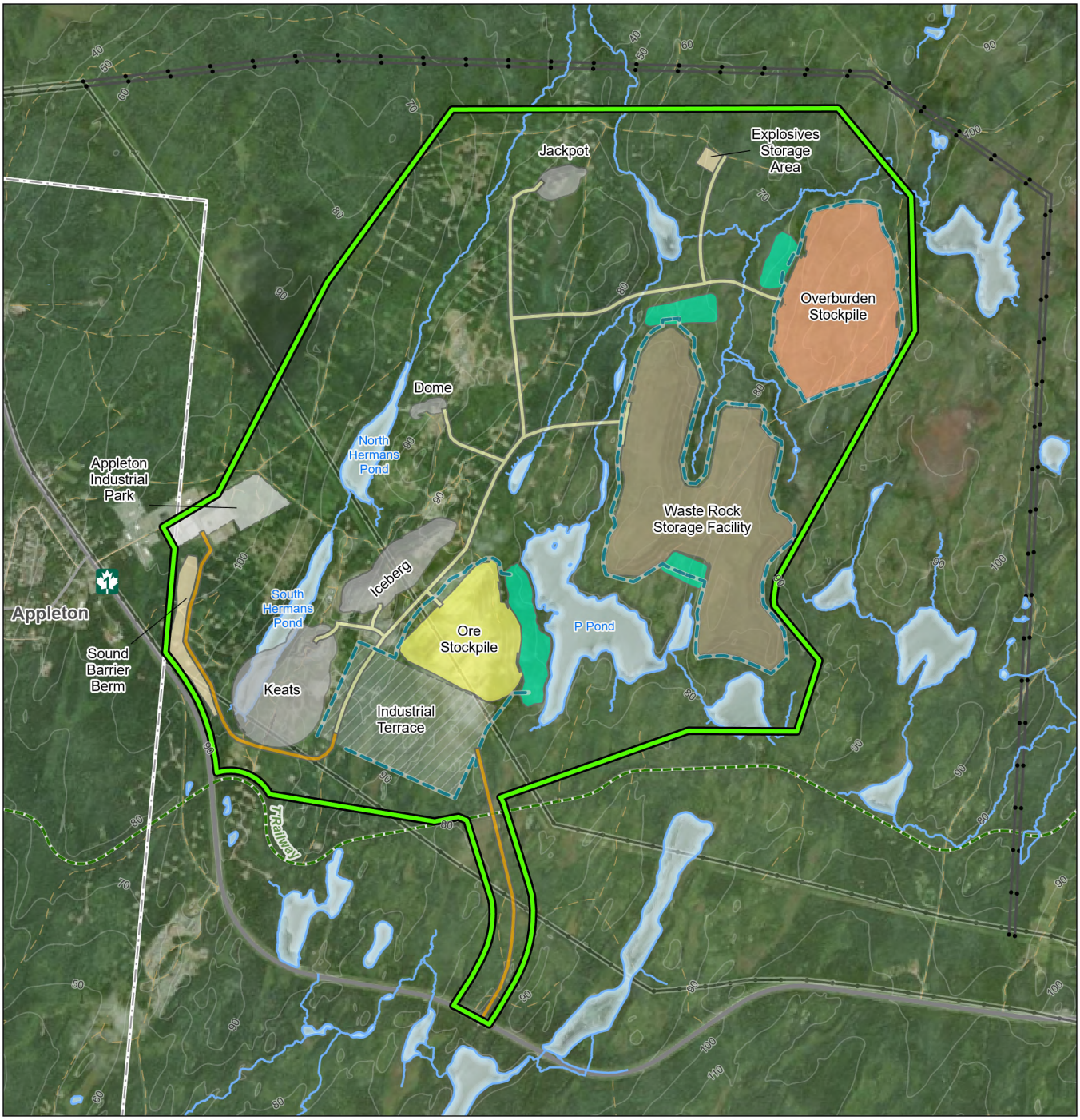
The Project includes four open pits (Keats, Iceberg, Jackpot, and Dome) and associated mine infrastructure (Figure 1.2). Approximately 1.9 million tonnes of ore will be mined, together with overburden and waste rock, using conventional open pit mining methods. Ore will be transported to a crushing and sorting facility, while waste rock and overburden will be managed in dedicated storage facilities. The mine layout has been designed to support efficient resource recovery while considering environmental protection, water management, and future rehabilitation requirements.

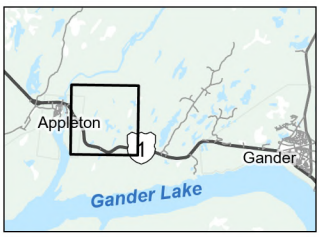
Key Project components include the open pits, an organics and overburden storage facility, a waste rock storage facility, run-of-mine pad and ore stockpile areas, a crushing and sorting plant, site roads and highway access, electrical and communications infrastructure, support buildings, an explosives storage area, and water management infrastructure. Water management systems will include diversion ditches, settling ponds, collection systems, and discharge controls designed to manage both contact and non-contact water and protect surrounding water resources.

The Project will generate several material streams. High-grade and mid-grade ore, along with selected sorter rejects, will be transported to the Pine Cove processing facility for milling. Mineralized material below cut-off grade and some sorter rejects will be stockpiled for potential future processing. Waste rock and overburden storage facilities have been designed with consideration for long-term stability, drainage control, and progressive rehabilitation.

Project activities will occur in four phases: early works, construction, operation, and rehabilitation/closure. Early works and construction activities include site preparation, vegetation clearing, grubbing, overburden removal, road construction, installation of water management infrastructure, development of the industrial area, and establishment of the mining facilities. During operation, mining will involve drilling, blasting, loading, hauling, crushing, ore sorting, stockpiling, waste rock management, water management, and transportation of ore to the Pine Cove processing facility.

Rehabilitation and closure planning are integrated into the Project from the outset as detailed in the Rehabilitation and Closure Plan. Progressive rehabilitation will occur throughout mine life where practical, including revegetation of completed areas and stabilization of waste rock storage slopes. At closure, infrastructure will be removed, disturbed areas regraded and revegetated, and long-term water management measures implemented. Potentially acid-generating waste rock and remaining mineralized material will be placed in mined-out pits for long-term containment. Post-closure monitoring will confirm that environmental protection measures remain effective and that the site is safe for future land use.





Notes

1. Coordinate System: NAD 1983 UTM Zone 21N
2. Data Sources: Newfound Gold Corp.; Stantec; GovNL Department of Forestry, Agriculture and Lands; CanVec NRCan
3. Background: Vantor; Government of Newfoundland and Labrador; NRCan CanVec

Legend

- Project Area

Proposed Project Layout

- Access Road
- Haul Road
- Perimeter Ditch
- Sedimentation Pond
- Open Pit
- Ore Stockpile
- Overburden Stockpile
- Waste Rock Storage Facility
- Other Mine Features
- Industrial Terrace
- Appleton Industrial Park

Existing Infrastructure

- Transmission Line
- Proposed Transmission Line (Re-routing)
- Highway
- Collector Road
- Local Road
- Resource Road / Trail
- NL T'Railway Provincial Park

Other Features

- Contour (10 m)
- Watercourse
- Waterbody
- Municipal Boundary

0 250 500 750 metres
(At original document size of 8.5x11)
1:30,000

N

Stantec

Project Location
Appleton,
Newfoundland and Labrador

Prepared by NW on 2026-10-05
QR by PM on 2026-10-16
TR by EW on 2026-10-05

Client/Project
New Found Gold Corp.
Queensway Gold Project

121418830_030

Figure No.
1.2

Title
Site Layout

Revised: 2026-10-19 By: niwhite

\\ca0151-PPFSS01\work_group\1214\active\121417598\03_data\gis_cad\mapping\ArcGIS Pro\121418830_NewFoundGold\121418830_NewFoundGold.aprx

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1.3 Purpose of the EPP

The purpose of the EPP is to outline potential environmental concerns and protection procedures related to the Project activities. This EPP also outlines practical procedures required for Project personnel (i.e., New Found Gold employees, contractors, and suppliers) to limit potential adverse environmental effects, as well as instructions for addressing planned and unplanned activities or events associated with early works and construction. New Found Gold will implement best practices to aid in the management of concerns identified.

To support Project activities being carried out in an environmentally responsible manner, this EPP has the following objectives:

- Confirm commitments to limit adverse environmental effects are met
- Document environmental concerns and appropriate protection measures
- Provide a reference document for personnel and contractors when planning and/or conducting specific activities
- Provide direction in the event of accidental events
- Communicate changes in the EPP through the revision process
- Serve as a reference for New Found Gold personnel and regulators to monitor compliance and recommend improvements
- Provide direction at the corporate level for the implementation and monitoring of commitments made in the EPP

Deviations from the procedures and commitments outlined in this EPP will be discussed with and approved by New Found Gold.

1.4 Environmental Protection Plan Organization

This EPP has been developed for specific activities to be conducted in support of work carried out on Project sites. It provides instructions for addressing both planned and unplanned activities and events. This EPP contains the following sections:

- **Section 1.0 Introduction:** Outlines the EPP purpose and organization, roles and responsibilities, environmental orientation, and reporting requirements
- **Section 2.0 Environmental Protection Procedures:** Description of environmental concerns and environmental protection procedures associated with work activities
- **Section 3.0 Resource-Specific Mitigation and Management Plans:** This section outlines mitigation measures for resources potentially affected by the Project
- **Section 4.0 Environmental Contingency Plan:** Outlines the contingency plans for potential unplanned and accidental events
- **Section 5.0 EPP Control Revisions:** Describes procedures for revising the EPP

- **Section 6.0 Contact List:** Contains a list of key Project and regulatory contacts
- **Section 7.0 Reference Material:** Lists references cited in the EPP
- **Section 8.0 Signature Page:** Contains a signature page for employee and contractor sign-off once orientation has been completed

A list of abbreviations and acronyms is provided in Appendix A.

1.5 Roles and Responsibilities

This section outlines the roles and responsibilities of parties involved with Project activities. The effectiveness of the EPP depends on the commitment and actions of all personnel.

1.5.1 Management Commitment

New Found Gold is committed to the preservation and protection of the environment and commits to the implementation, maintenance, and upgrading of this Plan that incorporates existing management strategies with new initiatives. The management of New Found Gold recognizes that staff time and resources are required to implement and maintain the EPP.

1.5.2 Health, Safety, and Environment Manager

New Found Gold's Health, Safety, and Environment Manager or designate will provide guidance and final approval for the EPP and subsequent revisions.

1.5.3 Senior Project Manager

New Found Gold's Senior Project Manager or designate will provide overall leadership and support of the EPP during Project activities carried out on the Project. Specific responsibilities include:

- Monitor and inspect work associated with the early works and construction activities
- Liaise with relevant government agencies and stakeholders as required
- Distribute the EPP and revisions to appropriate individuals noted in Appendix B
- Manage reviews of the EPP on an as-needed basis
- Maintain overall document control

1.5.4 Mine Manager

New Found Gold's designated Mine Manager will report directly to the Senior Project Manager and manage early works and construction activities carried out on the Project. Specific duties include:

- Act as New Found Gold's representative on-site and be responsible for overall environmental protection
- Hold initial orientation sessions for contractors and other personnel to be involved in early works and construction activities

- Confirm employees and contractors/sub-contractors on-site are familiar with the EPP contents and are able to implement all aspects of the EPP, including revisions and procedures
- Communicate proposed early works and construction activities to the Senior Project Manager to manage and obtain applicable approvals, authorizations and permits in a timely manner
- Monitor, or designate a representative to monitor, early works and construction activities and environmental protection measures to maintain compliance with the EPP, and regulatory requirements and commitments
- Report to Senior Project Manager incidents of environmental non-compliance
- Support and/or manage periodic reviews of the EPP
- Contact the appropriate regulatory agencies in the event of an environmental emergency

1.5.5 Site Personnel and Contractors

Contractors, subcontractors, and site personnel involved in Project activities will:

- Review and become familiar with procedures outlined in the EPP, including revisions
- Follow and implement commitments noted in the EPP, including regulatory conditions noted in approvals, authorizations, and permits
- Immediately report concerns, including spills or other event that may have an adverse effect on the environment, to New Found Gold's Mine Manager or designate
- Carry out clean-up, rehabilitation, or restoration as directed by New Found Gold's Mine Manager, designate, or regulatory agencies
- Provide feedback to New Found Gold's Mine Manager or designate regarding revisions that could improve the EPP

1.6 Reporting

1.6.1 Internal Communication

The New Found Gold Mine Manager or designate will be responsible for communicating policies, procedures, and legal and other requirements to Project personnel. Early works and construction personnel will communicate environmental incidents to New Found Gold's Mine Manager or designate as per the Reporting Procedures.

1.6.2 External Communication

When required, New Found Gold, through the Health, Safety, and Environment Manager or designate, will report on environmental issues relating to early works and construction activities to Newfoundland and Labrador Department of Environment, Conservation and Climate Change (NLDECCC).

Spills of petroleum products or other hazardous materials will be reported to:

> **Environmental Emergencies 24 Hour Report Line (Coast Guard Traffic Centre, St. John's)** (St. John's: **709-772-2083** or Other Areas: **1-800-563-9089**); and **Petroleum and Environmental Services Inc. (Appleton: 877- 449-2335)**

New Found Gold notes the difference between reportable spills on land versus in freshwater environments. Other compliance reporting required by permits or through compliance requirements not listed above will be submitted to NLDECCC.

1.7 Orientation

Through ongoing orientation and awareness training, New Found Gold will confirm that Project personnel understand their roles and responsibilities, as well as the potential environmental effects of their specific work activities. Workers will receive an orientation from an immediate supervisor prior to the start of a new activity and thereafter on an as-needed basis. New personnel arriving at the site will receive an orientation, to be given by New Found Gold's Mine Manager or designate.

2 Environmental Protection Procedures

The various environmental protection procedures for Project activities are described below. As required, this EPP will be revised to include new or amended environmental protection procedures so that early works and construction activities are completed properly.

2.1 Sensitive Timing Windows

Environmentally sensitive timing windows include:

- Avifauna (Migration): March 15-June 7 and July 15-November 31 (ECCC 2025)
- Newfoundland Marten natal and maternal dens: April 1 to June 30 (Government of Canada 2026)
- Myotis (Bat) Species: clearing restricted May 1 to Sept 1 (NLDECCC 2026)
- Avifauna (Breeding Migratory Birds; Waterfowl): April 15 to August 15 (ECCC 2025)
- Bald Eagle and Osprey nesting season (March 15 to July 31) (NLDECCC 2026)
- Freshwater Fish: October 1 to May 31 (for tributaries and headwaters of scheduled salmon rivers on the Island of Newfoundland; Fisheries and Oceans Canada [DFO] 2026)
- Insect species at risk (SAR): the active bee and beetle seasons (e.g., May to August for yellow-banded bumble bee; ECCC 2023).

Potential Environmental Concerns

Construction activities conducted during sensitive periods have the potential to increase adverse effects on species and should be avoided, where practicable.

Environmental Protection Procedures

Sensitive time periods identified above will be taken into consideration during Project planning, where practicable. If construction activities are required during these periods, the following additional mitigation measures will be implemented, as applicable:

- A detailed construction schedule will be developed before construction activities begin. Applicable timing restrictions and environmental constraints will be incorporated into the schedule.
- Construction activities near waterbodies will, where practicable, be scheduled during periods that reduce the potential for environmental effects. Where work is required outside preferred timing windows, additional mitigation measures may be implemented as appropriate. Efforts will be made to avoid in-water works between October 1 and May 31 to reduce potential effects on fish spawning, incubation, and hatching periods. Consultation with, and approvals from, DFO will be obtained where in-water works are proposed during this period.
- Stripping, grading, excavation, and rehabilitation activities will be sequenced to reduce the duration of soil exposure.
- Work in or near streams and other waterbodies will be planned to reduce the duration of disturbance. Where practicable, in-water work will be undertaken during periods of low flow.

- Construction activities will be planned, where practicable, to avoid areas used by fish and wildlife during sensitive periods identified above.
- Refer to Section 3.0 for additional mitigation measures related to wildlife.

2.2 Buffer Zones

Potential Environmental Concerns

Buffer zones are boundaries of undisturbed vegetation maintained along water bodies or other sensitive landscape features. Without adequate buffer zone vegetation, streams, ponds, and lakes can potentially become laden with silt from run-off. Vegetation also provides cover for fish in various aquatic environments.

Environmental Protection Procedures

Buffer zones of undisturbed vegetation (Table 2.1) will be established and maintained between work areas and water bodies, and identified sensitive areas (e.g., wetlands, rare plant occurrences, roosts, dens), where practicable. If work is anticipated within the recommended buffer zone, New Found Gold will first consult applicable regulators.

Where recommended or required, additional buffer widths will be maintained according to Table 2.1. For watercourses that are licensed salmon rivers, New Found Gold will work with public and regulatory bodies to promote and maintain the health of these important habitats.

Activity or development within 15 metres (m) of a waterbody is prohibited unless otherwise authorized by the Water Resources Management Division (WRMD) through a Section 48 permit. These buffer zones will be designated as no-activity areas, and the limits of approved disturbance activities (including clearing, grubbing, and topsoil and overburden removal) will be clearly marked in the field (e.g., flagging or survey stakes) prior to the commencement of work. Mitigation measures, including those outlined in Section 2.9, will be implemented for work carried out between 15 to 30 m of a waterbody.

A Section 48 permit will be obtained for work to be completed within 15 m of a body of water, which includes wetlands, shown on Natural Resources Canada 1:50,000 scale National Topographic System mapping, as defined by NLDECCC-WRMD.

Table 2.1 Recommended Buffer Zones for Queensway Project Early Works and Construction

Activity / Feature	Recommended Buffer Width	Source
Activities around the Gander River	100 m	WRMD/Provincial Archaeological Office (PAO)
Main tributaries of Gander Lake	100 m	WRMD
Gander Lake	300 m	WRMD/PAO
Public Protected Water Supplies	Defined boundary	WRMD
Other water bodies including wetlands and along both sides of field-identified steams	30 m	NLDECCC 2026
Resource roads or highways running adjacent to water bodies	20 m + 1.5 X slope (%)	Gosse et al. 1998
Piling of wood and slash – Grubbing	30 m	Gosse et al. 1998
Placement of Temporary Site Trailers - Fuel storage	100 m	Gosse et al. 1998
T'Railway Provincial Park	50 m either side	Newfoundland and Labrador Department of Tourism, Culture, Arts and Recreation

Table 2.1 Recommended Buffer Zones for Queensway Project Early Works and Construction

Activity / Feature	Recommended Buffer Width	Source
Stockpiles of organic cover and other excavated materials	50 m	Newfoundland and Labrador Department of Department of Industry, Energy and Technology 2022

2.3 Surveying

Potential Environmental Concerns

Surveying may result in habitat loss or alteration, sensory disturbance to wildlife, and disturbance of historic resources.

Environmental Protection Procedures

- Survey-line cutting will be limited to the extent required. Where practicable, survey routes that do not require line cutting will be used.
- Survey lines will be no wider than required to maintain a clear line of sight and allow unobstructed passage.
- Where practicable, survey lines will not be cut along the boundary between treed and open areas.
- Where practicable, trees and shrubs will be cut flush with the ground.
- Trees that do not intersect survey lines will be left standing.
- Vegetation will not be cut within designated sensitive areas without prior approval from the Mine Manager or designate.
- Historic resources discovered during surveying will be reported to the Provincial Archaeology Office (PAO) in accordance with Section 4.5, Discovery of Historic Resources.
- Areas where surface disturbance is planned or may occur will be inspected and monitored before, during, and after the work.

2.4 Laydown and Storage Areas

Potential Environmental Concerns

Laydown areas may be necessary for storing and maintaining equipment and supplies during early works and construction activities. Potential concerns include erosion and run-off of sediment into nearby water bodies.

Environmental Protection Procedures

- Existing laydown and storage areas will be used where feasible.
- New laydown, maintenance or storage areas required for the Project will be established within the Project Area.
- Establishing new laydown or storage areas will follow the procedures for vegetation clearing/grubbing (Section 2.5 and 2.6) and erosion prevention (Section 2.9).
- Working areas and laydown areas will be covered with blasted rock to reduce dust.
- External storage areas will be placed on level terrain and kept free of ponding or run-off.
- Drainage from areas of exposed soil will be controlled by grade or ditching and by directing run-off away from water bodies.
- Grading, if required, will be directed away from wetlands, where possible, and grading will be reduced within wetland boundaries unless required for site-specific purposes.
- Laydown and storage areas will be progressively rehabilitated once no longer required.
- Fuel will be stored, handled and transported according to Section 2.16.

2.5 Clearing Vegetation

Potential Environmental Concerns

Vegetation clearing of trees and shrubs will be required for site preparation. Potential concerns include stockpiling vegetation in or near watercourses, and wildlife disturbance.

Environmental Protection Procedures

- Clearing and grubbing will be limited to the necessary footprint and comply with applicable permits.
- Clearing will consist of cutting to within 15 centimetres (cm) of the ground or as dictated by permits and disposing of standing trees, as well as removing shrubs, debris, and other vegetation from the area indicated on early works and construction drawings. The *Environmental Protection Guidelines for Ecologically Based Forest Resource Management* (Newfoundland and Labrador Department of Forest Resources and Agrifoods 1998*)* will be followed.
- Timber will be felled inward toward the work area to avoid damaging standing trees within the immediate work area.
- Cleared vegetation and trees will be mulched and spread, and merchantable timber will be donated to local communities/stakeholders for firewood.
- Measures will be implemented to reduce and control sediment-laden runoff, including leaving stumps and roots in place to maintain soil cohesion and promote natural revegetation.
- If merchantable or usable timber is encountered, it will be removed by a local contractor.
- Slash and other material or debris related to clearing activities will not be permitted to enter watercourses and will be piled above spring flood levels.
- Heavy equipment will primarily be used for clearing vegetation.
- Appropriate buffer zones of undisturbed vegetation will be maintained between early works and construction activities and waterbodies, and other landscape features as noted in Section 2.2.
- Workers will not destroy or disturb features indicative of a cultural or archaeological site. Such features should be avoided and the measures described in Sections 3.1 and 4.5 followed.
- Where practicable in accessible areas (e.g., along cleared rights-of-ways), trees and other vegetation will be left in place or encouraged to grow to obstruct the view of Project facilities, reducing the change in viewshed and muffling nuisance noise.
- Vegetation clearing will be scheduled to avoid applicable sensitive timing windows (Section 2.1)
- Timing of vegetation clearing will avoid, where possible, the nesting and breeding season of avifauna (Section 2.1). If clearing must occur during breeding season, the following measures will be implemented (in accordance with guidelines outlined in the *Migratory Birds Convention Act* [MBCA]):
  - Prior to clearing, trained personnel will conduct systematic nest searches. These searches will identify active nests, signs of breeding behaviour, calls, droppings, or habitat likely to contain nests.

  - If an active nest is found, a no-work buffer zone will be established and clearly delineated. The buffer size depends on species, nest location, and sensitivity; some species require very large setbacks. Activities in the nesting area will be halted until nesting is completed, i.e., the young have left the vicinity of the nest.
  - Nests will not be marked using flagging tape or other similar material as these increase the risk of nest predation.
- Nests, eggs, and shelters of migratory birds or other wildlife will not be disturbed or destroyed. If an active nest is found, the surrounding area will remain undisturbed until fledging has occurred, or the nest is abandoned. If a raptor nest is encountered, work in the vicinity will stop until the Wildlife Division provides direction.
- Non-intrusive nesting surveys will be completed prior to vegetation clearing for raptors throughout the year as well as breeding birds within the breeding bird window (approximately mid-April to mid-August; ECCC 2025). Active or suspected active nests (forested birds such as passerines, upland game birds) should receive a minimum 30 m setback distance and for SAR (e.g., rusty blackbird) a minimum 75 m setback is required. Raptors nests require a year-round minimum setback of 200 m, and an 800 m setback is required for Bald Eagle and Osprey during the nesting season (March 15 to July 31). The location of any raptor nest site will be reported to the Wildlife Division at **WildlifeReferrals@gov.nl.ca**.
- If possible, large diameter trees will be maintained, especially those that are dead or dying. These types of trees typically have peeling bark, crevices and cavities that provide important roosting habitats for bats. Additional mitigation may involve offering alternate habitat (e.g., artificial structures such as bat boxes) to off set the loss of roosting habitat.
- The discovery of bat roosts or hibernacula, or active dens (e.g., marten dens), will be reported immediately to the Mine Manager (or designate) and work will cease. A plan for protection, avoidance, and/or mitigation will be established by New Found Gold, guided by engagement with trained personnel and/or federal or provincial regulators.
- Observations of bat colonies, potential hibernacula sites, or sick or dead bats will be reported to the provincial Wildlife Division at **709-637-2025** or through the toll-free bat hotline: **1-877-434-2287 (BATS)**.
- Bog mats will be used to limit disturbance to wetlands. Wetland disturbance will be avoided outside the work area.
- Sites where surface disturbances are planned or may occur, will be inspected and monitored prior to, during, and after the work.
- Equipment will arrive at the construction site clean and free of soil and vegetative debris, to reduce the risk of introducing or spreading non-native and/or invasive vascular plant species. Equipment will be inspected and either approved for use or cleaned, re-inspected, and approved for use.
- If potentially invasive vascular plant species are noted within or near the Project Area during clearing activities, the extent of the species will be assessed and a plan for removal and/or control will be developed.
- Where revegetation or rehabilitation is planned, native flowering plant species known to support bumble bees, lady beetles, and other native insects (e.g., goldenrod, clover, fireweed, yarrow) will be used, where possible.

2.6 Grubbing

Potential Environmental Concerns

Grubbing refers to the removal of the roots that remain in the soil after clearing. The main concerns associated with grubbing and disposal of related debris are the potential adverse effects on freshwater ecosystems and water quality through the release of sediment into watercourses, as well as the potential for disturbing historic resources.

Environmental Protection Procedures

- Grubbing activities will adhere to buffer zone requirements.
- Grubbing of the organic vegetation mat and/or the upper soil horizons will be restricted to the minimum area required.
- Measures to protect migratory birds and other wildlife (see Sections 3.2 and 3.3) will be implemented.
- Measures to avoid or reduce the spread of invasive species (see Sections 3.2 and 3.3) will be implemented.
- Topsoil and organics should be stored in low stable piles (i.e., 1 to 2 m). Surplus material will be stored or stockpiled for site rehabilitation and revegetation purposes.
- Measures will be implemented to reduce and control runoff of sediment-laden water during grubbing, and the re-spreading and stockpiling of grubbed materials. Where grubbed materials are re-spread or stockpiled, as many stumps and roots as possible will be left on the ground surface to maintain soil cohesion, dissipate the energy of runoff and promote natural revegetation. Erosion control measures will be implemented in areas prone to soil loss.
- Grubbed areas will be left exposed to the natural elements for as brief a time as possible to limit unnecessary erosion. Silt fences may be used to prevent sediment laden runoff from exposed areas.

2.7 Trenching

Potential Environmental Concerns

Where excavation for trenching occurs, potential runoff of sediment-laden water could result in adverse effects on freshwater fish habitat and water quality.

Environmental Protection Procedures

The following measures will be employed to reduce the potential adverse impacts of trenching:

- The topsoil, and excavated overburden and bedrock will be stored in separate stockpiles for later use during rehabilitation.
- Material unsuitable for future rehabilitation will be disposed of in a disposal area approved by the Mine Manger or designate.
- Dewatering of trenches will make use of measures to limit and control the release of sediment laden water through the use of various filtration measures including, but not limited to, erosion control devices, settling ponds, straw bales, geotextile, or other devices. Water quality monitoring of run-off or discharges may be required by NLDECCC-Pollution Prevention Division.
- Trenches or drains will be installed to gravity-drain low areas of ponds or excavation areas toward sump pits, which will be constructed at the pond bottom and dewatered using pumps for appropriate discharge.

2.8 Rock and Soil Management

Potential Environmental Concerns

Earthworks will involve removing unsuitable materials (such as organic or loose soils), preparing foundations, and placing fill materials to build roads, pads, water management features, and other site infrastructure. If not properly managed, these activities can cause erosion and sedimentation, dust, ground instability, and reduced soil quality. Careful planning and management of rock and soil materials will help reduce excavation and material handling requirements while possibly finding opportunities for reuse across the site.

Environmental Protection Procedures

- Cleared materials, including organics, topsoil, overburden, and bedrock, will be segregated and stored in low, stable piles for use in rehabilitation.
- Stockpiles of topsoil, overburden, and other potentially dust-generating materials will be managed to reduce dust generation, including through revegetation, where feasible. Where applicable, stockpiled material will be used or removed as soon as practical.
- Unsuitable material will be disposed of in approved areas.

2.9 Erosion and Sediment Control

Potential Environmental Concerns

Eroded material could cause siltation in water bodies, potentially affecting habitat for aquatic and terrestrial animals.

Environmental Protection Procedures

- The disturbance of new areas will be limited to the extent practical.
- Work will be conducted according to the conditions set out in regulatory permits, approvals and/or authorizations.
- Sediment control measures (e.g., silt fences, mulching, straw wattles or fibre rolls, revegetation) will be implemented if needed to reduce soil loss from exposed areas and stabilize surfaces.
- Exposed non-biodegradable erosion and sediment control materials will be removed once the work area is stabilized.
- Existing or new siltation control structures used will be monitored for excessive accumulation of sediment. Accumulated sediment will be removed from control structures to gain full effectiveness of the systems. Effluent from control structures will be released to flow overland for appropriate filtration prior to entering waterbodies.
- Drainage ditches, if required, will be stabilized (e.g., lining with vegetation or rock, terracing, interceptor swales, installation of rock check dams, hay bales) to reduce soil erosion. These measures will be inspected and maintained following installation.
- The amount and timing of exposed soil left open at any one time will be limited to reduce the potential for erosion.
- Areas of exposed erodible soil will be stabilized, e.g., back-blading, grading and/or compacting, revegetation or other mitigation, regularly inspected and maintained until they are permanently stabilized.
- If an inspection reveals that silt is entering a waterbody, further mitigative measures may be implemented to intercept run-off, e.g., temporary drainage ditches, siltation control (settling) ponds, ditch blocks/check dams, or sediment dam traps. The necessary or appropriate measures will be determined in the field.
- Work and laydown areas will be monitored for erosion and appropriate repair action taken, as necessary.
- Runoff will be directed away from active work areas before construction commences, reducing the volume of sediment-laden water to be managed.

2.10 Blasting

Potential Environmental Concerns

Potential environmental concerns associated with blasting include vibration and noise, dust generation, and the potential introduction of silt and ammonia into groundwater and into water bodies through mine dewatering effluent.

Environmental Protection Procedures

- Use of explosives in or near water will be avoided; however, if required, will follow applicable permit requirements.
- Blasting activities will be conducted by a licenced contractor and will follow best practices outlined in the Blasters Handbook and the DFO Environmental Code of Practice for Metal Mines.
- Blasting activities will be scheduled between 9:00 a.m. and 5:00 p.m. Blasting on days of cultural importance will be avoided and identified in consultation with Indigenous groups.
- The blasting contractor will develop a Blast Management Plan, to be approved by New Found Gold. The Blast Management Plan will guide safe and controlled blasting practices and address associated risks including flyrock and infrastructure damage.
- Fugitive dust emissions will be monitored and controlled by adjusting the crushing rate and the blast size.

2.11 Water Withdrawal / Supply

Potential Environmental Concerns

The potential environmental concerns related to water withdrawal relate to potential adverse effects to the terrestrial and aquatic habitats in and around the subject waterbody.

Environmental Protection Procedures

- Water intakes will be designed and installed as per DFO's Freshwater Intake End-of-Pipe Fish Screen Guideline (DFO 1995), including having an appropriate screen to prevent damage to fish.
- Mitigation specific to the use of Pumps and Generators (Section 2.14) and Dewatering Work Areas and Site Drainage (Section 2.13) are relevant to the supply of Project water and will be implemented, as needed.
- Fish rescues will be conducted in isolated areas of streams or ponds which experience reductions in flow, as required by applicable regulators.

2.12 Watercourse (Stream) Crossings

Potential Environmental Concerns

The potential environmental concerns associated with stream crossings and culvert installations include direct disturbances and/or mortality of fish, and potential loss of fish habitat resulting from sedimentation and removal of habitat and stream bank vegetation. An evaluation of soil erosion potential will be conducted at each stream crossing. The assessment of soil erosion potential will assist in the development of specific erosion stabilization methods, and effective sedimentation control practices on a site-specific basis.

Environmental Protection Procedures

No work below the high-water mark of surface water features will be conducted without prior notification and assessment by the Mine Manager or designate. Stream crossings will be constructed in compliance with the required Permit for Culvert Installation from WRMD and required approvals other regulatory agencies. If fording is required, a Fording Permit will be obtained from WRMD and the conditions followed.

The following measures will be implemented to reduce potential effects to stream crossings:

- Project infrastructure will be sited to avoid fish habitat to the extent practicable. Where the harmful alteration, disruption, or destruction of fish habitat cannot be avoided, the habitat will be offset, as required by the *Fisheries Act*.
- No work will be conducted below the high-water mark without prior assessment and applicable permits.
- In-stream work will be avoided when sensitive fish life stages are present (Sept 30 to May 31), unless authorized.
- In-water work areas will be isolated from receiving fish bearing waters as required by applicable permits.
- Deleterious substances (e.g., sediment and fuel) will be prevented from entering watercourses and waterbodies during watercourse crossing work.
- Equipment will be inspected and cleaned prior to use onsite to prevent the transfer of non-native aquatic invasive species.
- Work will be scheduled to heed weather advisories to avoid periods that may result in high flow volumes and increase the potential for erosion and sedimentation.
- When working in-water, machinery will be operated on land in dry stable areas, as practically feasible.
- When working in-water, excavated material will be placed above the high-water mark or top of bank of nearby waterbodies to prevent re-entry of sediments.
- Emergency spill kits will be readily available when working within 15 m of watercourses and waterbodies.
- Water being pumped or diverted from areas of in-water works will meet applicable guidelines before being discharged to the receiving environment.

- If culverts are required in areas of fish habitat, application will be made to the appropriate regulatory agency, usually NLDECCC and DFO. The culverts will be installed according to permit specifications and in accordance with the Environmental Guidelines for Culverts from WRMD. New culverts will be sized appropriately, embedded and designed to be passable to fish to provide fish passage. The following measures will also be implemented:
  - Install culvert(s) in accordance with good engineering and environmental practices.
  - Unless otherwise indicated, work should take place in dry conditions, either by the use of cofferdams or by diverting the stream.
  - Installation of cylindrical culverts will be counter sunk only where necessary to protect fish habitat such that the culvert bottom is one-third the diameter below the streambed in the case of culverts less than 750 millimetres (mm) outside the diameter; for culverts greater than 750 mm outside diameter, the culvert bottom will be installed a minimum of 300 mm below the streambed.
  - In multiple (gang) culvert installations, install one culvert at an elevation lower than the others.
  - The natural low flow regime of the watercourse will not be altered.
  - A culvert will not be installed before site specific information such as localized stream gradient, fish habitat type and species present have been evaluated. Culverts are to be installed using the guidelines provided in Gosse et al. (1998).
  - Riprap outlets and inlets to prevent erosion of fill slopes.
  - Use culverts of sufficient length to extend a short distance beyond the toe of the fill material.
  - Use backfilling material that is of a texture that will support the culvert and limit seepage and subsequent washing out.
  - Align culverts such that the original direction of stream flow is not significantly altered.
  - Remove fill and early works and construction related debris from the culvert area to a location above the peak flow level to prevent its entry into the stream.
  - Fill material will not be removed from streambeds or banks; except when installing a culvert when removal of material is necessary for the foundation.
  - Culverts should be marked to indicate their position under the snow.
  - Limit and restrict the use of heavy equipment in and near watercourses; where possible, an excavator will be used from shore rather than a bulldozer in the watercourse. Where it is absolutely necessary to do so, instream work will be performed by rubber-tired vehicles (Gosse et al. 1998) only and will only be done with prior notification of New Found Gold's Mine Manager or designate, in compliance with applicable regulatory approvals.
  - As required, cofferdams of non-erodible material will be used to separate work areas from the watercourse when excavating for culverts and footings.
  - Cofferdams will be removed upon completion of early works and construction and the streambed returned as closely as possible to its original condition.

- When fording watercourses, the WRMD Environmental Guidelines and applicable permits will be adhered to, along with the following:
  - Areas of spawning habitat will be avoided.
  - Crossings will be restricted to a single location and crossings made at right angles to the watercourse.
  - Equipment activity within the watercourse will be reduced by limiting the number of crossings.
  - Equipment will be mechanically sound to avoid leaks of oil, gasoline, and hydraulic fluids.
  - No servicing or washing of heavy equipment will occur adjacent to watercourses; temporary fueling, servicing or washing of equipment in areas other than the main fuel storage site will not be allowed within 30 m of a watercourse.
  - The entire fording area will be stabilized using vegetation mats, corduroy roads, or coarse material (125 mm diameter or greater), when the ford area is not natural bedrock, or is easily disturbed by fording. When the substrate of the ford area is not subject to easy disturbance by fording, or coarse material is not easily available within the lease boundaries, fording under existing substrate conditions may occur under the direction of the Mine Manager or designate.
  - Fording activities will not decrease the depth of the watercourses to less than 20 cm. Where the existing depth is less than 20 cm, that depth will be maintained.
  - Fording activities will be halted during seasonal, or precipitation related high flow periods.
  - Stabilize bank sections that contain loose or erodible materials. If banks must be sloped for stabilization, no material will be deposited in the watercourse and sloping will be accomplished by back-blading and the material removed will be deposited above the high-water mark of the watercourse.

2.13 Dewatering Work Areas and Site Drainage

Potential Environmental Concerns

The main concern associated with site dewatering and drainage relates to potential siltation of waterbodies and direct fish mortality and/or habitat destruction for freshwater aquatic species.

Environmental Protection Procedures

- Initial dewatering activities will be scheduled to avoid sensitive periods for aquatic life (Sept 30 to May 31), to the extent practically feasible.
- Fish salvage operations will be conducted as required, under the direction of qualified aquatic specialists and in consultation with DFO. Best efforts will be made to relocate fish from areas of in-water works (e.g., South Hermans Pond) to an appropriate location in the same watershed, as required.
- Site water will be discharged to vegetated areas to limit potential adverse effects on waterbodies.
- To reduce siltation to a waterbody, filtration or other suitable measures, (e.g., silt fences and/or dykes) will be used to limit silt and reduce the turbidity of water prior to discharging.
- Dewatering will be carried out gradually to prevent sediment resuspension and bank destabilization.
- Discharged water will follow natural surface drainage patterns.
- The amount of water requiring treatment on site will be reduced through perimeter berms which will promote overland flow of clean non-contact runoff away from the mine site.
- Monitoring of site run-off at early works and construction sites will be conducted as per provincial requirements, and in compliance with effluent quality standards.
- If monitoring indicates regulated water quality standards are exceeded, New Found Gold will, in consultation with applicable regulatory agencies, develop additional mitigation measures.
- Site drainage systems will be designed to limit impacts on downstream watercourses, wetlands, and associated vegetation, and to allow wildlife crossing opportunities, where feasible.
- Flows to fish bearing streams and ponds will be maintained by designing water management within the pre-development catchments to the extent practicable.

2.14 Pumps and Generators

Potential Environmental Concerns

A variety of water pumps, hoses, and electrical generators may be used at early works and construction sites and to support site trailers. Potential environmental concerns associated with their use include potential accidental spills or chronic leaks that could adversely impact waterbodies.

Environmental Protection Procedure

- To reduce fire hazards, fuel should not be stored immediately adjacent to generators, and the fuel storage area should be well ventilated. Fuel will not be stored within 100 m of waterbodies (Gosse et al. 1998).
- Fuel storage containers are to have spill trays beneath with a potential capacity of 110% of volume. They should also be in a covered and secured area.
- Drip pans are placed underneath pumps and generators located near waterbodies.
- Hoses and connections on equipment located near waterbodies should be inspected routinely for leaks and drips.
- Leaks will be reported immediately to the New Found Gold's Mine Manager or designate.
- In addition to spill kits located at fuel storage tanks, additional spill kits will be located at designated central storage location(s). Personnel involved with fueling, fuel transfer, and pumps and generators are trained in the use of spill kits.
- If water is required, please refer to Section 2.11.

2.15 Equipment Use and Maintenance

Potential Environmental Concerns

Various vehicles and heavy equipment may be used during early works and construction activities. Potential environmental concerns associated with operating and using vehicles and equipment include air emissions, accidental spills, and hydrocarbon leaks that may contaminate on-site water bodies.

Environmental Protection Procedure

- Idling of equipment will be reduced, where practicable to reduce noise and air contaminant emissions.
- Tier 4 engines are considered Best Available Control Technology for air contaminant emissions from diesel engines and will be used for mobile equipment.
- Prioritization will be given to purchasing off-road equipment that meets the most stringent available emission standards, including the latest applicable tier of the *Off-road Compression-Ignition (Mobile and Stationary) and Large Spark-Ignition Engine Emission Regulations*.
- Regular inspections, servicing, and maintenance of engines and exhaust systems will be conducted on mobile equipment and vehicles.
- Equipment maintenance and fueling activities will be performed at sites designated by the Mine Manager or designate and in compliance with applicable regulations.
- Drip pans will be placed under pumps, fuel containers, and generators.
- Hoses and connections on equipment will be inspected routinely for leaks and drips.
- Only minor repairs and maintenance (e.g., lubrication) of 'non-mobile' equipment will be performed on-site. Major repairs will be performed at a location outside of the early works and construction area, where possible.
- Fuel/oil leaks will be repaired and reported immediately to New Found Gold's Mine Manager or designate.
- Fuel and other hazardous materials will be handled according to procedures in Section 2.16.
- In addition to spill kits located at fuel storage tanks, additional spill kits will be located at designated central storage location(s). Personnel involved with fueling, fuel transfer, and pumps and generators will be trained in the use of spill kits.
- Fuel use will be tracked to identify inefficiencies and support adaptive management of equipment performance.

2.16 Storage, Handling and Transfer of Fuel, and Other Hazardous Material

Typical hazardous substances that may be used on site include, but are not limited to:

- petroleum, oil and lubricants
- chlorinated and non-chlorinated solvents (e.g., cleaner-degreasers)
- flammable gases (e.g., acetylene)
- waste petroleum products (e.g., used engine oil)
- corrosives (e.g., battery acid)
- glycol (e.g., antifreeze)

Potential Environmental Concerns

The main concern relative to hazardous substances is a potential uncontrolled release to the environment through spillage, and subsequent adverse effects on the environment, (i.e., terrestrial and aquatic habitat and species, soil, and groundwater quality), and human health and safety.

Environmental Protection Procedures

- The *Workplace Hazardous Materials Information System (WHMIS) Regulations* under the *Occupational Health and Safety Act* will apply to the handling and storage of hazardous materials. Relevant and current Safety Data Sheets will be readily available for the site.
- Necessary precautions will be taken to prevent and reduce the spillage, misplacement or loss of fuels and other hazardous materials. In the event of a reportable spill on land or a spill, regardless of size, in the freshwater environment, the Environmental Emergencies 24-Hour Report Line **(1-800-563-9089)** will be contacted as noted in the contact list in Section 6.0.
- A spill is defined as reportable, depending on the class and quantity of dangerous goods involved, which varies between applicable Regulations:
  - Reportable spill quantities for hazardous materials are listed in the *Transportation of Dangerous Goods Act.*
  - A reportable hydrocarbon spill is defined as loss of gasoline or associated products in excess of 70 litres in the *Storage and Handling of Gasoline and Associated Products Regulations.*
  - A spill, regardless of size, that may enter the freshwater environment, must be reported according to the *Fisheries Act*.
- A copy of the Environmental Contingency Plan (see in Section 4.1) for fuel and hazardous material spills will be readily available.
- Fuel storage systems will be registered and comply with the *Storage and Handling of Gasoline and Associated Products Regulations*.
- Only workers who are qualified and trained in handling these materials as stated in the manufacturer's instructions and government laws and regulations will handle fuel and other hazardous materials.
- Operators will stay present during the entire refueling operation. At no time will it be left unattended.

- Fuel and other hazardous materials should be stored at least 100 m from surface waterbodies (Gosse et al. 1998).
- Handling and fueling procedures will comply with the *Storage and Handling of Gasoline and Associated Products Regulations* and additional requirements put forth by applicable regulators to limit potential contamination.
- Fuel storage areas and non-portable transfer lines will be clearly marked or barricaded so that they are not damaged by moving vehicles. The markers will be visible under all weather conditions. Barriers will be constructed in compliance with the *Storage and Handling of Gasoline and Associated Products Regulations*.
- Waste oils, lubricants and other used oil will be retained in a tank or closed container and disposed of in accordance with the *Used Oil and Used Glycol Control Regulations*. Spill trays will be used, and substances will be stored in a secured area.
- Fire and spill response materials will be kept nearby.
- Soil contaminated by small leaks of oil or grease from equipment will be disposed of according to the *Environmental Protection Act*.
- Storage tank systems will be inspected on a regular basis by the operator as per the *Storage and Handling of Gasoline and Associated Products Regulations*. This involves, but is not limited to, gauging or dipping, reconciliation of records and the proper maintenance of reconciliation records for the applicable timeframe noted within permits and regulations.
- Contracted fuel suppliers will, before transporting or positioning fuel or oil, provide New Found Gold with a copy of their fuel and hazardous material spills contingency plan.
- Transportation of hazardous and dangerous materials will be conducted in accordance with applicable regulations. Transportation documents will be retained in a retrievable filing system and stored for the duration of the undertaking.
- Smoking will be prohibited within 10 m of a fuel storage area.
- Fueling or servicing of mobile equipment will be conducted in designated areas and should not occur within 100 m of a body of water (Gosse et al. 1998).
- Drum storage areas will not be located within 100 m of a water body (Gosse et al. 1998). Drums containing hydrocarbon or other hazardous materials will be transported, stored, handled and disposed of such that spillage or leakage does not occur. New Found Gold must approve the location of drum storage areas.
- Small quantities of hazardous material (e.g., drums, cans and other containers under 20 litres) will be stored in a secure location protected from weather and freezing, as well as vehicle traffic.
- Where hazardous materials are to be stored outdoors, a designated area will be established, graded, and fitted with an impermeable membrane covered with local soil and surrounded by an earth berm.
- Decommissioning of temporary storage tank systems will be conducted according to the *Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products*.
- Hazardous waste will be moved to an appropriate hazardous waste storage area (refer to Section 2.19 for disposal). These areas are constructed in compliance with applicable legislation.

2.17 Propane Storage and Use

Potential Environmental Concerns

There are potential risks associated with propane storage and use. It is a flammable substance and poses potential threat to human and animals. In the liquid form, propane could potentially cause frostbite on skin contact. Propane containers could potentially explode if exposed to heat or fire.

Environmental Protection Procedures

- Propane storage tanks will be installed and used as per manufacturer's specifications.
- Tank maintenance schedules will be set and followed.
- Tanks will be free of corrosion and damages and will be inspected regularly and maintained or replaced, as needed.
- Areas surrounding propane storage tanks will be well ventilated and free of possible ignition sources and combustible materials.

2.18 Waste Management

Potential Environmental Concerns

Waste (e.g., domestic and industrial wastes, grey water, paper, cardboard, and wood), if not properly controlled and disposed of, will be unsightly and could potentially cause human safety and health concerns. It could also attract wildlife leading to the potential for human-wildlife conflicts. New Found Gold has developed a Waste Management Plan (WMP) that identifies the various waste streams anticipated from early works and construction activities and provides appropriate waste management procedures to follow. A summary of the WMP is presented below.

Environmental Protection Procedures

- Solid waste will be handled according to the provincial Environmental Protection Act.
- Solid waste materials will be considered, prior to disposal, for reuse, resale, or recycling.
- Solid waste produced by site personnel will be collected and disposed of at an approved facility, with permission obtained from that facility.
- Waste accumulated on site prior to disposal will be confined, so that it does not pose an environmental or health hazard.
- Work areas will be kept clear of waste and litter to reduce the potential for attracting wildlife and reducing potential interactions with wildlife.
- Food waste that may attract animals will be stored in covered, wildlife-proof containers.
- Burning of waste is not permitted without appropriate permits.
- Hazardous wastes generated will be handled according to the procedures for handling fuel and hazardous materials.

2.19 Hazardous Waste Disposal

Potential Environmental Concerns

The primary concern with disposing of hazardous substances is the potential for an uncontrolled release to the environment through leakage or accidental spillage, and subsequent adverse effects on terrestrial and aquatic habitat and species, soil, groundwater quality, and human health and safety. The management of hazardous waste is addressed in New Found Gold's WMP.

Environmental Protection Procedures

- Hazardous waste will be handled according to the provincial *Environmental Protection Act*. Waste classified as "hazardous" or "special" that cannot be disposed of in regular landfill sites will be sent for disposal to a licensed hazardous waste management company.
- Necessary precautions will be taken to prevent and reduce the spillage, misplacement or loss of fuels, and other hazardous materials. In the event of a spill on land or in the freshwater environment, refer to the Environmental Contingency Plan (Section 4.1).
- A copy of New Found Gold's Environmental Contingency Plan will be present at hazardous material storage sites and fuel transfer locations.
- Hazardous waste materials will only be handled by workers who are qualified and trained in handling these materials as stipulated in government laws and regulations.
- Waste accumulated on site prior to disposal will be confined, so that it does not pose an environmental or health hazard.
- Waste material will not be disposed of on-site or in a body of water.
- Burning of waste is not permitted.
- Where hazardous waste materials are to be stored outdoors, a designated area will be established, graded and fitted with an impermeable membrane covered with local soil and surrounded by an earth berm. Hazardous materials will be stored in appropriately labeled containers.
- Waste oils, lubricants and other used oil will be retained in a tank or closed container and disposed of in accordance with the *Used Oil and Used Glycol Control Regulations*.
- Solvents used for parts cleaning will be stored, handled, and disposed of in accordance with hazardous materials management protocols.
- Soil contaminated by small leaks of oil or grease from equipment will be disposed of according to the *Environmental Protection Act*.
- Hazardous wastes generated by alternative treatments will be handled according to the procedures for handling fuel and hazardous materials (Section 2.16).

2.20 Sewage Disposal

Potential Environmental Concerns

The release of untreated sewage is a potential concern to human health, drinking water quality, and aquatic and terrestrial habitats. Sewage disposal is also addressed in New Found Gold's WMP.

Environmental Protection Procedures

- A combination of portable and plumbed toilets will be used on site. The sewage will be removed from portable toilets by a licensed contractor and disposed in compliance with the NL Department of Health guidelines, the *Lands Act*, *Waste Management Regulations*, *2003* under the *Environmental Protection Act* and the *Environmental Control Water and Sewage Regulations, 2003* under the *Water Resources Act*.
- Portable toilets or pit privies will be located a distance of at least 25 m from the Project sites in a direction away from bodies of water. Pit privies will be backfilled upon completion of early works and construction.

2.21 Vehicle Traffic

Potential Environmental Concerns

Vehicular traffic can result in fugitive dust, emissions and noise. New Found Gold is committed to the proper operation and maintenance of its vehicles to reduce environmental impacts.

Environmental Protection Procedures

- Vehicles and equipment, including all-terrain vehicles, will be restricted to designated routes within and between work, laydown, maintenance, and storage areas.
- Vehicles and equipment will be properly maintained to meet emission standards.
- Travel in areas outside designated work areas will not be permitted.
- Sensitive areas will not be entered by motorized vehicles without prior approval from the Mine Manager or designate and/or the Health, Safety, and Environment Department.
- Vehicles and equipment will yield to wildlife.
- Vehicles and equipment will yield to people, if present, and reduced speeds will be maintained on roadways.
- Chasing and/or harassing wildlife with vehicles and equipment will not be permitted.
- Maintaining and refueling vehicles will be restricted to designated areas (see Section 2.16).
- Heavy equipment (e.g., dump trucks and front-end loaders) will only be used in work areas.
- Access roads will be monitored for signs of erosion and appropriate action will be taken to repair roads, when necessary.
- As required, the contractor will implement dust suppression measures such as watering the roads.
- The Traffic Management Plan will encourage carpooling and require Project drivers and employees to observe speed limits and take safety precautions.
- When practicable, shift changes and truck movements will be scheduled to avoid peak traffic hours and school bus pick-up and drop-off times.

2.22 Dust Control

Potential Environmental Concerns

The environmental concerns associated with dust include potential human health effects and potential effects on aquatic ecosystems and vegetation. Dust will be managed on-site through the use of best available technologies and best practices, including real-time monitoring of dust levels near Appleton. Dust monitoring and associated adaptive management measures will be provided in the Air Quality Monitoring Plan, which will be developed prior to construction in consultation with regulators and included as an appendix to this EPP (Appendix C). The Plan will specify procedures for monitoring, trigger levels, and standards.

Environmental Protection Procedures

- Dust from early works and construction activities will be controlled using water or other approved dust suppressants as required during dry and windy period. In the event of excessive dust observed visually or via real-time dust monitoring results exceeding trigger levels, water will be applied to travel and work surfaces.
- Dust generated by truck movements along the site roads will be reduced by speed control, proper truck loading, application of water or other approved dust suppressants to suppress, and proper road maintenance.
- Waste oil will not be used for dust control. The application of dust suppressants other than water to roads as an alternative option to watering will be considered in consultation with NLDECCC. Dust suppression would be applied on an as-needed basis during dry and high wind conditions or if measured ambient particulate matter concentrations are approaching the Newfoundland and Labrador Air Quality Standards (exceed trigger action levels). The chosen dust suppressant will be approved by the NLDECCC prior to application. These suppressants, if required, will be applied, as per the manufacturer's recommendations.
- Disturbed areas will be revegetated as soon as practicable to limit dust emissions, and already disturbed areas will be used for Project infrastructure where feasible to limit the extent of disturbance.
- Working areas and laydown areas will be covered with blasted rock to reduce dust.
- Stockpiles of topsoil, overburden, and other potentially dust-generating materials will be managed to limit to the extent possible dust generation, including through revegetation where feasible and application of dust suppressants if needed. Where applicable, stockpiled material will be used or removed as soon as practical.
- Drop heights for material transfers will be reduced to the lowest level technically feasible to reduce fugitive dust from transfers.
- Where feasible, activities that take place at an existing storage pile (i.e., loading and unloading) should be confined to the downwind side of the storage pile.
- Regular clean-up of spillage around transfer points will be conducted.
- When handling/loading/dumping material using a front-end loader, excavator, or dump truck consider dumping material in a sheltered location when feasible, limit the speed of descent; and reduce the material free fall (drop height).
- Where feasible, the loading and unloading activities should be conducted when the wind speed is low to reduce fugitive dust emissions. In very high wind conditions, these activities should be suspended, where practicable.

2.22.1 Inspections and Reporting

Formal inspections of the performance of dust mitigation of working areas will be conducted periodically (monthly or more frequently) by management or designated representatives. Observations are to be made each shift regarding dust conditions.

The inspections should adhere to the following pattern:

- Review dust management practices for the area
- Conduct physical inspection
- Identify sources of fugitive dust not being effectively managed
- Recommend existing corrective action
- Suggest alternatives to the management group if existing practice is deemed ineffective
- Determine if additional resources are required and inform management group
- Establish accountability for the corrective action(s)
- Document inspection finding in report form
- Submit report for review and to enable follow up

Dust mitigation inspection reports will be circulated at the general management level and department management level. Observations made each shift will be recorded in the shift log book along with corrective action taken and other pertinent information. Shift supervisors and department managers will be responsible for addressing recognized fugitive dust issues in cooperation with the Health, Safety, and Environment Department which will serve as a technical resource to operating groups. The early identification of fugitive dust is via visual assessment or via exceedance of trigger action levels based on real-time dust monitoring.

The monitoring results from the real-time measurements will be compared to applicable guidelines and limits and used as a basis to objectively determine the overall effectiveness of dust mitigation and may trigger corrective actions in the form of additional mitigation.

2.23 Noise and Light Control

Potential Environmental Concerns

A variety of sound and light emissions associated with early works and construction activities can adversely impact the distribution and abundance of wildlife resources in the area. Noises associated with heavy equipment use are temporary in nature.

Environmental Protection Procedures

- New Found Gold will adhere to permits, approvals, and/or authorizations.
- Vehicles and generators will have exhaust systems regularly inspected and mufflers will be operating properly.
- A noise berm will be constructed near Keats pit to help reduce noise emissions.
- Project lighting will be optimized and limited to what is necessary for safe and efficient Project activities.
- Lighting design guidelines will be followed, such as the Commission Internationale de L'Éclairage, International Dark Sky Association, Illuminating Engineering Society.
- Full cut-off luminaires will be used where practicable to reduce glare, light trespass, and sky glow from the Project.
- Lighting will be designed to avoid excessive use of mobile flood lighting units and will be turned off when they are not needed.
- To the extent practicable, mobile and permanent lighting will be located such that unavoidable light spill off the working area is not directed toward receptors outside of the Project Area.
- Automatic sensors or strobe lighting will be used in areas where continuous lighting is not essential.
- Light fixtures will be located so that they are not directed toward oncoming traffic on nearby on-site or off-site roads.

3 Resource-Specific Mitigation and Management Plans

3.1 Historic Resources

Potential Environmental Concerns

Historic resource material that is disturbed, destroyed, or improperly removed from a site represents a potential cultural loss of information and history that could otherwise be handled and interpreted in an efficient and appropriate manner.

Environmental Protection Procedures

For the other watercourse or waterbody shorelines within the New Found Gold mineral claim that were not assessed in 2023 under Archaeological Investigations Permit 23.35, the following measures will be implemented where practical:

- The generalized 50 m-wide high archaeological potential buffer zone identified during the desktop Historic Resources Overview Assessment (HROA) remains in place and continued avoidance of those areas by Project-related ground disturbing activities is recommended.
- If avoidance of these areas is not possible, New Found Gold and its archaeologists will consult with the PAO regarding which of these new interaction locations warrant a walkover survey based on the results of the HROA and the observations from the field program completed in 2023. If new areas are identified for walkover survey are confirmed, this will be complete in 2026, prior to groundbreaking activities in these locations.

3.2 Avifauna Management Plan

Potential Environmental Concerns

The Avifauna Management Plan has been designed to reduce the possibility of incidental take of active nests during construction activities associated with the Project. New Found Gold will avoid adverse impacts on avifauna whenever possible. The construction footprint will be limited to the greatest extent possible and whenever possible, New Found Gold will endeavor to complete required clearing outside the regional bird breeding season clearing (Section 2.1).

Environmental Protection Procedures

- Vegetation clearing will be scheduled to avoid the migratory bird nesting period (Section 2.1), where feasible. Avoiding this window also helps protect species with overlapping sensitive periods, including SAR such as little brown and northern myotis (maternity roosting), Newfoundland marten (denning), and insect SAR during the active bee and beetle seasons (Section 2.1).
- Nests, eggs, and shelters of migratory birds or other wildlife will not be disturbed or destroyed. If an active nest is found, the surrounding area will remain undisturbed until fledging has occurred, or the nest is abandoned. If a raptor nest is encountered, work in the vicinity will stop until Wildlife Division provides direction.
- Non-intrusive nesting surveys will be completed prior to vegetation clearing for raptors throughout the year as well as breeding birds within the breeding bird window (Section 2.1).

- No vegetation clearing will occur within:
  - 800 m of a bald eagle or osprey nest between March 15 and July 31; 200 m during the remainder of the year
  - 800 m of a short-eared owl (ground) nest between May 15 to August 15
  - 200 m of other raptor nests between March 15 and July 31
- The location of a raptor nest site will be reported to the Wildlife Division **(WildlifeReferrals@gov.nl.ca).**
- Active or suspected active nests (forested birds such as passerines, upland game birds) should receive a minimum 30 m setback distance and for SAR (e.g., rusty blackbird) a minimum 75 m setback is required.

Response Actions

- Timing of vegetation clearing will avoid, where possible, the nesting and breeding season of avifauna. If clearing must occur during breeding season, the following measures will be implemented (in accordance with guidelines outlined in the MBCA):
  - Prior to clearing, trained personnel will conduct systematic nest searches. These searches will identify active nests, signs of breeding behaviour, calls, droppings, or habitat likely to contain nests.
  - If an active nest is found, a no-work buffer zone must be established and clearly delineated. The buffer size depends on species, nest location, and sensitivity; some species require very large setbacks. Activities in the nesting area will be halted until nesting is completed, i.e., the young have left the vicinity of the nest.
  - Nests will not be marked using flagging tape or other similar material as these increase the risk of nest predation.
- Raptors, although not protected under the MBCA, are protected under NL's *Wild Life Act*. In accordance with provincial guidelines, should a nest of a raptor be found, the following steps will be taken:
  - A buffer zone of 800 m for Bald Eagle and Osprey will be maintained while the nest is active, and a buffer zone of 200 m will be maintained for rest of the year and for other species of raptors
  - After the young have left their nest, a buffer zone of 250 m will be maintained
  - If work within the appropriate buffer zone cannot be avoided, Newfoundland and Labrador Department of Forestry, Agriculture and Lands will be contacted for direction on how to reduce disturbance of the nest and permits that may be required

These mitigation measures in place during the construction phase of this Project will help avoid and/or reduce incidental take of avifauna during vegetation clearing.

In addition, dust from construction activities will be controlled using water if required (Section 2.22), and noise generated from blasting or heavy equipment use will be addressed by following the requirements of permits and approvals (Section 2.23).

Fuels and hazardous materials required during construction will be stored according to applicable regulations (Section 2.16). Hazardous materials will be stored in appropriate locations with proper containment as required for each product (Section 2.19).

3.3 Wildlife and Wetland Environmental Effects Monitoring Program

Potential Environmental Concerns

Potential effects of Project construction on wildlife include habitat loss or alteration and increased mortality risk. Vegetation clearing and construction activities may change habitat conditions and create edge habitats, which can affect wildlife use and movement. Mortality risk may increase due to vehicle collisions, habitat alteration, and increased predation opportunities. Project construction, particularly vegetation clearing and grubbing, will remove vegetation, including some species of conservation concern, and may change plant communities in the area. The use of equipment and imported soils or materials may also introduce or spread non-native invasive plant species, which could affect native vegetation and habitat quality.

Environmental Protection Procedures – General

- Vehicles will yield to wildlife encountered on site.
- Site orientation will include information on SAR identification and protocols (e.g., buffers, bee sting protocols); sitings of potential SAR species will be reported to the Mine Manager (or designate).
- Waste storage areas will include measures to reduce the attraction of wildlife (e.g., secure containers, regular removal).
- Employees and contractors associated with the Project will be prohibited from fishing, hunting, trapping, gathering plants, or using off-road vehicles for recreational purposes within the Project Area, or from using the Project Area to access surrounding areas for these purposes, unless such access is specifically granted to support Indigenous traditional land use activities. Hunting / fishing / harvesting of wildlife will be strictly prohibited on the mine site.
- Chasing, catching, diverting, following, or otherwise harassing wildlife will be prohibited.
- Nuisance animals (e.g., bears, coyotes) will be managed by the Mine Manager (or designate) in consultation with Wildlife Division.
- Observations of caribou in the Project Area will be reported immediately to the Mine Manager (or designate) and work will cease. The Mine Manager (or designate) will determine if Project activities will be reduced or delayed, as applicable. New Found Gold will consult with the Wildlife Division on this issue.
- Project lighting will be controlled, while meeting regulatory, operational, health, and safety requirements, to mitigate attraction and disorientation of migratory birds, taking into account the Convention on Migratory Species' *International Light Pollution Guidelines for Migratory Species*.
- On-site wildlife observations, including caribou, will be documented year-round (e.g., location, date) on a wildlife observation form.

Environmental Protection Procedures – Bats (myotis)

- Where practical, large diameter trees will be maintained, especially those that are dead or dying. These types of trees typically have peeling bark, crevices, and cavities that provide important roosting habitats for bats. Additional mitigation may involve offering alternate habitat (e.g., artificial structures such as bat boxes) to off set the loss of roosting habitat.
- Caves, sinkholes, fissures, or other underground cavities that are identified as a result of Project activities will be inspected for evidence of overwintering bats and reported to Wildlife Division if evidence is present.

- Before demolition or removal of existing structures during the breeding bird or active bat season, wildlife surveys will be conducted to identify potential nesting and roosting sites. Additional mitigation may involve offering alternate habitat (e.g., artificial structures such as bat boxes) to off-set habitat loss.
- The discovery of bat roosts or hibernacula, or active dens (e.g., marten dens), will be reported immediately to the Mine Manager (or designate) and work will cease. A plan for protection, avoidance, and/or mitigation will be established by New Found Gold, guided by engagement with trained personnel and/or federal or provincial regulators.
- Trees and snags with a diameter at breast height of greater than 25 cm will be surveyed for potential active bat colonies prior to clearing between May 1 to September 1.
- New Found Gold will apply a 250-m no-cut buffer until September 1 should an active bat colony be detected.
- Observations of bat colonies, potential hibernacula sites, or sick or dead bats will be reported by the Mine Manager or designate to the provincial Wildlife Division at **709-637-2025** or through the toll-free bat hotline: **1-877-434-2287 (BATS)**.

Environmental Protection Procedures – Insects

- Where revegetation or rehabilitation is planned, native flowering plant species known to support bumble bees (e.g., goldenrod, clover, fireweed, yarrow) will be used, where possible.

Environmental Protection Procedures – Caribou

- Observations of caribou in the Project Area will be reported immediately to the Mine Manager or designate and work will cease. The Mine Manager (or designate) will determine if Project activities will be reduced or delayed, as applicable. New Found Gold will report observations to Wildlife Division and discuss additional mitigation measures, if required.

Environmental Protection Procedures – Vegetation and Wetlands

- Equipment will arrive at the construction site clean and free of soil and vegetative debris, to reduce the risk of introducing or spreading non-native and/or invasive vascular plant species. Equipment will be inspected and either approved for use or cleaned, re-inspected, and approved for use.
- If potentially invasive vascular plant species are noted within or near the Project Area during construction or operation, the extent of the species will be assessed and a plan for removal and/or control will be developed.
  - A Section 48 permit will be obtained for work to be completed within 15 m of a body of water, which includes wetlands, shown on Natural Resources Canada 1:50,000 scale National Topographic System mapping, as defined by WRMD.

4 Environmental Contingency Plan

New Found Gold has developed and will implement an Environmental Contingency Plan that includes procedures to address accidents and unplanned events. The Plan will be reviewed and updated as necessary throughout early works and construction activities. An Emergency Response Plan that focuses on accidents and emergencies that could risk human health and safety, such as medical emergencies, vehicle accidents, and fires/explosions will be provided to regulators under a separate cover prior to construction. The Environmental Contingency Plan addresses the following:

- Fuel and Hazardous Material Spills
- Water Control Infrastructure Failures
- Wildlife Encounters
- Forest Fires
- Discovery of Historic Resources

4.1 Fuel and Hazardous Material Spills

Potential Environmental Concerns

Fuel and hazardous materials can potentially be damaging to vegetation, soil, surface water, groundwater, wildlife, aquatic organisms, historic resources, and human health and safety.

Environmental Protection and Response Procedures

In case of a fuel or hazardous material spill, the following procedures will apply.

- The individual who discovers the leak or spill will make a reasonable attempt to immediately stop the leakage and contain the flow, if safe to do so. Spill kits are located at fuel storage tanks and at designated central storage location(s).
- Spill location, type of fuel or hazardous material, volume, and terrain condition at the spill site will be determined and reported immediately to the Mine Manager or designate, who will report it immediately to the applicable regulatory agency.
- In the event of a reportable spill on land or a spill regardless of size that may enter a waterbody frequented by fish must be reported immediately to the Environmental Emergencies 24 Hour Report Line **709-772-2083 or 800-563-9089**. (Refer to Section 2.16 for the definition of reportable spills on land versus in freshwater environments). The spill occurrence will be documented on the Spill Report Form in Appendix D.

Required information may include any or all of the following:

- name of reporter and phone number
- time of spill or leak
- time of detection of spill or leak
- type of product spilled or leaked
- amount of product spilled or leaked

- location of spill or leak
- source of spill or leak
- type of accident - collision, rupture, overflow, other
- owner of product and phone number
- if the spill or leak is still occurring
- if the spill or leaked product is contained, and if not, where it is flowing
- wind velocity and direction
- temperature
- proximity to waterbodies, water intakes, and facilities
- snow cover and depth, terrain, and soil conditions

The Mine Manager or designate will act as the "On-Scene-Commander" for the purposes of cleaning up a fuel or hazardous materials spill. The Mine Manager or designate will be familiar with spill clean-up procedures and mobilization procedures of the clean-up equipment and will have full authority to take necessary and appropriate action without unnecessary delay.

The overall responsibility of coordinating clean-up and maintaining the Environmental Contingency Plan current and up to date will be the Senior Project Manager.

Personnel will be trained in the procedures to follow in case of a fuel or hazardous material spill, and spill communication procedures. New Found Gold will update the personnel responsibilities list specific to spill response on an ongoing basis.

A complete list of spill response equipment will be available and distributed at early works and construction sites before the start of early works and construction activities.

- In reaching decisions on containment and clean-up procedures, the following criteria will be applied:
  - limit danger to workers and the public
  - protect public water supplies
  - limit adverse impacts to waterbodies
  - limit area affected by spill
  - limit the degree of disturbance to the area and waterbodies during clean-up
- The Mine Manager, designate, or Senior Project Manager will act in consultation with the authorities to:
  - assess site conditions and environmental impacts of various cleanup procedures
  - assess potential for fuel recovery versus burning
  - deploy on-site staff to mobilize pumps and empty 215 litre drums or other appropriate storage containers to the spill site
  - deploy on-site staff to build containment dykes and commence pumping contaminant into drums
  - apply absorbent as necessary

  - dispose of contaminated debris, cleaning materials and absorbent by burning, if appropriate, or by placing it in an approved land-fill site
  - take necessary precautions to avoid the incident in the future
- The Mine Manager or designate will be responsible for the preparation of a written report which will be sent (as soon as possible and no later than 30 days after the spill) to New Found Gold's Health, Safety, and Environment Department and, from there, to the applicable regulatory agencies.

4.2 Water Control Infrastructure Failures

Potential Environmental Concerns

Malfunction or failure of erosion and sediment control measures and/or dams (e.g., sediment ponds) could lead to erosion and sedimentation and/or the unplanned release of contact water into the receiving environment.

Environmental Protection and Response Procedures

The Water Management Plan provides detail on runoff and seepage collection strategies and systems (e.g., sedimentation ponds, berms, drainage ditches, pumps) to collect and contain surface water runoff and groundwater discharge from major Project components (open pit, waste rock piles, ore stockpile, and overburden stockpiles) during climate normal and extreme weather conditions.

New Found Gold is committed to working with provincial regulators and conforming with applicable guidelines (incorporating updates as applicable) such that the sedimentation ponds are designed, constructed, operated and ultimately rehabilitated in a safe and responsible manner.

The following procedures will be implemented in the event of a failure of erosion and sediment controls and/or dams during construction and/or operation:

- Sediment fencing and other sedimentation control measures (e.g., check dams) will be deployed, inspected and maintained as needed adjacent to wetlands and slow-moving watercourses.
- Where feasible, contact water will be pumped back into the collection system.
- The water management structure will be repaired and/or improved as required to avoid reoccurrence.
- Affected waterbodies will be monitored, and remedial actions and reporting, if required, will take place in consultation with regulators.

4.3 Wildlife Encounters

Potential Environmental Concerns

Wildlife encounters pose a potential risk for stress or injury to both the wildlife and site personnel.

Environmental Protection and Response Procedures

Personnel and contractors are responsible that the following procedures are followed:

- Site orientation will include information on SAR identification and protocols (e.g., buffers, bee sting protocols); sitings of potential SAR species will be reported to the Mine Manager (or designate).
- Employees and contractors associated with early works and construction will be prohibited from fishing, hunting, trapping, gathering plants, or using off-road vehicles for recreational purposes within the Project Area, or from using the Project Area to access surrounding areas for these purposes, unless such access is specifically granted to support Indigenous traditional land use activities.
- Site and working areas will be kept clean of food scraps and garbage.
- Waste will be collected for disposal in appropriate containers and routinely transferred to an approved location or facility.
- No personnel will chase, catch, divert, follow, or otherwise harass wildlife by vehicle or on foot at the early works and construction sites.
- Equipment and vehicles will yield the right-of-way to wildlife.
- Personnel should be aware of the potential for encounters with wildlife. Wildlife sightings will be recorded on the wildlife sighting forms.
- The Mine Manager or designate will be responsible for actions in response to nuisance animals (e.g., bears) in the early works and construction areas and will advise the Senior Project Manager for further action. Management of nuisance animals will be done in consultation with Wildlife Division.
- Capture, handling, relocation, or release of wildlife will be undertaken in consultation with and, where required, under authorization from Wildlife Division in accordance with the *Wild Life Act* and associated regulations.
- Observations of caribou in the Project Area will be reported immediately to the Mine Manager (or designate) and work will cease. The Mine Manager or designate will determine if Project activities will be reduced or delayed, as applicable. New Found Gold will consult with the Wildlife Division on this issue.
- Project lighting will be controlled, while meeting regulatory, operational, health, and safety requirements, to mitigate attraction and disorientation of migratory birds, taking into account the Convention on Migratory Species' *International Light Pollution Guidelines for Migratory Species*.
- On-site wildlife observations, including caribou, will be documented (e.g., location, date) on a wildlife observation form.

- If the nest of a raptor, or other birds are encountered during early works and construction activities, work in the area is to be halted until the Mine Manager or designate and/or Senior Project Manager is contacted and has had the opportunity to contact Wildlife Division and appropriate mitigation is applied.
- Caves, sinkholes, fissures, or other underground cavities that are identified as a result of Project activities will be inspected for evidence of overwintering bats and reported to Wildlife Division if evidence is present.

4.4 Forest Fires

Potential Environmental Concerns

Certain activities associated with early work and construction could potentially result in a fire, which could spread to the surrounding area. Such events could potentially be damaging to the biophysical environment (i.e., vegetation, wildlife, air quality, water quality), and human health and safety, and New Found Gold assets.

Environmental Protection and Response Procedures

New Found Gold and their contractors will take precautions to limit the potential for fire when working at the early works and construction sites. These precautions include, but are not limited to:

- Disposal of flammable waste on a regular basis. There will be no open fires during fire season.
- New Found Gold or their contractor will provide sufficient firefighting equipment to suit its labour force and fire hazards. Such equipment will be in good working order, comply with, and be maintained to the manufacturer's standards.
- New Found Gold or their contractor will provide personnel with training in the use of firefighting equipment.
- In the event of a forest fire, New Found Gold or the contractor will take immediate steps to contain or extinguish the fire, if safe to do so.
- New Found Gold's Mine Manager or designate will appoint a supervisory staff member as "On-Scene-Commander" for fighting forest fires, if safe to do so.
- Fires should be reported immediately to:
  - the Mine Manager or designate and Senior Project Manager
  - Forestry Branch, 24 hr Forest Fire Emergency Line at **(800)-898-4528**
- The following information will be provided:
  - name of the reporter and phone number
  - time of detection of the fire
  - size of the fire
  - location of the fire

4.5 Discovery of Historic Resources

Potential Environmental Concerns

Historic resource material that is disturbed, destroyed or improperly removed from a site represents a potential cultural loss of information and history that could otherwise be handled and interpreted in an efficient and appropriate manner.

Environmental Protection and Response Procedures

- If suspected archaeological material is encountered, stop work in the immediate area of the discovery and delineate the area as a no work zone until authorized personnel from New Found Gold, having consulted with the PAO, permit resumption of the work.
- The Mine Manager or designate will report the find immediately to New Found Gold's representative, the Health, Safety, and Environment Manager or designate.
- Mark the site's visible boundaries. Personnel will not move or remove artifacts or associated material unless the integrity of the material is threatened.
- The New Found Gold representative will report the find with the following information to the PAO and comply with the instruction provided:
  - nature of the find
  - precise description, map location and time of the find
  - nature of the activity resulting in the find
  - identity of the worker(s) making the find
  - present location of the material, if moved, and protective measures initiated for the material and the site
  - extenuating circumstances
- For the other watercourse or waterbody shorelines within the New Found Gold mineral claim that were not assessed in 2023 under Archaeological Investigations Permit 23.35, the following measures will be implemented where practical:
  - The generalized 50 m-wide high archaeological potential buffer zone identified during the desktop HROA remains in place and continued avoidance of those areas by Project-related ground disturbing activities is recommended.
  - If avoidance of these areas is not possible, New Found Gold and its archaeologists will consult with the PAO regarding which of these new interaction locations warrant a walkover survey based on the results of the HROA and the observations from the field program completed in 2023. If new areas are identified for walkover survey are confirmed, this will be complete in 2026, prior to groundbreaking activities in these locations.

5 EPP Control Revisions

This EPP will be revised as necessary to reflect site-specific environmental protection requirements and allow updates as work progresses or changes. EPP holders may initiate revisions by forwarding proposed revisions to the Mine Manager or designate and/or the Senior Project Manager. The following information will be provided on the Revision Request Form (Appendix E) for revision requests:

- section to be revised
- nature of the revision
- rationale for the revision (e.g., environment and/or worker safety)
- who submitted the revision request

Approval for revisions will be required from New Found Gold. When the Senior Project Manager approves a revision request, details of the revision will be distributed to EPP holders and will be documented in the Revision History Log (Appendix F). Each revision will be accompanied by:

- revision instructions
- list of sections being superseded
- an updated Table of Contents indicating the status of each section in the EPP

When EPP Holders receive a revision, they will, in a timely manner:

- read the text of the revision
- check the control sheet to confirm that the listed pages have been received
- remove and destroy the superseded pages from their copy of the EPP
- insert the revised pages in the proper place in their copy of the EPP
- page check the EPP, using the updated table of contents to confirm the EPP is complete and current
- enter the revision number and date entered on the Revision History Log
- incorporate the revision into the area of responsibility, as appropriate
- confirm that their personnel are familiar with the revisions

6 Contact List

New Found Gold Corp. Main Office
(709) 381-9353

Canadian Coast Guard Environmental Emergencies, 24-Hour Report Line
St. John's (709) 772-2083
Other Areas 1-800-563-9089

Service NL, Occupational Health and Safety Division
Grand Falls-Windsor Office, Tel: (709) 292-4400
Serious Workplace Accidents (24 hrs): (709) 729-4444

Department of Environment and Climate Change Water Resources Management Division
Director, Tel. (709) 729-2563

Department of Environment and Climate Change Pollution Prevention Division
Director, Tel. (709) 729-5782

Department of Department of Fisheries, Forestry and Agriculture Wildlife Division
Wildlife Biologist, Tel: (709) 637-2353

Department of Fisheries, Forestry and Agriculture Crown Lands Administration Division
Western and Labrador Regional Lands Office, Tel: (709) 637-2390

Department of Fisheries, Forestry and Agriculture
24 hr Forest Fire Emergency Line Tel. (800)-898-4528

Department of Industry, Energy and Technology,
Director, **Mineral Lands**
Tel. (709) 729-6425

Department of Tourism, Culture, Arts and Recreation
Provincial Archaeology Office, Tel. (709) 729-2462

Environment and Climate Change Canada
Environmental Emergencies Coordinator
Tel. (709) 772-7285

Environment and Climate Change Canada – Canadian Wildlife Service
Manager, Regulatory Affairs
Tel: (709) 772-7456 or (709) 690-3382

Fisheries and Oceans Canada
Area Habitat Biologist, Central, Tel: (709) 292-5197

Town of Gander
Tel: (709) 651-2930 Fax: (709) 256-5809

Town of Appleton
Tel: (709) 679-2289 Fax :(709) 679-5552

Town of Glenwood
Tel: (709) 679-2159 Fax: (709) 679-5470

RCMP
1-800-709-7267 (non-emergency)

Petroleum & Environmental Services Inc.
10 Simms Rd, Glenwood, NL A0G 2K0
Tel: 1-877-449-2335 (24hrs) Fax: 1-709-679-2205
Email: info@pesnl.ca

7 Reference Material

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Newfoundland and Labrador Department of Forest Resources and Agrifoods. 1998. Environmental Protection Guidelines for Ecologically Based Forest Resource Management (Stand Level Operations).

8 Signature Page

New Found Gold Corporation

The undersigned certify that they have reviewed, and understand their role and responsibility regarding:

QUEENSWAY GOLD PROJECT EARLY WORKS AND CONSTRUCTION ACTIVITIES ENVIRONMENTAL PROTECTION PLAN

As part of their Site Orientation.

representing

Name (Printed)	Company
Signature of above	Date
Name of Manager or Supervisor	
Manager or Supervisor's Signature	Date

APPENDIX A

List of Abbreviations and Acronyms

LIST OF ABBREVIATIONS AND ACRONYMS

cm	centimetre
DFO	Fisheries and Oceans Canada
EPP	Environmental Protection Plan
HROA	Historic Resources Overview Assessment
m	metre
MBCA	*Migratory Birds Convention Act*
mm	millimetre
New Found Gold	New Found Gold Corp.
NL	Newfoundland and Labrador
NLDECCC	Newfoundland and Labrador Department of Environment, Conservation and Climate Change
PAO	Provincial Archaeology Office
the Project	Queensway Gold Project
SAR	Species at Risk
WMP	Waste Management Plan
WRMD	Water Resources Management Division

APPENDIX B

Controlled Copy Distribution List

CONTROLLED COPY DISTRIBUTION LIST

New Found Gold	Individual or Location

APPENDIX C

Air Quality Monitoring Plan

APPENDIX D

Spill Report Form

New Found Gold Fuel and Hazardous Materials Spill Report Form

1. Name of reporter and phone number: _____
2. Time of spill or leak: _____
3. Time of detection of spill or leak: _____
4. Type of product spilled or leaked: _____
5. Amount of product spilled or leaked: _____
6. Location of spill or leak: _____
7. Source of spill or leak: _____
8. Type of accident - collision, rupture, overflow, other: _____
9. Owner of product and phone number:

   _____

10. Is the spill or leak still occurring: YES NO
11. Is the spill or leaked product contained: YES NO

    If NO, where it is flowing and what actions are being taken for containment:

    _____

    _____

12. Wind velocity and direction: _____
13. Temperature: _____
14. Proximity to waterbodies, water intakes, and facilities: _____

    _____

15. Snow cover and depth, terrain, and soil conditions: _____

    _____

In the event of a reportable spill on land or any spill regardless of size that may enter a waterbody frequented by fish must be reported immediately to:

Environmental Emergencies 24 Hour Report Line 709-772-2083 or **800-563-9089**.

APPENDIX E

Revision Request Form

SECTION TO BE REVISED:

NATURE OF REVISION:

RATIONALE FOR REVISION:
(i.e., environment/worker safety, etc.)

SUBMITTED BY:

Please submit request to the New Found Gold Mine Manager.

APPENDIX F

Revision History Log

REVISION HISTORY LOG

Version	Date Issued	Revision Notes

Appendix C Vibration Studies and Blast Management Plan

Technical Memo

To: Jared Saunders

From: David Pocthier

CC:

Project title Queenway mine project

Client: NewfoundGold

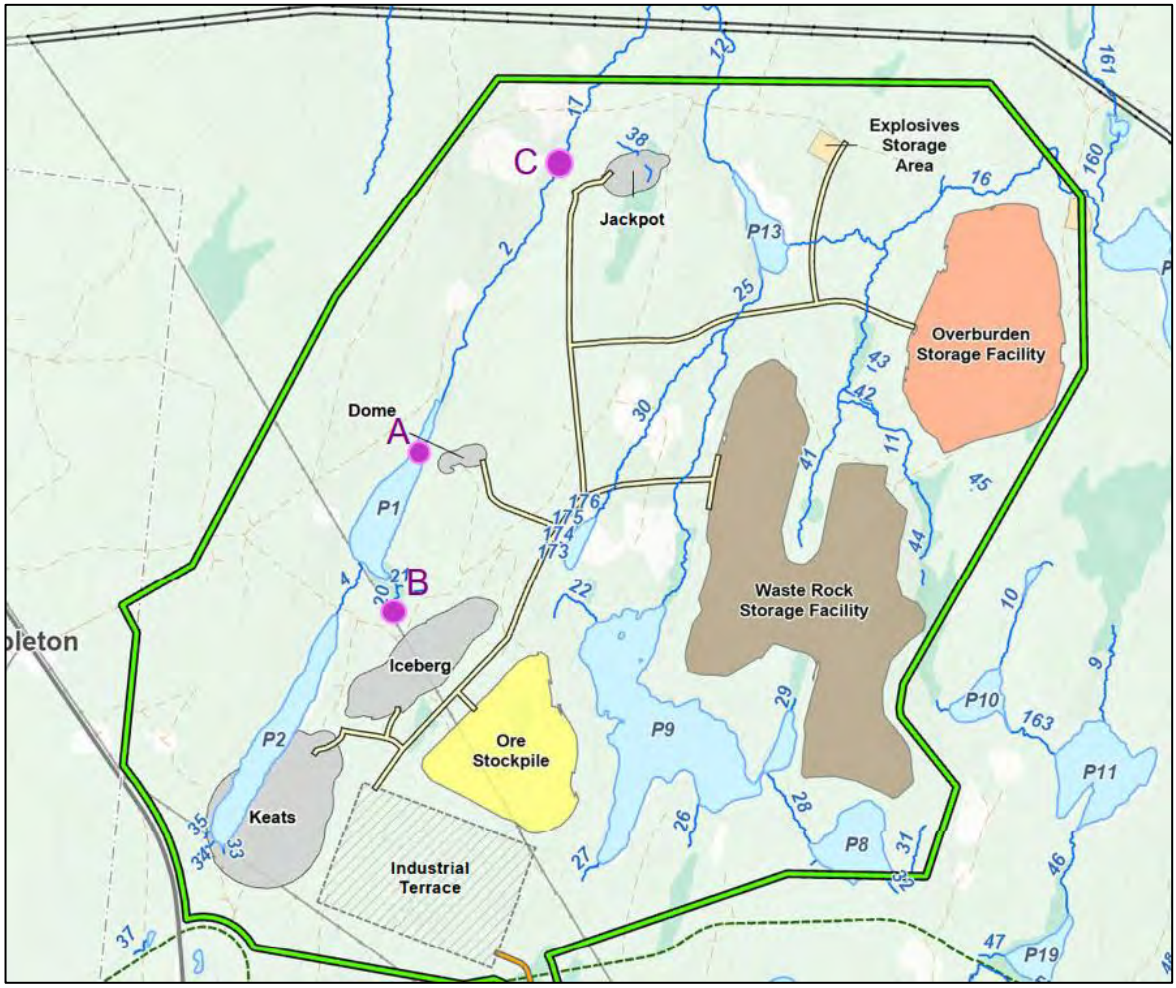
Project number: CA0059717.8120

Subject: Blast assessment – Fish Habitat and spawning period

Date: 2026-09-17

A.Receptor Location and critical distance

Rcptr_ID	Name	Type	Closer Pit	Distance (m)
A	Pond1	Waterbody	Dome	75
B	Stream 20	Watercourse	Iceberg	100
C	Stream 2	Watercourse	Jackpot	160


C
Jackpot
Explosives
Storage
Area
P13
Overburden
Storage Facility
Dome
A
P1
B
Waste Rock
Storage Facility
Iceberg
Ore
Stockpile
P9
P10
P11
P2
Keats
Industrial
Terrace
P8
P19

B.DFO Guidelines Threshold

DFO Guidelines (Wright and Hopky 1998) establish a 100 kPa peak overpressure (underwater shockwave) threshold to prevent fish fatalities and a 13 mm/s ground vibration threshold for spawning fish habitats during the period of egg incubation.

However, DFO now recommends a 50 kPa overpressure threshold based on more recent data from monitoring of seismic exploration in the MacKenzie Delta in 2002 (Cott and Hanna 2005).

For this reason, the present assessment is based on the following thresholds:

- 50 kPa peak overpressure (underwater shockwave) threshold to prevent fish fatalities; and
- 13 mm/s ground vibration threshold for fish spawning habitats during the period of egg incubation.

C.Drill and Blast parameters

Various blasting scenarios were considered to limit the impact on fish habitat and spawning areas. The baseline scenario involves a hole diameter of 114 mm and a blasting sequence of two holes per delay. Scenario #2 entails refining the initiation sequence by reducing the number of holes or introducing electronic detonator technology. Scenarios #3 and #4 involve reducing the borehole diameter to 102 mm and 89 mm, respectively, while maintaining a firing sequence of one hole per delay.

Parameter	unit	Scenario #1	Scenario #2	Scenario #3	Scenario #4
Drilling					
Bench heigth	m	5	5	5	5
Sub-drilling	m	1	1	1	0.75
Drill depth	m	6	6	6	5.75
Borehole diam.	mm	114	114	102	89
Burden	m	3.5	3.5	3.1	2.4
Spacing	m	3.5	3.5	3.1	2.4
Volume/hole	m3	61.25	61.25	48.05	28.80
Explosives					
Collar	m	2.3	2.3	2.3	3
Loaded length	m	3.7	3.7	3.7	2.75
Explosive type		Bulk Emulsion			
Product density	g/cc	1.2	1.2	1.2	1.2
Linear charge	kg/ml	12.2	12.2	9.8	7.5
Charge/hole	kg	45.3	45.3	36.3	20.5
Firing sequence	hole/delay	2	1	1	1
Charge/delay	kg	90.6	45.3	36.3	20.5
Powder factor	kg/m3	0.74	0.74	0.75	0.71
Powder factor	t/m3	0.27	0.27	0.28	0.26

D.Water overpressure and Vibration estimate

The estimation of underwater overpressure was carried out using the method described in Annex III of the DFO Guidelines.
The vibration estimation was performed using the general method from the ISEE guide. This method is more conservative than the one proposed in the DFO Guidelines.

Scenario #1 Standard

Rcptr_ID	Name	Type	Closer Pit	Critical distance (m)	Scenario	Hole diameter (mm)	Kg/delay	Water overpressure (kPa)	PPV (mm/s)*
A	Pond1	Waterbody	Dome	75	1	114	90.6	**48.1**	**41.93**
B	Stream 20	Watercourse	Iceberg	100	1	114	90.6	**30.4**	**26.46**
C	Stream 2	Watercourse	Jackpot	160	1	114	90.6	**14.3**	**12.47**

Scenario # 2/3/4 mitigated

Rcptr_ID	Name	Type	Closer Pit	Critical distance (m)	Scenario	Hole diameter (mm)	Kg/delay	Water overpressure (kPa)	PPV (mm/s)*
A	Pond1	Waterbody	Dome	75	4	89	20.5	**14.7**	**12.78**
B	Stream 20	Watercourse	Iceberg	100	3	102	36.3	**14.6**	**12.72**
C	Stream 2	Watercourse	Jackpot	160	2	114	45.3	**8.2**	**7.16**

* only during spawning period

Compliant

Non compliant

E. Conclusion and recommendation

The previous table shows that the water overpressure 50 kPa criteria for fish habitat is met in all scenarios. However, the 13 mm/s vibration criteria applicable during spawning periods is met only in Stream 2 using standard parameters.

To ensure compliance during spawning periods, mitigation measures must be implemented. These consist of reducing blast hole diameters to 102 mm and 89 mm (depending on the pit and the distance between the fish habitat and the blast area) and designing a blasting sequence that provides one hole per delay.

To achieve this during spawning periods, blast sizes should be also reduced near water sources, and electronic detonators could be used.

We also recommend not using ANFO-type bulk explosives near water sources.

The vibration and overpressure levels given in this note are estimates based on standard models (ISEE and DFO Guidelines). Drilling and blasting parameters will need to be revised according to the actual results obtained on site.

Technical Memo

To: Jared Saunders

From: David Pocthier

CC:

Project title Queenway mine project

Client: NewfoundGold

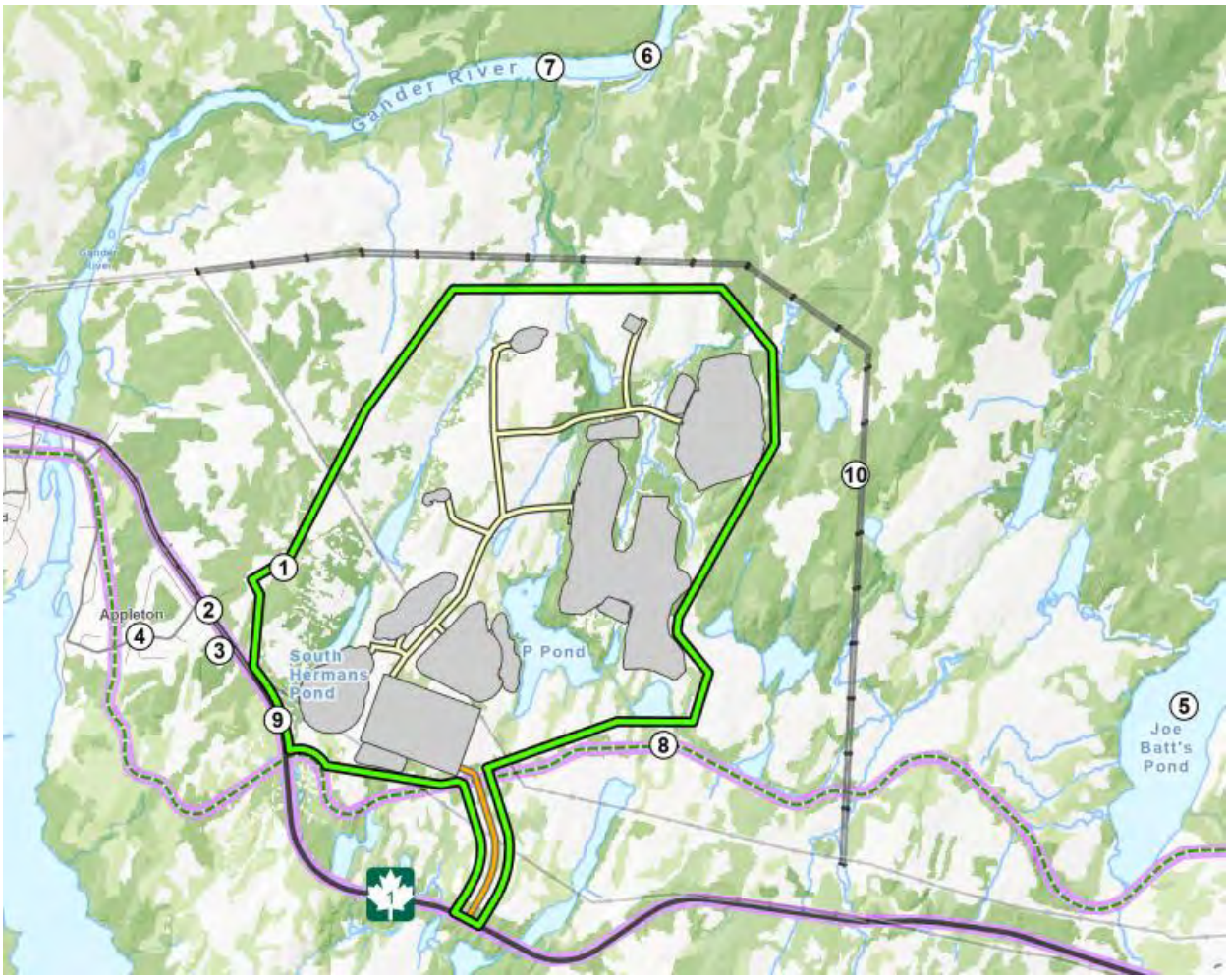
Project number: CA0059717.8120

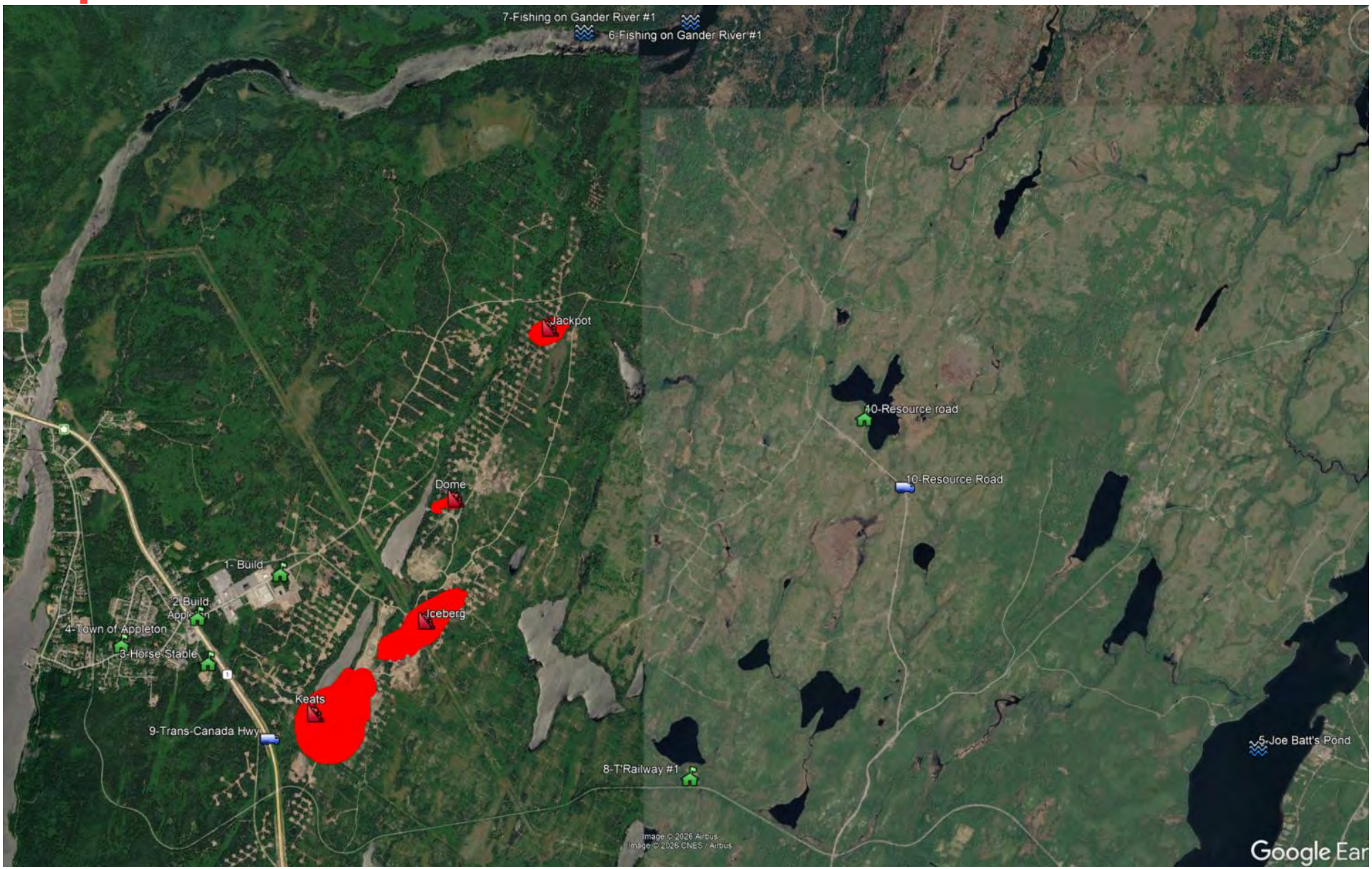
Subject: Blast assessment - Vibration and Airblast estimate

Date: 2026-09-16

A.Receptor Location

Rcptr _ID	Name	Lat	Long	Type	Closer Pit	Distance (m)
1	Simms Roads Building #2	48.98683	-54.84500	Building	Keats	710
3	Horse Stable - 200 Trans-Canada Highway	48.98161	-54.85148	Building	Keats	640
2	Building - Trans-Canada @ Simms Rd	48.98426	-54.85240	Building	Keats	850
4	Town of Appleton	48.98267	-54.85922	Building	Keats	1210
5	Joe Batt's Pond	48.97627	-54.75763	Pond	Iceberg	4880
6	Fishing on Gander River #1	49.01902	-54.80810	Water course	Jackpot	1940
7	Fishing on Gander River #1	49.01846	-54.81760	Water course	Jackpot	1700
8	Railway #1	48.97474	-54.80846	Building	Iceberg	1900
9	Trans-Canada Highway	48.97707	-54.84599	Road	Keats	175
10	Resource Road	48.99172	-54.78898	Building	Jackpot	2460


Gander River
Appleton
South Hermans Pond
P Pond
Joe Batt's Pond
1
2
3
4
5
6
7
8
9
10


7-Fishing on Gander River #1
6-Fishing on Gander River #1
Jackpot
10-Resource road
10-Resource Road
Dome
1- Build
2-Build
Iceberg
4-Town of Appleton
3-Horse Stable
Keats
9-Trans-Canada Hwy
8-T'Railway #1
5-Joe Batt's Pond
Image © 2026 Airbus
Image © 2026 CNES / Airbus
Google Ear

B.Drill and Blast parameters

Parameter	unit	Open Pit
Drilling		
Bench heigth	m	5
Sub-drilling	m	1
Drill depth	m	6
Borehole diam.	mm	114
Burden	m	3.5
Spacing	m	3.5
Volume/hole	m3	61.25
Explosives		
Collar	m	2.3
Loaded length	m	3.7
Explosive type		Bulk emulsion
Product density	g/cc	1.2
Linear charge	kg/ml	12.2
Charge/hole	kg	45.3
Firing sequence	hole/delay	2
Charge/delay	kg	90.6
Powder factor	kg/m3	0.74
Powder factor	t/m3	0.27

Tonnage	t	40 000
Density	t/m3	2.7
Volume	m3	14815
Hole number	holes	242

Based on a charge of 45.3 kg per hole and a firing sequence with a two-hole overlap, the charge per delay used for the estimate is 90.6 kg. This approach is more conservative and realistic than considering only a single hole per delay interval.

C.Regulation and limits

1. No thresholds in NL regulation.
2. We propose to use thresholds of Ontario and Quebec for mining Industry.

Jurisdiction	Ground vibration limit (PPV)	Airblast / Air overpressure limit	Reference
Quebec	12.7 mm/s PPV measured at the point of impact (receptor) for mining blasting activities.	128 dBL (linear)	Directive 019 sur l'industrie minière (2025)
Ontario	12.5 mm/s PPV (NPC-119 guideline, routinely monitored blasting).	128 dBL (linear)	NPC-119 Model Municipal Noise Control By-Law, referenced by Ontario Ministry of the Environment, Conservation and Parks (MECP) guidance.

D.Vibration estimate

1. The standard attenuation formula (International Society of Explosives Engineers, ISEE) for quarry has been used

$$PPV = 1140 \left(\frac{D}{\sqrt{W}}\right)^{-1.6}$$

Where PPV = Peak particle velocity (mm/s)

D : distance (m)

W : charge per delay of explosive (kg)

2. The maximum charge per hole is 45.3 kg according to D&B parameters given (bench height = 5m, drilling diameter = 4.5 po)

3. We consider that 2 holes may detonate at the same delay: charge per delay = 2 holes = 90.6 kg

4. Estimate at receptors:

Rcptr_ID	Name	Closer Pit	Distance (m)	Kg/delay	K	beta	PPV (mm/s)
1	Simms Roads Building #2	Keats	710	90.6	1140	-1.6	1.15
3	Horse Stable - 200 Trans-Canada Highway	Keats	640	90.6	1140	-1.6	1.36
2	Building - Trans-Canada @ Simms Rd	Keats	850	90.6	1140	-1.6	0.86
4	Town of Appleton	Keats	1210	90.6	1140	-1.6	0.49
5	Joe Batt's Pond	Iceberg	4880	90.6	1140	-1.6	0.05
6	Fishing on Gander River #1	Jackpot	1940	90.6	1140	-1.6	0.23
7	Fishing on Gander River #1	Jackpot	1700	90.6	1140	-1.6	0.28
8	T'Railway #1	Iceberg	1900	90.6	1140	-1.6	0.24
9	Trans-Canada Highway	Keats	175	90.6	1140	-1.6	10.81
10	Resource Road	Jackpot	2460	90.6	1140	-1.6	0.16

The limit of 12.5 mm/s is not applicable to the receptor #9 : TCH.

5. Damage on buildings from **USBM RI 8507 / Siskind et al. :**

PPV (mm/s)	Potential effect on old plaster
< 12.5	No damage expected
12.5 - 25	No damage expected; vibrations noticeable
25 - 50	Generally below USBM cosmetic damage threshold
50 - 70	Cosmetic cracking possible in susceptible old plaster
> 70	Increasing likelihood of plaster cracking or propagation of existing cracks
> 100	Significant risk of cosmetic damage in vulnerable finishes

E. Airblast

1. The standard attenuation formula (U.S. Bureau of Mines, USBM) for quarry has been used. Two equations : Front and Behind blast.

Front of Blast

$$P_{psi} = 1.317 \left(\frac{D_{ft}}{W_{lb}^{1/3}} \right)^{-0.966}$$

Behind Blast

$$P_{psi} = 0.056 \left(\frac{D_{ft}}{W_{lb}^{1/3}} \right)^{-0.515}$$

Équations converties en SI

Avec :

- P = surpression d'air (Pa)
- D = distance (m)
- W = charge maximale par délai (kg)

Front of Blast

$$P_{Pa} = 3714.8 \left(\frac{D_m}{W_{kg}^{1/3}} \right)^{-0.966}$$

Behind Blast

$$P_{Pa} = 239.8 \left(\frac{D_m}{W_{kg}^{1/3}} \right)^{-0.515}$$

Conversion de la pression en dBL

$$dBL = 20 \log_{10} \left(\frac{P_{Pa}}{20 \times 10^{-6}} \right)$$

Where P = Airblast (Pa)
D : distance (m)
W : charge per delay of explosive (kg)

2. The maximum charge per hole is 45.3 kg according to D&B parameters given (bench height = 5m, drilling diameter = 4.5 po)

3. We consider that 2 holes may detonate at the same delay: charge per delay = 2 holes = 90.6 kg

4. For receptors (2,3,4 and 9), we consider that:
   a. They are protected behind a 10 m berm
   b. They are located behind the blast direction
   c. We use the formula “Behind blast”

5. Other receptors located away may be exposed to the front of blast, we used the formula “Front blast” to estimate airblast. That’s why the receptor #1 is classified as **Moderate.**

6. Estimate at receptors:

Rcptr _ID	Name	Closer Pit	Position vs Blast	Distance (m)	kg/delay	K	beta	Airblast (Pa)	Airblast (dBL)	Comments
1	Simms Roads Building #2	Keats	FRONT	710	90.6	3715	-0.966	27.51	122.77	
3	Horse Stable - 200 Trans-Canada Highway	Keats	BEHIND	640	90.6	240	-0.5150	18.52	119.33	Behind Berm, behind blasts
2	Building - Trans-Canada @ Simms Rd	Keats	BEHIND	850	90.6	240	-0.5150	16.00	118.06	Behind Berm, behind blasts
4	Town of Appleton	Keats	BEHIND	1210	90.6	240	-0.5150	13.34	116.48	Behind Berm, behind blasts
5	Joe Batt's Pond	Iceberg	FRONT	4880	90.6	3715	-0.966	4.27	106.60	
6	Fishing on Gander River #1	Jackpot	FRONT	1940	90.6	3715	-0.966	10.42	114.34	
7	Fishing on Gander River #1	Jackpot	FRONT	1700	90.6	3715	-0.966	11.84	115.44	
8	Railway #1	Iceberg	FRONT	1900	90.6	3715	-0.966	10.63	114.51	
9	Trans-Canada Highway	Keats	BEHIND	175	90.6	240	-0.5150	36.11	125.13	Behind Berm, behind blasts
10	Resource Road	Jackpot	FRONT	2460	90.6	3715	-0.966	8.28	112.34	

7. Comparison of Airblast with Wind speed

Much research has also been done on the relationship between wind speed and the relation to pressure. In reference a 28.5 mph (46kph) wind will yield the same pressure as 134dB pressure or 100.2Pa.

Table 1: Wind speed conversion

Wind Speed (km/h)	Over Pressure (dB)	Over Pressure (Pa)
5	95	1.2
10	107	4.7
15	115	10.7
20	120	18.9
25	123	29.6
50	135	118.4
75	142	266.3
100	147	473.5

F. NFG TEMPLATE FOR VIBRATION AND AIRBLAST ESTIMATE

Table 1 summarizes how Project activities may be noticed at nearby homes, recreational areas, and land use locations. It describes what people may hear, see, or experience during Project construction and operation, and identifies the types of effects that may be more noticeable depending on the activity taking place, the distance from the activity, local terrain, wind direction, and weather conditions.

Table 1 What People May Notice at Nearby Locations

	What People May Notice					
Location	**When people may notice effects**	**Sound (see Table 2)**	**Dust or air quality (see Table 3)**	**What people may see (see Figure X)**	**Ground vibration (see Table 4)**	**Airblast (see Table 5)**
Simms Roads Building #2					Low	Moderate
Horse Stable - 200 Trans-Canada Highway					Low	Low
Building - Trans-Canada @ Simms Rd					Very Low	Low
Town of Appleton					Very Low	Low
Joe Batt's Pond					Very Low	Very Low
Fishing on Gander River #1					Very Low	Low
Fishing on Gander River #1					Very Low	Low
T'Railway #1					Very Low	Low
Trans-Canada Highway					Elevated	Elevated
Resource Road					Very Low	Low

Note: Symbols, words, and colours provide a general comparison with the examples in Tables 2 to 5. What people notice may vary with the activity, distance from the activity, local terrain, wind direction, and weather conditions.

Table 2 Public-Friendly Ground Vibration Scale WSP

Human Response to Blasting Ground Vibration (USBM-Based)

Level	What people may notice	PPV (mm/s)
Very Low	• Barely perceptible • Usually not noticed by most people • Well below levels typically associated with annoyance or complaints	**< 0.9**
Low	• Perceptible to some occupants • Generally below annoyance levels • Complaints unlikely	**0.9 - 2.5**
Moderate	• Distinctly perceptible • Noticeable to many occupants indoors • May attract attention	**2.5 - 6.1**
Elevated	• Clearly felt by most people • Light rattling of loose objects possible	**6.1 - 12.7**
High	• Strongly perceptible to mildly unpleasant • Windows, dishes, or other objects may rattle	**12.7 - 25.4**
Very High	• Mildly to distinctly unpleasant • Strongly felt by occupants • Complaints become increasingly likely	**25.4 - 50.8**
Extreme	• Distinctly unpleasant to intolerable • Very disturbing to most people • High likelihood of complaints	**> 50.8**

Adapted from Wiss (1974), as reproduced in RI 8507: Structure Response and Damage Produced by Ground Vibration from Surface Mine Blasting, and supplemented by Transportation and Construction Vibration Guidance Manual (2020).

Table 3 Public-Friendly Concussion (Airblast) Scale (WSP)

Human Response to Blasting Air Overpressure (USBM-Based)

Level	What people may notice	PPV (mm/s)
Very Low	What people may notice	Air Overpressure
Low	• Barely audible • Generally unnoticed by most people during daily activities • Complaints unlikely	< 110
Moderate	• Audible indoors and outdoors • Clearly noticeable to some residents • Generally acceptable	110 - 120
Elevated	• Readily noticeable by most people • May attract attention • Occasional light rattling of loose objects	120 - 125
High	• Strongly noticeable • Light rattling of windows, dishes, or loose objects possible • Some residents may express concern	125 - 130
Very High	• Loud and potentially disturbing • Rattling commonly observed • Complaints increasingly likely	130 - 135
Extreme	• Very loud airblast • Significant nuisance potential • Strong public reaction and complaints likely	135 - 140

Source: Adapted from Siskind et al., USBM RI 8485 and RI 8507; supported by *Transportation and Construction Vibration Guidance Manual* (Caltrans, 2020).

REPORT

NEW FOUNG GOLD CORP.
QUEENSWAY GOLD PROJECT

Blast Management Plan

Submitted to:

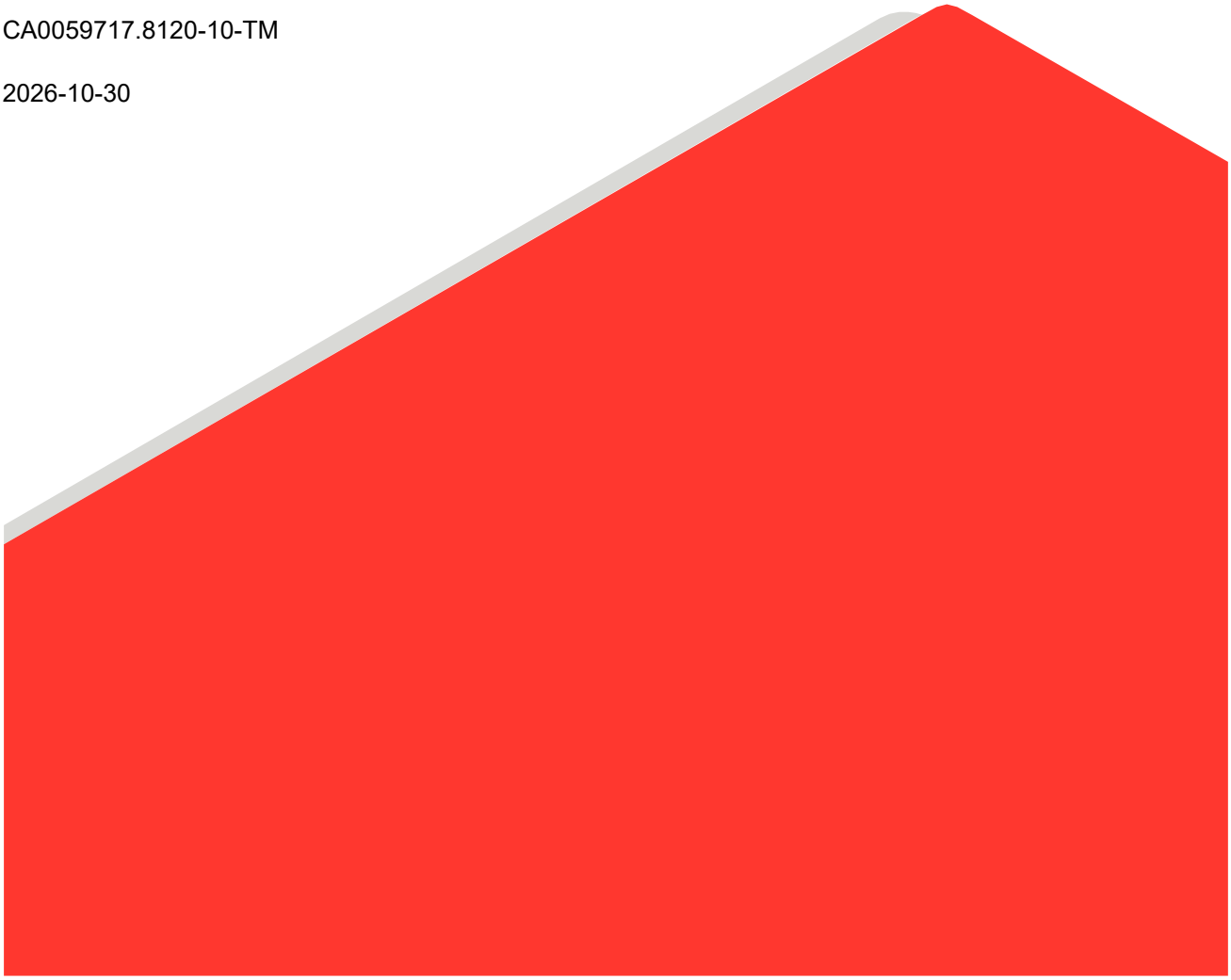
Jared Saunders / Mark Ross
2, industrial Park, Springdale, NL, A0J 1S0

Submitted by:

WSP Canada Inc.

CA0059717.8120-10-TM

2026-10-30



Quality control

REVISION	DRAFT	FINAL		
Date	2026-09-30	2026-10-30		
Prepared by	D. POCTHIER	D. POCTHIER		
Reviewed by	D. CORKERY	D. CORKERY		
Project Number	CA0059717.8120	CA0059717.8120		

Table of Contents

1.0 SCOPE AND PURPOSE 1

2.0 STUDY LIMITATIONS 2

3.0 DEFINITIONS 2

4.0 REGULATION 4

4.1 Newfoundland and Labrador Provincial legislation: 4

4.2 Federal regulations 4

5.0 HANDLING OF EXPLOSIVES 4

5.1 Transport 4

5.2 Storage 4

6.0 BLAST IMPACT ASSESSMENT CRITERIA 5

6.1 Blasting Hours 5

6.2 Impact Assessment Criteria 5

6.3 Fish Habitat criteria 6

6.4 Flyrock 6

7.0 INFRASTRUCTURE AND SENSITIVE RECEPTORS 7

7.1 Residences, buildings and human activity 7

7.2 Fish habitat 8

8.0 BLAST MANAGEMENT SYSTEM 9

8.1 Blasting Schedule Notification 9

8.2 Design, execution, and review of the blast 9

8.3 Ground vibration and airblast overpressure management 10

8.4 Flyrock Management 10

8.4.1 Protection Berm 10

8.4.2 Blast Design 10

8.4.3 Blasting Sequence and Orientation 11

8.4.4 Stemming 11

8.4.5 Flyrock Control 11

8.4.6 Blasts Located Between 175 m and 400 m of the Highway or Trail 11

8.4.7 Blasts Located Within 175 m of the Highway or Trail 12

8.5 Dust and Blast Fume (NOx) Management 12
8.6 Fish habitat management 13
8.6.1 Fish Mortality Prevention (50 kPa Underwater Overpressure Criteria) 13
8.6.2 Protection of Fish Spawning Habitat (13 mm/s Vibration Criterion) 13
8.6.3 Mitigation Measures 14
8.6.4 Measures to Prevent Water Contamination from Explosive Products 14
9.0 HIGHWAY AND TRAIL CLOSURE 14
10.0 AIRCRAFT SAFETY AND NOTAM PROCEDURES 15
11.0 ELECTRICAL STORMS AND LIGHTNING 15
12.0 MONITORING PROGRAM 15
12.1 Vibration and air overpressure monitoring 15
12.2 Flyrock monitoring 16
12.3 Dust and Blast Fume Monitoring 16
13.0 DATA MANAGEMENT AND RECORD KEEPING 16
14.0 INCIDENT, COMPLAINT MANAGEMENT AND CONTINUOUS IMPROVEMENT 17
15.0 REFERENCES 19
16.0 SIGNATURE PAGE 20

TABLES

Table 1: Ground vibration and airblast overpressure limits in Québec and Ontario mining regulation 6
Table 2: DFO Guidelines thresholds 6
Table 3: Receptors of human activity and critical distance from blast areas 8
Table 4: Receptors of fish habitat and critical distance from blast areas 8
Table 5: Minimum Setback Distance from Fish Habitat to Meet the 50 kPa Underwater Overpressure Criterion (Rock Substrate) 13
Table 6: Minimum Setback Distance from Fish Spawning Habitat to Meet the 13 mm/s Vibration Criterion 13

FIGURES

Figure 1: Mine and four blast areas Location 1
Figure 2: Sensitive receptors location 7

1.0 SCOPE AND PURPOSE

This Blast Management Plan (BMP) for the Queensway Gold Project (the Mine) has been prepared by WSP Canada Inc. (WSP) on behalf of New Found Gold Corp. (NFG). The purpose of the BMP is to ensure that blasting activities are conducted safely, efficiently, and in compliance with applicable federal and provincial legislation, regulatory requirements, and permit conditions. The BMP identifies potential adverse effects associated with blasting operations, establishes mitigation and control measures to minimize these effects, and defines monitoring and reporting requirements to protect workers, the public, infrastructure, and the environment. The plan also provides a framework for the planning, execution, evaluation, and continuous improvement of blasting activities throughout the life of the Project.

The Mine is located approximately 0.5 kilometers southeast of the community of Appleton, Newfoundland and Labrador. There are four blast areas (Figure 1).
Potential impacts associated with blasting activities include:

- Ground vibration affecting nearby residences, buildings, and infrastructure.
- Airblast overpressure affecting nearby residents, livestock, and other sensitive receptors.
- Dust and blast fumes affecting nearby residents and surrounding areas.
- Flyrock impacting nearby residences, public roads, equipment, livestock, or infrastructure.
- Water quality impacts resulting from the release of explosive residues into nearby watercourses, ponds, and fish habitat.
- Underwater shockwaves and ground vibration affecting fish and fish habitat located in nearby water bodies.
- Hazard to air navigation

The mitigation and monitoring measures presented in this BMP are intended to minimize these impacts and ensure that blasting activities are conducted in a safe, controlled, and environmentally responsible manner.

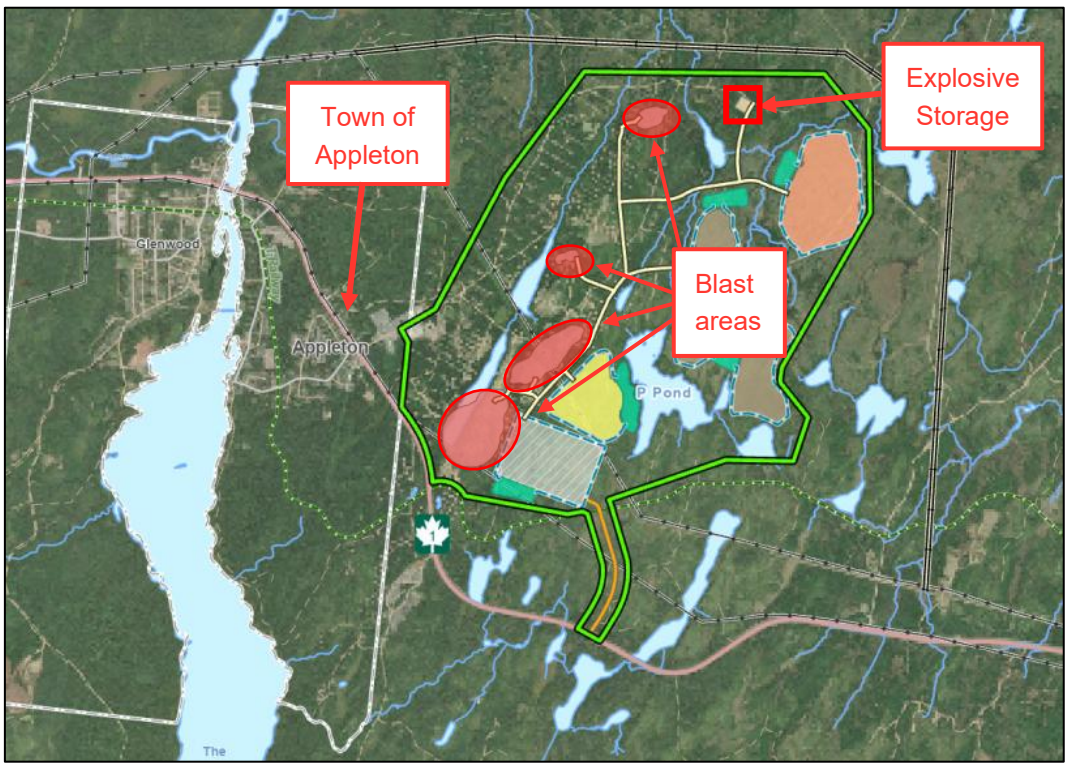


Figure 1: Mine and four blast areas Location

2.0 STUDY LIMITATIONS

The analyses and recommendations presented in this document are based on a bench height of 5 m, a maximum blasting frequency of one blast per day, and the locations of identified sensitive receptors. Any significant change to these parameters may require a reassessment of the conclusions and recommendations presented herein.

Blast monitoring results should be reviewed regularly to confirm compliance with the applicable vibration and airblast criteria. This Blast Management Plan should also be reviewed and updated if significant changes occur in bench height, blasting frequency, blast design, charge per delay, rock mass conditions, sensitive receptor locations, or other site-specific conditions that could affect blast performance and environmental impacts.

3.0 DEFINITIONS

Definitions of the terms used in this report are as follows:

Airblast (Air overpressure): The airborne pressure wave generated by a blast that propagates through the atmosphere. Airblast results from the rapid expansion of detonation gases and the vibration of the ground and rock mass. It is typically measured as air overpressure in decibels (dBL) or kilopascals (kPa).

ANFO (Ammonium Nitrate/Fuel Oil): A widely used, cost-effective blasting agent made from porous ammonium nitrate prills and fuel oil. It requires confinement and a primer to detonate.

Blasthole: a hole drilled into rock for the placement of explosives. Proper placement and sizing are critical for effective blasting.

Bench: A horizontal ledge in a pit or excavation where rock is drilled and blasted in sequential vertical slices.

Blast Pattern: The layout and geometric design of the blastholes, typically defined by burden and spacing, to ensure optimal rock fragmentation.

Blaster-in-Charge: The person designated to direct and supervise blasting activities and to ensure that explosives are handled, loaded, connected, and fired safely and in accordance with regulatory requirements and approved blasting procedures. The Blaster-in-Charge has authority over blast area security, blast clearance, initiation, and post-blast inspections.

Booster: A high-velocity, cap-sensitive explosive used to enhance the initiation of the main blasting agent charge.

Bootleg: The part of a drilled blasthole that remains when the force of the explosion does not break the rock completely to the bottom of the hole.

Bulk emulsion explosives: Pumpable, water-resistant explosives manufactured and loaded directly into blastholes from a mobile bulk delivery unit. Bulk emulsions are widely used in mining operations due to their safety, energy performance, and adaptability to varying ground conditions.

Burden: The shortest perpendicular distance from an explosive charge to the nearest free (exposed) face of the rock.

Clearance Area (Exclusion Area): The area surrounding a blast pattern that must be cleared and secured before initiation of a blast. The extent of the blast clearance area is determined based on site-specific factors including maximum charge weight, blast geometry, terrain, potential flyrock distances, and regulatory requirements.

Charge per delay: The total weight of explosives detonated within a single delay period and is typically expressed in kilograms (kg). It represents the maximum explosive charge fired effectively at the same instant for the purposes of ground vibration and airblast assessment.

Collar: The top opening of a drill hole at the bench surface.

Cushion blast: A controlled perimeter blast conducted after the production blast using reduced and decoupled explosive charges to limit energy transfer into the final wall and preserve rock mass integrity.

Decking: Separating explosive charges within a single blasthole using stemming or air gaps to control the timing and energy distribution of the blast.

Delay Blasting: Using specialized detonators or connectors to fire explosive charges at staggered fractions of a second. This improves fragmentation and reduces ground vibrations.

Flyrock: Rock fragments thrown beyond the designated blast danger zone by the force of the explosion.

Free Face: An unconfined rock surface toward which blasted material can move during detonation.

Misfire: A hazardous condition where an explosive charge or part of a charge fails to detonate completely during the blast sequence.

Overbreak: Excessive breakage of rock beyond the planned excavation limit, which can compromise structural stability.

Powder Factor: A metric measuring the quantity of explosives consumed per unit of rock broken (usually kg/ton or kg/m³), used to gauge blast efficiency.

PPV (Peak Particle Velocity): The maximum velocity of ground particle movement during a blast event.

Pre-splitting: A controlled blasting technique where uncharged or lightly charged holes are fired along the excavation perimeter prior to the main blast, creating a clean fracture plane and protecting the remaining wall.

Primer: A small, sensitive explosive device (often a booster combined with a detonator) used to initiate a larger, more stable explosive charge.

Spacing: The distance between individual boreholes located within the same row of a blast pattern.

Stemming: Inert material, such as crushed aggregate, drill cuttings, or gravel, placed in a blasthole to confine explosive gases and improve energy transfer during blasting. Stemming is commonly placed above the explosive column and may also be used between explosive decks in decked blast designs.

Sub-drilling: Drilling the blasthole deeper than the planned excavation floor to ensure that the rock breaks completely to the desired elevation.

Trim blast: A controlled perimeter blast conducted after the production blast using lightly loaded holes to excavate rock adjacent to the final wall while minimizing backbreak and wall damage. The production blasting may have taken place many years earlier or could have taken place on an earlier delay within the same blast.

Underwater Shockwave: A high-pressure wave generated in water by the detonation of explosives. The shockwave propagates rapidly through the water and can affect fish, aquatic organisms, underwater structures, and vessels. Underwater shockwaves are typically measured as peak pressure (kPa) or sound exposure metrics using hydrophones.

Vibration: Ground motion generated by the detonation of explosives and the subsequent movement of rock. Blast-induced vibrations propagate through the ground as seismic waves and are typically measured using a geophone in terms of Peak Particle Velocity (PPV), expressed in millimeters per second (mm/s).

4.0 REGULATION

In Newfoundland and Labrador (NL), drilling and blasting work is regulated by a combination of provincial occupational health & safety law and federal explosives law and are listed below.

4.1 Newfoundland and Labrador Provincial legislation:

- Occupational Health and Safety Act & Regulations, 2012 (NLR 5/12)
- Mining Act & Mining Regulations (NLR 42/00)
- Fire Protection Services Act, SNL 2008, c. F-11.01.

4.2 Federal regulations

- Explosives Act & Explosives Regulations, 2013
- Health Canada. 2015. Workplace Hazardous Materials Information System (WHMIS 2015). Government of Canada.
- DFO Guidelines for the Use of Explosives in or Near Canadian Fisheries Waters (DFO 1998).
- Transportation of Dangerous Goods Act, 1992 and Transportation of Dangerous Goods Regulations (Government of Canada, 2026)

5.0 HANDLING OF EXPLOSIVES

5.1 Transport

The handling, storage, and transportation of explosives shall be conducted in accordance with the applicable provisions of the Explosives Act (Canada), the Transportation of Dangerous Goods Act, 1992 (Canada), the Fire Protection Services Act (Newfoundland and Labrador), and all regulations made under those Acts.

Transport of explosives throughout the Project will be undertaken by the explosives contractor and manufacturer using dedicated trucks operated by properly trained and authorized personnel, and in accordance with applicable laws, regulations, and conditions of approval.

Explosives will be transported from the mine's storage facilities to the open-pit mine via the project's internal haul road. Explosives delivered by the manufacturer will be transported to the mine site via public roads. Only explosives intended for immediate use will be transported; no storage or stockpiling of explosives will take place outside the designated facilities.

5.2 Storage

The explosives storage area will be located within the Project site and positioned away from key infrastructure and other exposed sites (Figure 1), in accordance with the separation distance requirements established by Natural Resources Canada (NRCan). Required separation distances between potential explosion sites and exposed sites will be maintained at all times.

Bulk explosives, including explosive storage facilities, explosives delivery and loading units, and all blast loading and firing activities, will be managed by a licensed explosives contractor.

Packaged explosives and initiation systems will be stored in approved magazines that comply with applicable federal explosives regulations and industry best practices. Access to the explosive’s storage area will be restricted to authorized personnel and controlled through appropriate security measures. Explosives will be stored and managed in a manner that does not present a hazard to people, property, or the environment.

Explosives will only be handled by trained, authorized, and licensed personnel. Standard operating procedures will be implemented for all blasting-related activities, including:

- Transportation of explosives;

- Explosive loading and priming;
- Blast clearance and guarding;
- Blast initiation and firing;
- Post-blast inspections;
- Misfire management;
- Secondary blasting; and
- Other activities associated with the safe use of explosives.

These procedures will be designed to ensure compliance with applicable regulatory requirements and to minimize risks to personnel, the public, property, and the environment.

6.0 BLAST IMPACT ASSESSMENT CRITERIA

6.1 Blasting Hours

Blasting activities at the Mine will be conducted between 9:00 a.m. and 5:00 p.m., Monday to Sunday, inclusive.
Where practicable, NFG will schedule blasts outside peak traffic periods when temporary closures of the Trans-Canada Highway are required in order to minimize disruption to the travelling public.

6.2 Impact Assessment Criteria

Newfoundland and Labrador legislation currently does not prescribe quantitative limits for blast-induced ground vibration, airblast overpressure, or underwater shockwave associated with mining operations. While the Occupational Health and Safety Regulations, 2012 (NLR 5/12), enacted under the Occupational Health and Safety Act, establish requirements for the safe storage, handling, and use of explosives, they do not specify blast vibration or airblast overpressure limits.

Accordingly, blast performance criteria adopted by the Québec and Ontario mining industries have been selected for the Project to provide a recognized and conservative basis for the protection of nearby residents, structures, and other sensitive receptors. In Québec, a maximum ground vibration limit of 12.7 mm/s PPV and an airblast overpressure limit of 128 dBL are specified in the Directive 019 sur l'industrie minière. In Ontario, a ground vibration limit of 12.5 mm/s PPV for routinely monitored blasting and an airblast overpressure limit of 128 dBL are referenced through the NPC-119 Model Municipal Noise Control By-Law and associated guidance used by the Ontario Ministry of the Environment, Conservation and Parks (MECP).

For the purposes of this Blast Management Plan, the more conservative ground vibration criterion of 12.5 mm/s PPV and an airblast criteria of 128 dBL will be adopted at sensitive receptors. Compliance with these criteria will be verified through blast monitoring and will be used to evaluate blast performance and support the protection of workers, the public, infrastructure, and the environment.

Table 1: Ground vibration and airblast overpressure limits in Québec and Ontario mining regulation

Jurisdiction	Ground vibration limit (PPV)	Airblast / Air overpressure limit	Reference
Quebec	12.7 mm/s	128 dBL	Directive 019 sur l'industrie minière, QC (2025)
Ontario	12.5 mm/s (routinely monitored blasting).	128 dBL	NPC-119 Model Municipal Noise Control By-Law, referenced by Ontario Ministry of the Environment, Conservation and Parks (MECP) guidance.
Queensway Project	**12.5 mm/s**	**128 dBL**	**Adopted BMP Criteria**

6.3 Fish Habitat criteria

DFO Guidelines (Wright and Hopky 1998) establish a 100 kPa peak overpressure (underwater shockwave) threshold to prevent fish fatalities and a 13 mm/s ground vibration threshold for spawning fish habitats during the period of egg incubation. However, DFO now recommends a 50 kPa overpressure threshold based on more recent data from monitoring of seismic exploration in the MacKenzie Delta in 2002 (Cott and Hanna 2005).

The blast design should be developed to ensure that the peak underwater shockwave pressure does not exceed 50 kPa, the threshold established to prevent fish mortality. In addition, ground vibration levels at fish spawning habitats during the egg incubation period should remain below 13 mm/s Peak Particle Velocity (PPV) to minimize the risk of adverse effects on developing eggs.

Table 2 summarizes the limitations of the DFO guidelines for fish habitat:

Table 2: DFO Guidelines thresholds

Parameter	Threshold
Peak overpressure (underwater shockwave) threshold to prevent fish fatalities	50 kPa
Ground vibration on fish spawning habitats during the period of egg incubation	13 mm/s

6.4 Flyrock

Flyrock is defined as any rock fragment projected beyond the established blast clearance area. Blast designs and mitigation measures shall ensure that no flyrock travels beyond the blast clearance perimeter, leaves the mine property, or enters any waterbody.

7.0 INFRASTRUCTURE AND SENSITIVE RECEPTORS

Sensitive receptors include residences, buildings, public roads, recreational areas, fish habitat, watercourses, and other locations that may be affected by blasting activities. As shown on the figure 2 and tables 3 and 4, infrastructure and sensitive receptors include the nearest residences and buildings, the town of Appleton, nearby fishing areas, the Trans-Canada Highway, the T'Railway Provincial Park, and fish habitats located within the mine boundaries.

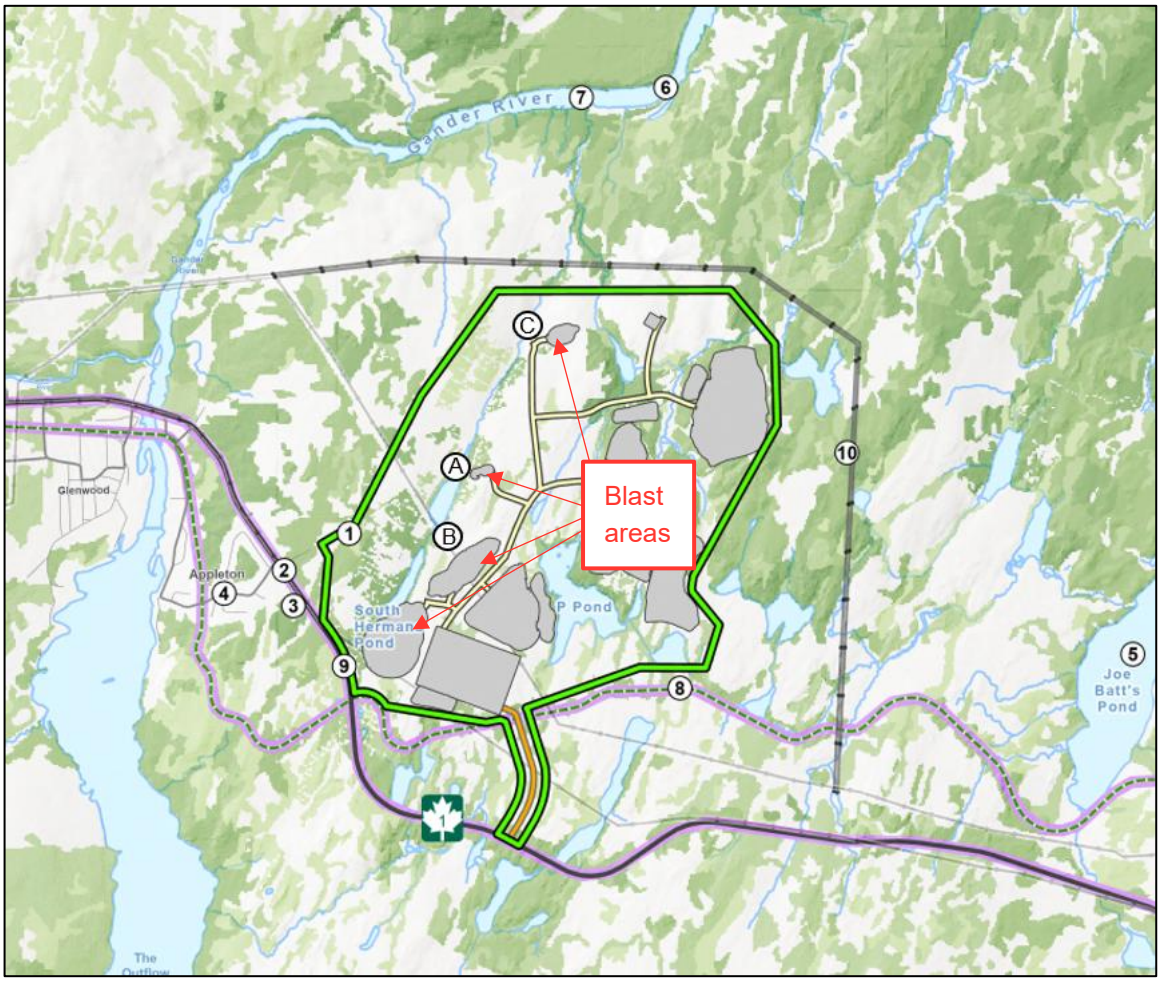


Figure 2: Sensitive receptors location

7.1 Residences, buildings and human activity

Potential blasting impacts were assessed with respect to nearby residences, buildings, transportation corridors, recreational areas, and other locations where human activity may occur. The closest identified receptors to the Project are summarized in Table 3. These receptors were considered in the development of blast designs, monitoring requirements, and mitigation measures to manage potential effects from ground vibration, airblast, flyrock, dust, and blast fumes.

Table 3: Receptors of human activity and critical distance from blast areas

Rcptr _ID	Name	Lat	Long	Type	Closer Pit	Distance (m)
1	Simms Roads Building #2	48.98683	-54.84500	Building	Keats	710
3	Horse Stable - 200 Trans-Canada Highway	48.98161	-54.85148	Building	Keats	640
2	Building - Trans-Canada @ Simms Rd	48.98426	-54.85240	Building	Keats	850
4	Town of Appleton	48.98267	-54.85922	Building	Keats	1210
5	Joe Batt's Pond	48.97627	-54.75763	Pond	Iceberg	4880
6	Fishing on Gander River #1	49.01902	-54.80810	Watercourse	Jackpot	1940
7	Fishing on Gander River #1	49.01846	-54.81760	Watercourse	Jackpot	1700
8	T'Railway #1	48.97474	-54.80846	Building	Iceberg	1900
9	Trans-Canada Highway	48.97707	-54.84599	Road	Keats	175
10	Resource Road	48.99172	-54.78898	Road	Jackpot	2460

7.2 Fish habitat

Potential effects on aquatic environments were assessed for nearby waterbodies and watercourses that may provide fish habitat. The closest identified aquatic receptors to the Project are summarized in Table 4. These receptors were considered in blast planning and environmental protection measures to minimize potential impacts associated with vibration, overpressure, and the release of blasting-related contaminants.

Table 4: Receptors of fish habitat and critical distance from blast areas

Rcptr_ID	Name	Type	Closer Pit	Distance (m)
A	Pond1	Waterbody	Dome	75
B	Stream 20	Watercourse	Iceberg	100
C	Stream 2	Watercourse	Jackpot	160

8.0 BLAST MANAGEMENT SYSTEM

8.1 Blasting Schedule Notification

Residents living within the Town of Appleton when blasting zone is within a 1,000-meter radius of residences will be notified at least 24 hours in advance. If road traffic on the Trans-Canada Highway were to be interrupted, the notification period is 48 hours, and the entire municipality of Appleton would need to be informed through municipal services.

A blast notification board detailing the date and time of the next blast is maintained at the Mine entrance and will be updated at least 24 hours before each blast.

8.2 Design, execution, and review of the blast

NFG and its blasting contractors will implement a continuous improvement program for blasting activities through the following procedures:

- Blast designs and methodologies will be reviewed and approved by qualified drill and blast personnel.
- Explosive energy levels will be optimized and minimized, where practicable, while maintaining the required blasting performance.
- Non-electric (Nonel) and electronic initiation systems will be used, subject to operational and site-specific constraints.
- Quality control measures will be implemented to ensure drilling, loading, and initiation activities remain within established design tolerances.
- All blastholes will be fully stemmed using suitable stemming material to provide adequate confinement of the explosive charge.
- High-quality stemming materials and appropriate stemming lengths will be used to maximize confinement and reduce the potential for airblast and flyrock.
- Adequate burden and relief will be maintained to minimize the risk of blowouts, excessive airblast overpressure, and other blast anomalies.
- Drill hole deviation will be minimized through quality control procedures and periodic verification of drilling accuracy.
- Free face conditions, burden relief, geology, and groundwater conditions will be assessed prior to loading explosives.
- Each production blast will be monitored, as required, to verify compliance with applicable ground vibration and airblast overpressure criteria.
- Following each blast, the surrounding area will be inspected, and the distribution of flyrock in front of, behind, and to either side of the blast will be assessed.
- Blast performance and monitoring results will be reviewed jointly by the blasting contractor and Mine management to identify improvement opportunities and support the continuous optimization of blast design parameters and blasting practices.

8.3 Ground vibration and airblast overpressure management

The following control measures will be implemented to minimize blast-induced ground vibration and airblast overpressure:

- Construction and maintenance of a 10 m-high earth berm between the Keats Pit and the Town of Appleton to provide additional shielding from blast effects.
- Development and implementation of blast designs optimized to minimize vibration and airblast generation while achieving required rock fragmentation objectives.
- Use of initiation systems and firing sequences designed to minimize the maximum charge per delay (i.e., the quantity of explosives detonated simultaneously) and reduce confinement of back rows.
- Use of explosive charge distributions that are tailored to observed face burden and site-specific geological conditions.
- Use of appropriate stemming materials and stemming lengths to maximize explosive confinement and reduce the potential for excessive airblast.
- Maintenance of adequate burden and relief conditions to promote efficient rock breakage and minimize blast anomalies.
- Orientation of blast free faces, where practicable, away from the municipality to direct rock movement and venting away from sensitive receptors.
- Scheduling of blasting activities during favorable meteorological conditions, including clear skies and wind directions that carry blast-related air pressure waves away from nearby residential areas.
- Monitoring of ground vibration and airblast levels, as required, to verify compliance with applicable project criteria and support continuous improvement of blasting practices.

8.4 Flyrock Management

The following control measures will be implemented to minimize the potential for flyrock and to ensure the safety of workers, the public, infrastructure, and transportation corridors.

8.4.1 Protection Berm

- Construction and maintenance of a 10 m-high earth berm between the Keats Pit and the Town of Appleton to provide physical containment and additional protection from potential flyrock.

8.4.2 Blast Design

- Bulk emulsion will be preferred to ANFO for production blasts. ANFO generates more gas than emulsion, thereby increasing the risk of flyrock.
- Explosive charge distributions will be designed to suit observed face burden and site-specific ground conditions.
- The number of blast rows will be limited, where practicable, to reduce confinement in back rows.
- Vertical blastholes will be used preferentially.
- Blast patterns incorporating one or more free faces will be prioritized to provide adequate relief and reduce the potential for flyrock generation.

8.4.3 Blasting Sequence and Orientation

- Blasting operations will initially be conducted in areas located well away from public roads and motorized trails. As operations advance toward these features, blasting parameters will be adjusted based on observed performance and monitoring results.
- Where practicable, blast free faces will be oriented away from nearby residences and the municipality. Free faces will be maintained clear of broken rock to maximize relief and minimize vertical rock projection.
- For blasts oriented toward the municipality, retain blasted rock against the free face, where practicable, to reduce horizontal rock projection.
- Blast initiation sequences will be designed to direct rock movement toward the free face and away from sensitive receptors.

8.4.4 Stemming

- Appropriate stemming materials and stemming lengths will be used to maximize explosive confinement.
- The stemming length will be at least 20 times the blasthole diameter. For example, a 114 mm diameter hole will have a minimum stemming length of 2.3 m.
- Stemming depths will be measured and verified to ensure the specified distance between the explosive column and the blasthole collar is achieved.
- Increased stemming lengths will be used for first-row holes and for blasts located near public roads, trails, or other sensitive receptors.
- Stemming lengths may be increased based on the height of broken rock present on the bench surface. Information regarding surface conditions shall be documented in drilling reports and reviewed during blast design.

8.4.5 Flyrock Control

- Blast clearance areas will be established and maintained based on blast-specific conditions, including geometry, explosive loading, topography, and potential flyrock risk.
- Post-blast inspections will be conducted to verify the effectiveness of flyrock controls.
- All production blasts will be video recorded to support blast performance reviews and continuous improvement initiatives.

8.4.6 Blasts Located Between 175 m and 400 m of the Highway or Trail

Blasting operations conducted between 175 m and 400 m of a public highway or trail will comply with the following requirements in addition to the general specifications:

- Inclined blastholes will not be drilled.
- ANFO shall not be used, as the large volume of gases generated during detonation may increase the risk of flyrock.
- Confined blasts, including pre-split and box-cut blasts, will be covered with blast mats or approximately 1 m of stone dust and, where required, underlain with a suitable membrane to control the ejection of stemming material.
- The stemming length will be at least 25 times the blasthole diameter. For example, a 114 mm diameter hole will have a minimum stemming length of 2.8 m.

- Stemming depths will be measured and verified to ensure the specified distance between the explosive column and the blasthole collar is achieved.
- The blast size and number of rows fired will be reduced, where necessary, to minimize confinement and reduce the risk of vertical rock projection.
- Blast free faces will be oriented away from nearby roads or trails. Free faces will be maintained clear of broken rock to maximize relief and minimize vertical rock projection.
- Where ground conditions permit, final walls will be excavated using cushion or trim blasting techniques. Perimeter holes will be fired after the production holes rather than before, reducing confinement and the potential for flyrock.
- Trial blasts shall be conducted in areas located away from the pit and sensitive receptors to validate the blasting parameters and confirm the effectiveness of flyrock control measures.
- The need for temporary closure of the highway and trail during blasting will be assessed by the blaster and implemented when warranted by site conditions or blast-specific risk factors.

8.4.7 Blasts Located Within 175 m of the Highway or Trail

Mining operations do not plan to blast within 175 m of the Highway or the trail. However, if blasting were to occur at a distance of less than 175 m from a public highway, trail, or other sensitive infrastructure, the following measures would apply in addition to the general blasting specifications and the requirements applicable to the 175 m to 400 m setback zone:

- All blast areas are covered with blast mats.
- The use of bulk explosives is not permitted. Cartridged explosives shall be used to control the quantity of explosive loaded and the distribution of the explosive column within the blasthole.

8.5 Dust and Blast Fume (NOx) Management

Controls implemented to minimize dust and blast fumes (NOx):

The following control measures will be implemented to minimize the generation and migration of dust and blast fumes, including nitrogen oxides (NOx):

- Construction and maintenance of a 10 m-high earth berm between the Keats Pit and the Town of Appleton to provide additional shielding from dust and blast fumes.
- Blast patterns and powder factors will be optimized to achieve effective rock breakage while limiting excessive dust generation.
- Use of appropriate stemming materials and stemming lengths to maximize explosive confinement and promote complete detonation of explosives.
- Where practicable, blast free faces will be oriented away from the municipality, residences, and other sensitive receptors.
- Weather conditions will be evaluated prior to each blast. Weather forecasts will be reviewed for excessive winds, temperature inversions, and wind directions that may carry dust or blast fumes toward Appleton, the Trans-Canada Highway, or other sensitive receptors. Where an elevated risk is identified, blasting activities will be postponed until more favorable conditions are present.
- Blasting shall not be permitted when wind speeds exceed 25 km/h (7 m/s) and the wind is blowing toward the municipality (i.e., from the southeast toward the northwest).

- ANFO will not be used in wet blastholes. Water-resistant bulk emulsion explosives will be used in wet conditions to reduce the potential for incomplete detonation and the generation of NOx fumes.
- Blastholes will be inspected during loading to identify the presence of groundwater or standing water, and explosive products will be selected accordingly.
- Explosives will be loaded, primed, and initiated in accordance with manufacturer recommendations to promote complete detonation and minimize the production of blast fumes.
- Following each blast, the blast area will be inspected for evidence of excessive fumes. Where fume generation is observed, the blast design, explosive selection, and loading practices will be reviewed and adjusted as part of the continuous improvement process.
- Access to affected areas will remain restricted until blast fumes have dissipated and conditions are confirmed to be safe.
- Any excessive fume events will require an investigation to determine contributing factors and develop corrective actions.

8.6 Fish habitat management

Blasting activities will be planned and conducted to minimize potential adverse effects on fish and fish habitat. Blast designs will comply with applicable Fisheries and Oceans Canada (DFO) criteria for underwater overpressure and ground vibration.

8.6.1 Fish Mortality Prevention (50 kPa Underwater Overpressure Criteria)

To meet the DFO criterion for preventing fish mortality due to underwater shockwaves, the minimum setback distances presented in Table 5 shall be maintained between the blast location and fish habitat. The setback distances were extrapolated from the DFO guideline methodology for a maximum allowable underwater overpressure of 50 kPa.

Table 5: Minimum Setback Distance from Fish Habitat to Meet the 50 kPa Underwater Overpressure Criterion (Rock Substrate)

Weight of max. explosive charge per delay (kg)	0.5	1	2	5	10	25	50	100
Setback Distance (m)	5.5	7.8	11.0	17.4	24.6	38.8	54.9	77.6

8.6.2 Protection of Fish Spawning Habitat (13 mm/s Vibration Criterion)

To meet the DFO ground vibration criterion for fish spawning habitat during the egg incubation period, the setback distances presented in Table 6 shall be maintained between the blast location and active fish spawning areas.

Table 6: Minimum Setback Distance from Fish Spawning Habitat to Meet the 13 mm/s Vibration Criterion

Weight of max. explosive charge per delay (kg)	0.5	1	5	10	25	50	100
Setback distance (m)	10.7	15.1	33.7	47.8	75.5	106.7	150.9

8.6.3 Mitigation Measures

Where the required setback distances cannot be maintained, one or more of the following mitigation measures shall be implemented to reduce underwater overpressure and blast-induced vibration:

- Scheduling blasting activities outside sensitive spawning and egg incubation periods, where practicable.
- Prioritizing blasting in areas located farther from active spawning habitats during sensitive life stages.
- Use of decked charges to reduce the maximum explosive charge detonated per delay.
- Use of electronic detonators to eliminate charge overlap and improve control of the maximum charge per delay.
- Reduction of overall blast size.
- Reduction of blasthole diameter to decrease the explosive charge weight per hole and per delay.
- Optimization of blast timing, burden, spacing, and charge distribution to minimize vibration and underwater shockwave generation.
- Continuous review of blast monitoring results to verify compliance with applicable fish habitat protection criteria and support ongoing improvement of blasting practices.

These measures will be incorporated into blast design and planning to ensure the protection of fish and fish habitat while maintaining safe and effective mining operations.

8.6.4 Measures to Prevent Water Contamination from Explosive Products

To minimize the risk of water contamination associated with blasting activities, the following measures will be implemented:

- ANFO (Ammonium Nitrate-Fuel Oil) will not be used in or near water, due to its potential to release nitrogen-based compounds, including ammonia, into the aquatic environment.
- Controlled explosive loading procedures will be employed to prevent spills of explosive products during loading operations.
- Explosives will be loaded and primed in accordance with the manufacturer's specifications to ensure proper handling and minimize the risk of product loss to the environment.
- Any spilled explosive products or contaminated materials will be collected and disposed of in accordance with applicable regulatory requirements and manufacturer recommendations.
- Drill holes containing standing water will be loaded with water-resistant explosive products, such as bulk emulsions specifically designed for wet conditions.

These measures are intended to reduce the potential for explosive-derived contaminants to enter surface water, groundwater, and fish habitat, thereby protecting aquatic ecosystems and maintaining compliance with applicable environmental requirements.

9.0 HIGHWAY AND TRAIL CLOSURE

Where road closures are required to support blasting activities, the Trans-Canada Highway and motorized trails within the blast clearance area will be temporarily closed for the duration of the blast. Closure durations will be minimized, and access will be restored only after the affected areas have been inspected and

confirmed safe for public use. In the event of a misfire, road closures will remain in effect until the area is declared safe by the Blaster-in-Charge.
The public will be notified in advance of planned road closures through municipal communications and signage posted along affected roadways indicating the scheduled date and time of the closure.

10.0 AIRCRAFT SAFETY AND NOTAM PROCEDURES

The Project is located near the community of Appleton and approximately 20 km from Gander International Airport (YQX/CYQX), a Transport Canada-certified international airport and airport of entry serving commercial, charter, military, and general aviation traffic. Due to the proximity of aviation operations, blasting activities have the potential to create hazards to aircraft through the generation of flyrock, dust plumes, and blast debris. Accordingly, blasting activities will be planned and conducted in accordance with the requirements of Transport Canada, NAV CANADA, and applicable aviation regulations.

In accordance with Transport Canada Advisory Circular AC 601-009, a NOTAM may be required for above-ground blasting activities that could present a hazard to air navigation. The purpose of the NOTAM is to provide advance notice of blasting activities to pilots and air traffic service providers so that appropriate precautions can be taken.

Prior to blasting, NFG or its designated blasting contractor will assess whether a NOTAM is required based on the blast location, anticipated flyrock distance, dust generation potential, blast timing, and proximity to aviation routes, aerodromes, heliports, or other aviation operations. Where required, the NOTAM will be issued sufficiently in advance of blasting activities and will include the information specified by Transport Canada and NAV CANADA.

11.0 ELECTRICAL STORMS AND LIGHTNING

To ensure the safety of personnel and blasting operations, the following measures will be implemented:

- Blasting activities will not be conducted during electrical storms.
- Explosive loading, hookup, and firing activities will be suspended whenever lightning is observed, thunder is heard, or a storm is approaching the Project area.
- As a precautionary measure, blasting activities will be suspended when lightning is detected within 10 km of the blast area.
- Personnel involved in blasting operations will withdraw to a safe location until the storm has passed.
- Blasting will only resume once the Blaster-in-Charge has confirmed that conditions are safe.

12.0 MONITORING PROGRAM

12.1 Vibration and air overpressure monitoring

Air overpressure (airblast) and ground vibrations will be monitored at one of the buildings closest to the Mine site. The monitoring location may be established at or near either “Simms Road Building #2” or “Residence – 200 Trans-Canada Highway.”

During the first year of operations, permanent monitoring equipment will be installed to record all blast events. Subject to a review of the monitoring data demonstrating consistent compliance with the applicable airblast and ground vibration criteria, the permanent monitoring equipment may be removed after the first year and replaced with a modified monitoring program.

Where monitoring results exceed 80% of the adopted criteria, blast designs will be reviewed prior to subsequent blasts.

Blast monitoring instrumentation will be installed, calibrated, operated, and maintained in accordance with the equipment manufacturer's specifications and the ISEE Field Practice Guidelines for Blasting Seismographs (2025). Instrument deployment, calibration, sensor placement, and monitoring procedures will follow recognized industry best practices to ensure accurate and reliable measurements of ground vibration and airblast overpressure.

The following blast performance data will be collected and maintained for each blast to support compliance verification, quality control, and continuous improvement:

- Measured ground vibration (PPV in mm/s)
- Measured airblast overpressure (dBL)
- Maximum charge per delay
- Distance to monitoring location
- Total explosive quantity
- Number of blastholes
- Blast type
- Weather conditions
- Blast video recordings.

12.2 Flyrock monitoring

A flyrock monitoring program will be implemented through pre-blast inspections, visual observations during blasting, and post-blast inspections to verify that flyrock remains within the designated blast area.

- A visual inspection of the blast area and surrounding locations will be conducted following each blast to identify any flyrock beyond the designated blast area.
- Flyrock observations and incidents will be documented and recorded.
- Video recordings of blasts will be reviewed, where available, to assess flyrock behaviour and blast performance.
- Any flyrock occurrence beyond the established exclusion zone will be investigated and corrective actions implemented.
- Monitoring results, including video observations, will be reviewed periodically to support continuous improvement of blasting practices.

12.3 Dust and Blast Fume Monitoring

Each blast will be evaluated for dust and fumes, including the intensity and observed direction of their dispersion. These observations will be recorded as part of the blast performance assessment and kept in the blasting records.

A video recording of each blast will be maintained on site to support blast performance assessment, incident investigations, and the continuous improvement of blasting practices.

13.0 DATA MANAGEMENT AND RECORD KEEPING

In accordance with Section 422 of the Occupational Health and Safety Regulations, 2012 (NLR 5/12) blast records will be maintained and retained to support regulatory compliance, performance evaluation, and continuous improvement of blasting practices.

The Blaster-in-Charge will maintain a field journal or equivalent record containing information related to blast planning, inspections, execution, and monitoring. Blast records will be retained for a minimum of five years and will be made available for inspection by regulatory authorities upon request. Explosives and detonator inventory records will be maintained for a minimum of three years in accordance with regulatory requirements.

The following information will be recorded for each blast, as applicable:

- Date, time, and location of the blast;
- Blast identification number;
- Number of blastholes fired;
- Maximum charge per delay;
- Total quantity of explosives used;
- Blast design parameters;
- Measured ground vibration and airblast overpressure results;
- Distance to monitoring locations;
- Weather conditions;
- Dust and fume observations, including dispersion direction;
- Flyrock observations;
- Video recordings of the blast; and
- Details of any incidents, misfires, complaints, or corrective actions.

All blast records will be stored electronically and/or in hard copy and will be reviewed periodically by Mine management and the blasting contractor to verify compliance with applicable criteria and to support the continuous improvement of blasting operations

14.0 INCIDENT, COMPLAINT MANAGEMENT AND CONTINUOUS IMPROVEMENT

NFG and its blasting contractors will implement a process for the reporting, investigation, and review of blasting-related incidents, complaints, non-conformances, and operational performance to support continuous improvement of blasting practices and minimize potential impacts on workers, the public, infrastructure, and the environment.

Any blasting-related incident, non-compliance, complaint, misfire, excessive vibration or airblast event, flyrock occurrence, security breach, injury, property damage, environmental incident, or other blast anomaly will be reported to Mine management and investigated as soon as practicable following notification. The purpose of each investigation will be to identify root causes, determine corrective and preventive actions, and prevent recurrence.

The following procedures will be implemented:

- All blasting incidents, near-miss events, and non-conformances will be documented.
- Complaints related to blasting activities will be recorded, investigated, and addressed.
- Misfires will be managed in accordance with applicable regulations, site procedures, and the instructions of the Blaster-in-Charge.
- Where monitoring results exceed 80% of the adopted criteria, blast designs will be reviewed prior to subsequent blasts.
- Any exceedance of blast performance criteria, including ground vibration, airblast, flyrock, dust, fume, or environmental protection requirements, will be investigated and corrective measures implemented.
- Blast monitoring data, blast records, complaints, incident investigations, and operational observations will be reviewed regularly to identify opportunities for improvement.
- Ground vibration, airblast overpressure, dust, fume, flyrock, environmental monitoring results, blast performance, fragmentation, and muckpile characteristics will be evaluated to assess blast effectiveness and compliance.

- Blast designs, initiation systems, charge distributions, and stemming practices will be reviewed periodically to optimize blast performance and reduce potential adverse effects.
- Corrective and preventive actions, lessons learned, and improvement opportunities will be communicated to relevant personnel and incorporated into future blast planning and execution.
- Blast records, monitoring results, incident reports, investigations, corrective actions, and compliance reviews will be maintained as part of the blast management system.
- Blasting contractors will participate in periodic reviews of blast performance and monitoring results.
- This BMP will be reviewed at least annually and updated as necessary based on monitoring results, incidents, complaints, operational changes, and regulatory updates.

The Blaster-in-Charge and Mine management will periodically review monitoring trends, incident data, complaints, blast performance results, and regulatory compliance requirements to identify opportunities for continual improvement. Blast designs, procedures, and operational controls will be modified as necessary to enhance safety, environmental performance, regulatory compliance, and blasting efficiency. All changes arising from the continuous improvement process will be documented and incorporated into future blasting activities.

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16.0 SIGNATURE PAGE

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Appendix D Queensway Gold Project – Preliminary Air Quality Best Available Control Technology Report

Queensway Gold Project – Preliminary Air Quality Best Available Control Technology Report

Final Report

October 20, 2026

Prepared for:
New Found Gold Corporation

Prepared by:
Stantec Consulting Ltd.

Project Number:
121418830

Disclaimer

The conclusions in the Report titled Queensway Gold Project – Air Quality Best Available Control Technology Report are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

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Executive Summary

New Found Gold Corporation (New Found Gold) retained Stantec Consulting Ltd. to complete a preliminary Best Available Control Technology (BACT) assessment for air contaminant emissions associated with the proposed Queensway Gold Project (the Project), a new open pit gold mine located east of the Town of Appleton, Newfoundland and Labrador (NL). The assessment was prepared to support Project planning and regulatory review under the NL *Air Pollution Control Regulations* (NLR 11/22) and is intended to inform detailed engineering by identifying technically and economically feasible measures to reduce air contaminant emissions during Project operation.

The Project is expected to include four open pits, waste rock and overburden storage areas, ore stockpiles, a modular crushing and sorting plant, haul and access roads, water management infrastructure, and supporting administrative and maintenance facilities. The mine is currently anticipated to operate for approximately seven years following a four- to six-month construction period, producing approximately 700 tonnes per day of pre-concentrated product feed for transport to the permitted Pine Cove processing facility.

The air quality BACT assessment focuses on air contaminants with applicable air quality criteria or objectives in NL, including total suspended particulate (TSP), particulate matter less than 10 microns (PM_{10}), particulate matter less than 2.5 microns ($PM_{2.5}$), regulated metals, and combustion gases such as nitrogen dioxide, carbon monoxide, and sulphur dioxide. Based on the Project description and preliminary emissions information, fugitive dust sources, particularly road travel and conveyors/transfer points, are expected to be the primary focus of mitigation, while combustion gas controls are addressed at a higher qualitative level herein because modelling indicates combustion gases are expected to remain well within compliance with the use of United States Environmental Protection Agency Tier 4 type engines.

The assessment considered Project components that may substantively release air contaminants during operation, including mobile equipment, blasting, road travel, stockpiles, crushing and screening, conveyors and transfer points, and stationary combustion sources. Candidate technologies and practices were screened for technical feasibility based on maturity, adoption, geographic suitability, equipment or fuel availability, and emissions reduction potential. They were then assessed for economic feasibility based on anticipated capital cost, operating cost, and overall return on investment.

Preliminary findings indicate that technically and economically feasible controls for mobile equipment include the use of Tier 4 diesel engines, regular inspection and maintenance, fuel and energy use monitoring, and anti-idling policies. Alternative mobile equipment technologies such as battery electric, autonomous systems, and hydrogen are not considered broadly feasible for this Project at this stage due to limitations related to equipment availability, supporting infrastructure, Project scale, and the relatively short mine life.

For road travel, dust suppression is a key mitigation priority because haul roads are identified as a major contributor to particulate emissions. Water application, chemical suppressants, speed limits, reduced activity during windy or high-dust conditions, road maintenance, optimized routing, vegetation or wind breaks, vehicle wash or wheel shaker stations, and real-time air quality and weather monitoring are identified as practical controls. Paving may reduce dust emissions but is expected to have lower economic feasibility compared with suppression and operational controls, particularly given the relatively short mine life.

For stockpiles, crushing, screening, conveyors, and transfer points, the most effective dust controls include enclosure or partial enclosure, reduced drop heights, sealed transfer points, wet suppression where compatible with processing, dust collectors and ongoing preventative maintenance of dust management systems. Fully enclosed stockpiles and associated dust collection systems may provide high emissions reduction potential but are not considered economically feasible in consideration of final stockpile sizes and design requirements.

A key overarching practice to support monitoring performance of dust management will be continuous real-time ambient dust (TSP, $PM_{2.5}$, PM_{10}) monitoring between the Project and Appleton. The real-time monitoring will be set up with trigger alarm levels lower than the ambient air quality standards, as an early indication of rising dust levels. In the event of trigger level alarms at the air quality monitoring station, review of activities and mitigation would be initiated. Additional mitigation will be deployed in a timely manner as needed to avoid air quality standard exceedances due to Project emissions. This could include increased application of dust suppressants (water or other approved suppressants), maintenance on dust collection systems as deemed required or curtailment of certain operations if deemed necessary to reduce Project emissions during dry and windy periods.

The Environmental Protection Plan (EPP) for the Project includes detailed dust mitigation practices and inspection procedures to support ongoing monitoring and continuous improvement of dust management for the Project. The EPP will also include an Air Quality Monitoring Plan as an appendix, to be developed prior to construction in consultation with regulators.

Overall, the preliminary BACT review provides supporting technologies and practices that can be implemented as part of a practical dust-focused control strategy that will be refined during detailed engineering. Recommended next steps include confirming the final equipment fleet and crushing/sorting configuration, completing detailed economic and emissions control efficiency evaluations for available options, selecting site-specific dust suppressant products and ambient air quality trigger levels, and incorporating monitoring, inspection, and adaptive management requirements into the Project's air quality management planning, through the EPP and Air Quality Monitoring Plan.

Table of Contents

Disclaimer i

Executive Summary ii

Acronyms / Abbreviations vi

1 Introduction 1

2 Project Overview 2

3 Regulatory Context 4

4 BACT Assessment 5

4.1 Project Components Considered 6
4.2 Real-Time Monitoring and Environmental Protection Planning 6
4.3 Mobile Equipment 7
4.3.1 Technologies 11
4.3.2 Autonomous Operation 12
4.3.3 Anti-idling Software 13
4.3.4 Hydrogen Fuel Cell and Combustion 13
4.3.5 Practices 14
4.3.6 Summary of Technical Feasibility 14
4.3.7 Summary of Economic Feasibility 15
4.4 Blasting 16
4.4.1 Technologies 16
4.4.2 Practices 17
4.4.3 Summary of Technical Feasibility 17
4.4.4 Summary of Economic Feasibility 18
4.5 Road Travel 19
4.5.1 Technologies 19
4.5.2 Practices 21
4.5.3 Summary of Technical Feasibility 23
4.5.4 Summary of Economic Feasibility 24
4.6 Stockpiles, Crushing, Conveying and Transfer Points 25
4.6.1 Technologies 26
4.6.2 Practices 27
4.6.3 Summary of Technical Feasibility 28
4.6.4 Summary of Economic Feasibility 29
4.7 Stationary Equipment 30
4.7.1 Diesel and Biodiesel 30
4.7.2 Grid Electricity 31
4.7.3 Practices 31
4.7.4 Summary of Technical Feasibility 31
4.7.5 Summary of Economic Feasibility 32

5 BACT Selection 33

6 References 35

List of Tables

Table 4.1 Assessment Criteria 5
Table 4.2 Technologies and Practices for Consideration 8
Table 4.3 Technical Feasibility Evaluation – Mobile Equipment 14
Table 4.4 Economic Feasibility Evaluation – Mobile Equipment 15
Table 4.5 Technical Feasibility Evaluation – Blasting 17
Table 4.6 Economic Feasibility Evaluation – Blasting 18
Table 4.7 Technical Feasibility Evaluation – Road Travel 23
Table 4.8 Economic Feasibility Evaluation – Road Travel Equipment 24
Table 4.9 Technical Feasibility Evaluation – Stockpiles and Crushing Circuit 28
Table 4.10 Economic Feasibility Evaluation – Stockpiles and Crushing Circuit 29
Table 4.11 Technical Feasibility Evaluation – Stationary Equipment 31
Table 4.12 Economic Feasibility Evaluation – Stationary Equipment 32
Table 5.1 BACT Selection 33

List of Figures

Figure 2.1 Site Layout 3

Acronyms / Abbreviations

Al	Aluminum
AP-42	Compilation of Air Pollutant Emissions Factors
As	Arsenic
B5	Biodiesel blend containing 5% biodiesel
BACT	Best Available Control Technology
BC	British Columbia
BESS	Battery Energy Storage System
Cd	Cadmium
CO	Carbon monoxide
Cu	Copper
ECCC	Environment and Climate Change Canada
EPP	Environmental Protection Plan
Fe	Iron
GHG	Greenhouse gas
Hg	Mercury
hp	Horsepower
ICE	Internal combustion engine
kg/VKT	Kilograms per vehicle kilometre travelled
LAER	Lowest Achievable Emission Rate
m	Metre
m^2	Square metre
NL	Newfoundland and Labrador
NLDECCC	Newfoundland and Labrador Department of Environment, Conservation and Climate Change
NLR	Newfoundland and Labrador Regulation
NO_2	Nitrogen dioxide
NO_x	Nitrogen oxides
NRCan	Natural Resources Canada
NSR	New Source Review

Pb	Lead
PM	Particulate matter
$PM_{2.5}$	Particulate matter less than or equal to 2.5 microns in aerodynamic diameter
PM_{10}	Particulate matter less than or equal to 10 microns in aerodynamic diameter
PPD	Pollution Prevention Division
RACT	Reasonably Achievable Control Technology
SCR	Selective catalytic reduction
SO_2	Sulphur dioxide
t	Tonne
TPM	Total particulate matter
TSP	Total suspended particulate
UDEQ	Utah Department of Environmental Quality
ULSD	Ultra-low sulphur diesel
US	United States
US EPA	United States Environmental Protection Agency
V	Vanadium
VKT	Vehicle kilometres travelled
VMT	Vehicle miles travelled
Zn	Zinc



1 Introduction

New Found Gold Corporation (New Found Gold). engaged Stantec Consulting Ltd. (Stantec) to complete a preliminary Best Available Control Technology (BACT) assessment for air contaminant emissions in support of the Queensway Gold Project (the Project). This assessment is required under the Newfoundland and Labrador (NL) *Air Pollution Control Regulations* (NLR 11/22). This BACT is considered preliminary as the Project is still progressing through detailed engineering design. This preliminary BACT will inform detailed design by identifying potential technologies and practices that can be further reviewed and considered to manage air contaminant emissions to the lowest level technically and economically achievable.

Air quality is defined by the composition of the ambient air, including the presence and quantity of air contaminants that may have adverse effects on vegetation, wildlife, or human health. Air quality is highly influenced by local sources of air contaminants (e.g., nearby industrial facilities or vehicle traffic) and can also be influenced by air contaminants transported from sources that are farther away. The concentrations of contaminants in the ambient air can be compared to air quality criteria and standards, which are established to protect the environment and human health. This BACT assessment focuses on the air contaminants expected to be emitted from the Project and for which there are applicable air quality criteria or standards in NL as follows:

- Particulate matter with aerodynamic particle diameter less than or equal to 10 microns (PM_{10})
- Particulate matter with aerodynamic particle diameter less than or equal to 2.5 microns ($PM_{2.5}$)
- Total suspended particulate (TSP)
- Metals regulated by the NL Air Quality Standards
- Combustion gases (nitrogen dioxide [NO_2], carbon monoxide [CO], and sulphur dioxide [SO_2])

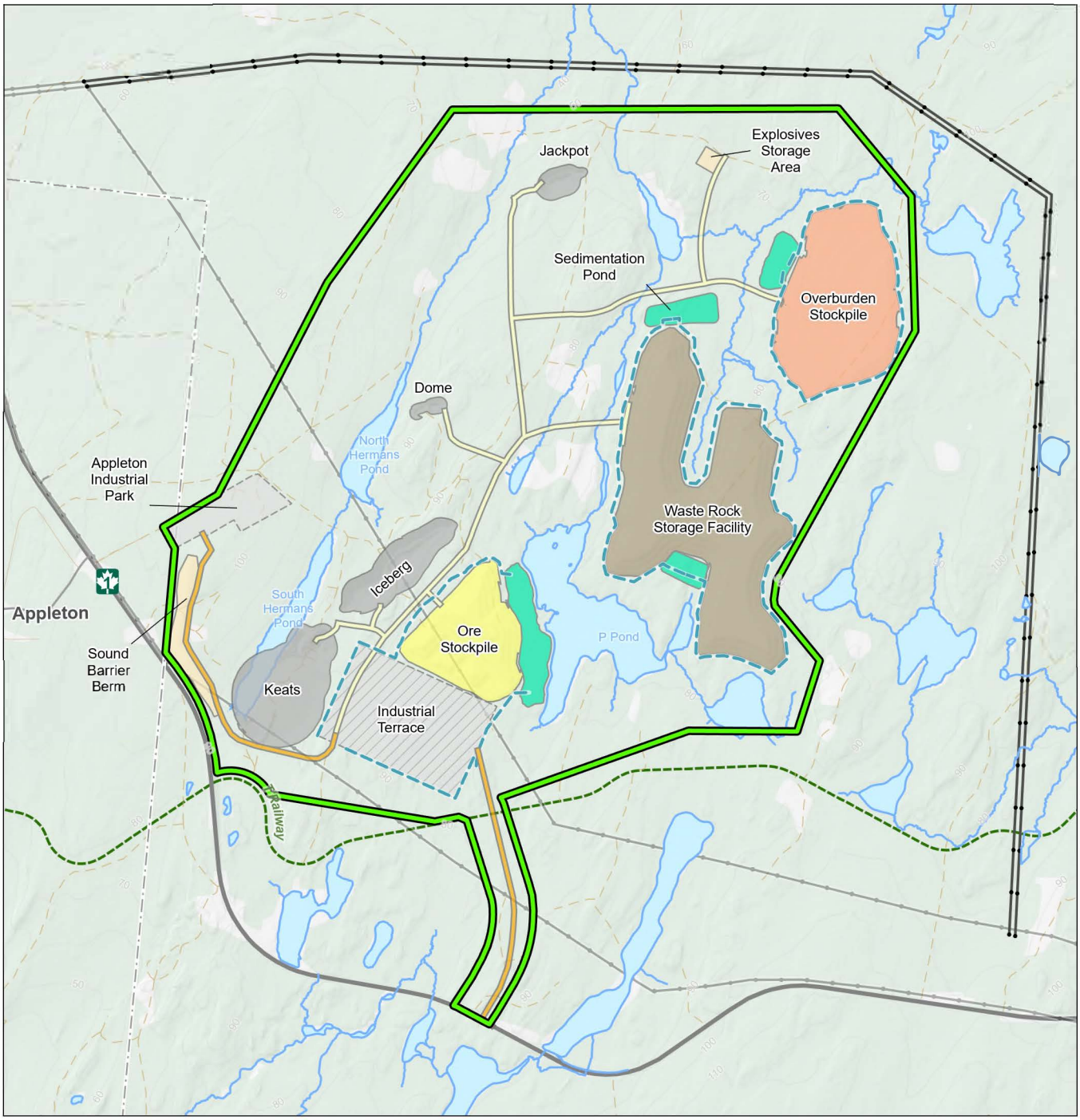
2 Project Overview

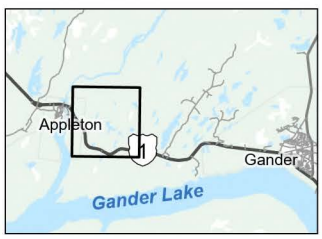
New Found Gold is proposing a new open pit gold mine, located east of the Town of Appleton, NL. The Project represents a transition from several years of exploration at the site to full scale mining, supported by favourable geological results and a development strategy that enables New Found Gold to advance production while continuing exploration activities across the remainder of the Queensway Property. It will unlock valuable mineral resources, support regional economic growth, and strengthen Canada's and NL's position in the global mining sector.

The Project involves the development of four open pits, a waste rock storage facility, overburden storage facility, ore stockpiles, a modular crushing and sorting plant, and associated operational infrastructure including access and haul roads, water management facilities, and administrative and maintenance shops (Figure 2.1). The mine will produce approximately 700 tonnes per day of preconcentrated product feed, which will be transported to the existing, permitted Pine Cove processing facility, located on the Baie Verte Peninsula, for final processing.

The Project has a mine life of seven years, based on current production rates. The construction period will occur over a four-to-six-month period. Progressive rehabilitation will occur as appropriate throughout operation, with final rehabilitation and closure after mining operations have been completed. Post-closure monitoring will follow. In general, the open pit mine will operate as follows, with the following air contaminant emissions during operation:

- Drilling and blasting with an explosive to loosen rock in the open pit (dust and combustion emissions)
- Using heavy equipment to load blasted material onto haul trucks, which then travel down a haul road and deposit the material in either a waste rock storage pile or an ore storage pile (dust and combustion emissions)
- Material is recovered from stockpiles via covered conveyors or mobile equipment and directed to the crusher (dust emissions)
- The crushed material is then sorted, resulting in preconcentrated ore that is stored before transport to Pine Cove for processing (dust emissions)
- Use of stationary combustion equipment to power screening, crushing, and sorting equipment, as well as smaller sources such as light plants (combustion emissions)





Notes

1. Coordinate System: NAD 1983 UTM Zone 21N
2. Data Sources: Stantec; GovNL Department of Forestry, Agriculture and Lands; CanVec NRCan; Newfound Gold Corp.
3. Background: Government of Newfoundland and Labrador; NRCan CanVec;

Legend

- Project Area

Proposed Project Layout

- Access Road
- Haul Road
- Ditch
- Sedimentation Pond
- Open Pit
- Ore Stockpile
- Overburden Stockpile
- Waste Rock Storage Facility
- Other Mine Features
- Industrial Terrace
- Appleton Industrial Park

Existing Infrastructure

- Transmission Line
- Proposed Transmission Line (Re-routing)
- Highway
- Collector Road
- Local Road
- Resource Road / Trail
- NL T'Railway Provincial Park

Other Features

- Contour (10 m)
- Watercourse
- Waterbody
- Municipal Boundary

0 250 500 750 metres

(At original document size of 8.5x11)
1:30,000

N

Stantec

Project Location
Appleton,
Newfoundland and Labrador

Prepared by NW on 2026-09-24
TR by EW on 2026-09-24

Client/Project
New Found Gold Corp.
Queensway Gold Project

121418830_030

Figure No.
2.1

Title
Site Layout

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3 Regulatory Context

This assessment is required under the NL *Air Pollution Control Regulations* (NLR 11/22) under the *Environmental Protection Act*. Section 6 of NLR 11/22 requires an owner or operator who installs a new or modified emission source to employ BACT. The *Air Pollution Control Regulations* further specifies that BACT must be acceptable to the Province and, in the particular circumstance, represent the most effective or most stringent emission control device or technique, be proven reliable in comparable processes, and be economically feasible as determined by the Minister in consideration of industry standards and consultation with the owner or operator.

For the air contaminant BACT assessment report, it is expected that a BACT review for major point sources, generally following the United States Environmental Protection Agency's (US EPA's) guidance for the "New Source Review" (NSR) program, would be completed as per direction from Newfoundland and Labrador Department of Environment, Conservation and Climate Change, Pollution Prevention Division (NLDECCC - PPD). Under EPA's NSR program, if a company is planning to build a new facility or modify an existing facility such that air pollution emissions will substantively increase, then the company must obtain an NSR permit. The NSR permit requires the company to reduce air pollution emissions by changing the process to prevent air pollution or installing air pollution control equipment (US EPA 2025).

In the US, BACT is required on major new or modified sources in clean areas (referred to as attainment areas). BACT is determined on a case-by-case basis, by providing evidence that the proposed technologies to be used will result in the Lowest Achievable Emission Rate (LAER) of target air contaminants in consideration of technical and economic feasibility. In addition to BACT, US EPA also uses the term Reasonably Achievable Control Technology (RACT). One source of information that can be used is the EPA-established RACT/BACT/LAER Clearinghouse, which is a central database of air pollution technology information, including past RACT, BACT, and LAER decisions contained in NSR permits (US EPA nd). In addition to publicly available information, such as the Clearinghouse, New Found Gold's design team provided information on achievable emission rates for key air contaminants and feasible emissions control technologies available to the Project.



4 BACT Assessment

The BACT assessment process includes the following steps:

- Identify Project components that may release air contaminant emissions during operation (Section 4.1)
- Identify the air contaminant control options including technologies and practices that are relevant for the Project, using US EPA's Clearinghouse, other published sources (including British Columbia's Developing a Fugitive Dust Management Plan for Mines in BC, Technical Guidance November 2023 and Ontario's Technical Bulletin on Management Approaches for Industrial Fugitive Dust Sources 2017) and input from the New Found Gold design team (Sections 4.3 to 4.7)
- Assess the technical feasibility of the technologies in light of the Project's scope and needs (Sections 4.3 to 4.7)
- Assess the economical feasibility of the technologies in light of the Project's scope and needs (Sections 4.3 to 4.7)
- Select the BACT that are technically and economically feasible during Project operation (Section 5)

Activities that occur within the Project's physical footprint for the purpose of production and that are controlled by New Found Gold are included. Vehicles or equipment that enter the physical footprint of the Project to bring in supplies or receive product are not included in the BACT assessment. Vehicles and equipment that are not directly related to the operation of the Project, such as passenger vehicles and snowplows, are not included in the BACT assessment. The outlook on the technical and economic feasibility of each technology and practice are based on readily available information at the time of writing and professional judgement of the Project team. The technical and economic feasibility will be described using the criteria in Table 4.1.

Table 4.1 Assessment Criteria

Aspect	Criteria	Possible Results
Technical Feasibility	Maturity	Mature, commercial testing, bench scale *If not mature, anticipated timeline to maturity is presented*
	Adoption	Widespread, limited, project-specific
	Geographic Limitations	None, climate-specific
	Availability of Equipment or Fuel	Widespread, limited, project-specific
	Air Contaminant Emissions Reduction Potential	Low, medium, high
Economic Feasibility	Anticipated Capital Cost	Low, medium, high
	Anticipated Operation Cost	Low, medium, high
	Overall Return on Investment	Low, medium, high

The Project air contaminant emission estimates presented in the emissions inventory incorporate the preliminary emission control measures. The BACT assessment therefore includes a discussion of the emission reductions achieved by the selected control measures relative to uncontrolled or less-controlled emission scenarios.

4.1 Project Components Considered

The Project components that could release substantive air contaminant emissions during operation are:

- Mobile equipment, e.g., loaders, haul trucks (combustion gases and particulate matter)
- Blasting (dust, combustion gases)
- Road travel (dust)
- Stockpiles and storage in relation to dropping, reclaiming, wind erosion (dust)
- Crushing and Screening (dust)
- Conveyor belts and transfer points (dust)
- Stationary combustion equipment (combustion gases)

The possible technology and practice options available for each Project component along with estimated annual emissions during peak year and % of Project total emissions are summarized in Table 4.2. As the dispersion modelling completed for the Project operation indicates that combustion gases are well within compliance while dust (particulate matter), including some trace metals, could approach ambient criteria if not further mitigated, the focus of the BACT assessment is on dust (particulate matter, trace metals) while combustion gas BACT is addressed at a higher, more qualitative level. In consideration of the % contribution of each dust source, additional focus is made on road dust and conveyors/transfer points.

4.2 Real-Time Monitoring and Environmental Protection Planning

The implementation of continuous real-time dust monitoring, with trigger level alarms to operational management can be a key aspect of overall air quality management practices at a mine as it provides timely data to support the ongoing effectiveness of dust control. This practice or technology is applicable to various emissions sources at the mine as it would evaluate the ambient dust levels between the site and Appleton. The use of real-time particulate matter monitors in NL is becoming commonplace for mines, and is considered technically and economically feasible for the Project. The practice of monitoring and setting trigger levels below the regulatory ambient air quality standards will help identify periods when additional dust mitigation may be needed and allow operations to respond before air quality standards are exceeded. Real-time monitoring is very useful when paired with application of dust suppressants as the application rate can be increased during times when monitoring indicates that higher dust levels are present. Depending on the magnitude and persistence of measured concentrations, operational responses may also include reducing operation (e.g., amount of hauling) or temporarily curtailing an operation until conditions improve.

The Environmental Protection Plan (EPP) will provide a practical and detailed guide to dust control measures for operation including those identified in this study as being best practices and applicable to the project. The Air Quality Monitoring Plan, which will be appended to the EPP. will also establish the procedures for responding to elevated particulate matter concentrations identified through real-time monitoring, including escalation measures and operational adjustments where appropriate.

4.3 Mobile Equipment

Heavy machinery commonly used for mining includes excavators, graders, drills, loaders and haul trucks. Diesel is commonly used as fuel for off road equipment, but smaller off road and on road equipment may use diesel, gasoline, or propane. This assessment specifically targets large equipment that uses diesel, as the smaller equipment generally contributes negligibly to the total air contaminant emissions. Equipment will range in physical size and gross horsepower rating depending on the needs of the Project.

Equipment units are planned to be contractor operated. Fleet maintenance activities will be performed either at the Project site or at the contractor's maintenance facilities.

Three available technologies and three practices were considered in this assessment of off-road and on-road equipment, as shown in Table 4.2. The available technologies are discussed in the following sections.



Table 4.2 Technologies and Practices for Consideration

Project Component	Technologies	Practices	Project Emissions – Operations Peak Year (Year 4), In tonnes emitted/year (% of total emissions)															
			TPM	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	Al	As	Cd	Cu	Fe	Pb	Hg	Ni	V	Z
Mobile Equipment	• US EPA Tier 4 engines combusting ultra-low sulphur diesel (ULSD), biodiesel, or renewable diesel • Electric-drive • Autonomous operation • Anti-idling software • Hydrogen	• Regular inspections and maintenance • Monitoring of fuel/energy use • Anti-idling policy • Real-time air quality monitoring, • Environmental Protection Plan	.14 (0.29%)	2.14 (0.80%)	2.14 (4.84%)	64.07 (8.18%)	556.42 (65.62%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)
Blasting	• Blast Hole Stemming Optimization • Blast Plugs and Cones • Fog Cannon	• Consideration of meteorological conditions	9.84 (1.34%)	5.12 (1.91%)	0.3 (0.68%)	25.33 (3.24%)	107.67 (12.70%)	3.17 (0.97%)	1.01 (3.75%)	4.62E-03 (3.88%)	2.64E-06 (3.77%)	1.05E-03 (3.82%)	0.66 (3.74%)	1.17E-03 (3.85%)	3.93E-07 (3.65%)	9.7E-04 (3.77%)	2.29E-03 (3.79%)	1.17E-03 (3.76%)
Road Travel	• Road surface type, crushed stone or asphalt	• Dust suppression (water) • Dust suppression (chemical) • Reduce speed and set speed limits • Reduce working hours on windy days • Add vegetation to roadsides to prevent dust travel • Regular road maintenance • Optimized routing for reduced haul distances • Vehicle wash/wheel shaker stations • Real-time air quality monitoring, • Environmental Protection Plan	451.65 (61.44%)	128.43 (47.89%)	12.84 (29.04%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)

Table 4.2 Technologies and Practices for Consideration

Project Component	Technologies	Practices	Project Emissions – Operations Peak Year (Year 4), In tonnes emitted/year (% of total emissions)															
			TPM	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	Al	As	Cd	Cu	Fe	Pb	Hg	Ni	V	Z
Stockpiles	• Enclosed stockpiles • Windbreaks • Fog Cannons	• Dust suppression (water) • Dust suppression (chemical) • Reduce drop heights • Progressive reclamation • Limiting exposed areas • Consideration of meteorological conditions prior to material transfers	29.85 (4.06%)	14.93 (5.57%)	2.24 (5.07%)	- (0.00%)	- (0.00%)	- (0.00%)	2.78 (10.32%)	0.01 (8.47%)	7.12E-06 (10.18%)	2.55E-03 (9.28%)	1.87 (10.59%)	2.67E-03 (8.79%)	1.28E-06 (11.90%)	2.61E-03 (10.15%)	5.99E-03 (9.90%)	3.19E-03 (10.26%)
Crushing and Screening	• Covered/enclosed equipment • Airborne materials control - Cyclone - Baghouse - Wet scrubber - Bin vent dust collectors - Fog Cannons	• Maintain negative air pressure in enclosure • Wet suppression of material transfers (e.g., spray system) • Create a fugitive dust control plan for facility • Regular maintenance of facility equipment weatherproofing, and seals • Capital stock turnover • Monitoring material usage to confirm efficient operation	28.74 (3.91%)	11.39 (4.25%)	1.72 (3.89%)	- (0.00%)	- (0.00%)	- (0.00%)	2.96 (10.98%)	0.014 (11.32%)	7.7E-06 (11.01%)	3.08E-03 (11.21%)	1.93 (10.93%)	3.42E-03 (11.26%)	1.15E-06 (10.69%)	2.83E-03 (11.01%)	6.7E-03 (11.08%)	3.42E-03 (11.00%)
Conveyors and transfer points	• Covered/enclosed equipment	• Maintain negative air pressure in enclosure • Reduce drop heights • Wet suppression of material transfers (e.g., spray system) • Regular maintenance of facility equipment weatherproofing, and seals • Real-time air quality monitoring • Environmental Protection Plan	197.33 (26.85%)	93.33 (34.80%)	14.13 (31.96%)	- (0.00%)	- (0.00%)	- (0.00%)	20.2 (74.95%)	0.091 (76.33%)	5.25E-05 (75.04%)	0.0208 (75.69%)	13.2 (74.75%)	0.0231 (76.09%)	7.93E-06 (73.75%)	0.0193 (75.07%)	0.0455 (75.23%)	0.0233 (74.97%)

Table 4.2 Technologies and Practices for Consideration

Project Component	Technologies	Practices	Project Emissions – Operations Peak Year (Year 4), In tonnes emitted/year (% of total emissions)															
			TPM	PM_{10}	$PM_{2.5}$	NO_x	CO	SO_2	Al	As	Cd	Cu	Fe	Pb	Hg	Ni	V	Z
Stationary Combustion Sources	• Grid electricity • Diesel/biodiesel generator set with low NO_X burners • Renewable electricity with battery electric storage system (BESS) • Tier 4 Engines for generators • Selective catalytic reductions (SCR) on large generators	• Regular maintenance • Optimize sizing to reduce consumption • Good combustion practices	15.51 (2.11%)	12.85 (4.79%)	10.84 (24.52%)	693.5 (88.58%)	183.79 (21.68%)	324.95 (99.03%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)	- (0.00%)

4.3.1 Technologies

4.3.1.1 ULSD Diesel/Biodiesel/Renewable Diesel Combustion Engines

Diesel is the business-as-usual fuel for heavy duty mobile equipment due to its ease of storage, transport, and energy density. The use of diesel-fuelled equipment is well established in many sectors and is in use throughout the world. Regulatory requirements and best operational practices for diesel storage and fuelling technologies are well defined in Canada. Diesel trucks and other mobile equipment sold for use in Canada are designed to meet health and safety, fire and life safety, and air pollution control requirements in Canada.

Diesel engines release air contaminants including particulate matter, metals, and combustion gases. The current best control technologies for diesel engines in Canada align with the US EPA rule for Tier 4 nonroad diesel engines, which were phased in starting in 2008 (US EPA 2004). This rule reduces total particulate matter, NO_X, and non-methane hydrocarbons emissions from diesel engines. Mobile equipment with diesel engines that meet the Tier 4 emissions standards are readily available from well-known suppliers, such as Caterpillar, Liebherr, and JCB.

Mining equipment that operates on diesel can also use biodiesel that is blended with petroleum-based diesel. Biodiesel is produced from renewable feedstocks, such as soybean oil and animal fat, via a process called transesterification. Biodiesel is more temperature sensitive than 100% diesel; at low temperatures biodiesel can form crystals that can plug the fuel filter. This is similar to petroleum-based diesel; however, the temperature at which crystals form in biodiesel is higher than for petroleum-based diesel. Using a low biodiesel blend (less than 5%) can alleviate this issue. Biodiesel used in engines is always blended with petroleum-based diesel. A 5% blend, referred to as B5, is typically endorsed by North American engine manufacturers for on-road vehicles (NRCan 2024). Construction equipment manufacturers, particularly Caterpillar and Cummins, have stated that biodiesel blends up to 20% can be used in their equipment (Caterpillar Inc. 2024, Cummins Inc. 2024). From an emissions standpoint, biodiesel combustion in a diesel engine typically has lower PM, hydrocarbon, and CO emissions than when using only diesel. This is because of biodiesel's higher cetane number (more complete combustion) and high lubricity (smoother starts) (SC Fuels 2025). Biodiesel blends are readily available in Canada but may not be suitable for aboveground winter use.

Renewable diesel, also referred to as hydrogenation derived renewable diesel, is produced from the same feedstocks as biodiesel through a process involving hydrotreating, isomerization, and fractionation. Hydrotreating uses hydrogen and high temperature and pressures to convert the oils in the feedstock to simple paraffins (Digital Refining 2010). Isomerization results in the specific chemicals required and fractionation results in the finished product. This equipment is commonly found at traditional oil refineries. Chemically, renewable diesel is the same as petroleum derived diesel and has better low temperature operability (Valero 2024). Emissions of particulate matter tend to be lower when combusting renewable diesel compared to petroleum diesel, with comparable emissions of other air contaminants (Cummins 2022). Renewable diesel does not need to be blended with petroleum diesel; it can be used directly with existing engines and infrastructure provided it meets the fuel profiles specified by the engine manufacturer. Renewable diesel is produced in US with federal subsidies, while the production of



renewable diesel in Canada is primarily taking place in the western provinces, with several facilities coming online in recent years. In NL, the Braya Renewable Fuels' refinery produces renewable diesel; however, until recently, Braya has only sold renewable diesel to customers outside of Canada. Braya's first sale of renewable diesel to a Canadian customer occurred on June 15, 2026, for 100,000 barrels (Bush 2026).

The use of diesel engines, petroleum diesel, blended biodiesel, or renewable diesel in mobile equipment that meets the Tier 4 emission standards is considered technically feasible for the project. Inclusion of anti-idling technology in the mobile equipment's control system, when available, is also considered technically feasible.

4.3.1.2 Electric-drive and Hybrid

Electric-drive equipment uses electricity from batteries for energy instead of a fuel such as diesel. This technology has the advantage of emitting no air contaminants from operation. Equipment manufacturers such as Caterpillar already have some small electric equipment available and are further developing electric equipment for market. Caterpillar offers the 988K XE wheel loader (588 hp) with increased efficiency over its 988K diesel counterpart (Caterpillar 2024). There are also hybrid electric-diesel equipment (BigRentz 2024).

Heavy mobile equipment with non-emitting electric engines are becoming more widespread in underground mining operations. While the focus on electric equipment is mainly for underground, more mines are decarbonizing by retrofitting their existing fleet with electric drive trains that do not produce greenhouse gas emissions directly or using hybrid electric-diesel equipment that do not require charging infrastructure but still provide some savings over straight diesel. This has the benefit of reducing air contaminant emissions through reduced fuel consumption. In addition to retrofits, some manufacturers, such as Komatsu, offer electric transport trucks with gross horsepower ratings of 2,000 hp to 4,400 hp for sale (Komatsu 2024). More prototype electric mine transport trucks are being tested by equipment manufacturers including Liebherr and Caterpillar (Anyadike 2023). Other mining equipment, such as hydraulic excavators, are also being designed with fully electric systems; examples include the Hitachi EX3600 7E and EX5600 7E with gross horsepower ratings starting at 1,609 hp. The transport trucks and hydraulic excavators considered for the Project are much smaller than these models. It is unlikely that electric equipment or vehicles will become commercially available in the scale needed for the Project during the Project's operation phase, which is relatively short at seven years. Therefore, the use of electric drive equipment is not considered technically feasible for the Project.

4.3.2 Autonomous Operation

Equipment that has software installed to automatically direct its operation is becoming more common in the mining industry as operators strive to improve efficiencies. Its main use is for large-scale, high-volume mines. Traditionally, the drivers behind automation have been operational: increased safety, reduced operating costs, and increased productivity. Automation can also provide a solution to a lack of operators in remote areas. The air quality benefit to using equipment that can direct itself is an increase in fuel efficiency, because the software prioritizes constant speed rather than the accelerations and decelerations caused by human drivers, even those trained for fuel efficient operation. It also has the benefits of decreasing maintenance requirements and reducing worker exposure to hazards.



Caterpillar, Komatsu, Sandvik, Volvo, Atlas Copco, and Epiroc have some notable market-share in autonomous equipment and the systems needed to operate them (Patrick 2026). However, these equipment and systems are designed for very large operations (e.g., 200 t loads) or very specific operations, such as underground mining (Migneault 2024, Jarratt 2025). In addition, the capital costs of autonomous or semi-autonomous equipment and the supporting systems are high and the resulting reduction in fuel and personnel costs may not fully offset the capital cost plus the ongoing electricity consumption cost. The smaller size of the equipment needed and open pit mining method for the Project makes autonomous or tele-remote equipment and systems not technically feasible at the start of operation and are not expected to become feasible over the Project's operation.

4.3.3 Anti-idling Software

The idling of haul trucks while waiting for loading or unloading or during breaks and shifts changes result in extra fuel being combusted. Modern large haul trucks come equipped with software and technology to monitor the equipment's conditions and shutdown the engine when certain criteria are met, such as zero speed and parking brake applied. A small auxiliary engine is used to maintain critical systems, such as lighting, climate control, and radios. At any time, an operator can override the software and turn the engine back on. Idle management systems can also be retrofitted onto haul trucks or other equipment, such as loaders (Rosco Mining Solutions nd). This technology is not currently commercially available in the size of haul trucks required for the Project; therefore, equipment with anti-idling software is not considered to be technically feasible. Although 65 ton-haul trucks with this technology may become feasible during the Project's lifetime, it would not be economically feasible to purchase new haul trucks during operation.

4.3.4 Hydrogen Fuel Cell and Combustion

Hydrogen fuel cell technology and hydrogen internal combustion engines (ICEs) for off- and on-road equipment are relatively new. A hydrogen fuel cell generates electricity through the chemical reaction between hydrogen and oxygen, whereas a hydrogen ICE burns hydrogen in a similar way to conventional diesel engines (Fox 2023). No air contaminants are released from a hydrogen fuel cell; water is the only by-product. Like an electric battery in a vehicle, a hydrogen fuel cell remains in the equipment and is refueled in a similar manner as diesel equipment. Prototype operation suggests that refuelling may need to occur once or twice per day, depending on the tank size and equipment operating hours.

Leading manufacturers are well on the way to bringing hydrogen fuel cells and ICE to commonly used construction equipment in various sizes. While these manufacturers continue to develop and test hydrogen equipment, commercial scale is not expected until 2030.

The other aspect of technical feasibility of hydrogen is its production, transportation, and storage. Hydrogen can be produced through a variety of technologies; the most common technology currently used is steam methane reforming. Electrolysis of water, which requires high amounts of electricity to split the water, produces oxygen in addition to hydrogen. Similar to natural gas, hydrogen may be transported as a high-pressure gas in a pipeline or by road or rail via a tube trailer or liquefied for transport in a cryogenic tank (Alsaba et al. 2023).



Hydrogen in equipment is not technically feasible due to the emerging nature of the technology and lack of availability on the market as well as lack of hydrogen supply in NL. Hydrogen production technologies are not considered a technically feasible fuel during operation of the Project due to current lack of infrastructure and fuel availability and short Project lifetime.

4.3.5 Practices

For combustion engines, practices that reduce fuel use will reduce air contaminant emissions. The main practice that can be employed is the regular maintenance of the mobile equipment according to the manufacturer's specifications and best practices. Routine monitoring of fuel use can be used to detect when a piece of equipment is not functioning at best possible performance. Because mining operations include some idle time in between activities, reducing idling time either through equipment computer systems or policy will reduce fuel combustion and hence air contaminant emissions. These practices are considered technically and economically feasible for the Project.

4.3.6 Summary of Technical Feasibility

A summary of the technical feasibility of each mobile equipment technology and practice is provided in Table 4.3.

Table 4.3 Technical Feasibility Evaluation – Mobile Equipment

Aspect	Criteria	Result
Tier 4 Engine, Diesel	Maturity	Mature
	Adoption	Widespread
	Geographic Limitations	None
	Availability of Equipment or Fuel	Widespread
	Air Contaminant Emissions Reduction Potential	None (business as usual)
Tier 4 Engine, Biodiesel	Maturity	Mature
	Adoption	Widespread
	Geographic Limitations	Climate-specific
	Availability of Equipment or Fuel	Limited
	Air Contaminant Emissions Reduction Potential	Low
Tier 4 Engine, Renewable Diesel	Maturity	Mature
	Adoption	Limited
	Geographic Limitations	None
	Availability of Equipment or Fuel	Limited
	Air Contaminant Emissions Reduction Potential	Low

Table 4.3 Technical Feasibility Evaluation – Mobile Equipment

Aspect	Criteria	Result
Battery Electric/hybrid	Maturity	Mature
	Adoption	Widespread
	Geographic Limitations	None
	Availability of Equipment or Fuel	Limited at smaller size required
	Air Contaminant Emissions Reduction Potential	High
Autonomous Operation	Maturity	Mature
	Adoption	Project-specific
	Geographic Limitations	None
	Availability of Equipment or Fuel	Limited
	Air Contaminant Emissions Reduction Potential	Low
Anti-idling Software	Maturity	Mature
	Adoption	Limited
	Geographic Limitations	None
	Availability of Equipment or Fuel	Limited at smaller size required
	Air Contaminant Emissions Reduction Potential	Medium

4.3.7 Summary of Economic Feasibility

A summary of the economic feasibility of each technology judged to be technically feasible is provided in Table 4.4. The main factor contributing to low return on investment for those with medium and high costs is the relatively low production rates and short mine life planned.

Table 4.4 Economic Feasibility Evaluation – Mobile Equipment

Aspect	Criteria	Result
Tier 4 Engine, Diesel	Anticipated Capital Cost	Medium
	Anticipated Operation Cost	Medium
	Overall Return on Investment	Medium
Tier 4 Engine, Biodiesel Diesel	Anticipated Capital Cost	Medium
	Anticipated Operation Cost	Medium
	Overall Return on Investment	Medium

Table 4.4 Economic Feasibility Evaluation – Mobile Equipment

Aspect	Criteria	Result
Tier 4 Engine, Renewable Diesel	Anticipated Capital Cost	Medium
	Anticipated Operation Cost	High
	Overall Return on Investment	Medium
Battery Electric	Anticipated Capital Cost	High
	Anticipated Operation Cost	Medium
	Overall Return on Investment	Low
Autonomous Operation	Anticipated Capital Cost	High
	Anticipated Operation Cost	Medium
	Overall Return on Investment	Low
Anti-idling Software	Anticipated Capital Cost	Medium
	Anticipated Operation Cost	Low
	Overall Return on Investment	Low
Hydrogen Fuel Cell	Anticipated Capital Cost	High
	Anticipated Operation Cost	High
	Overall Return on Investment	Low

The technologies and practices identified as technically and economically feasible are carried forward for consideration in the BACT selection presented in Section 6.

4.4 Blasting

Blasting is employed in open-pit mining to break and fragment rocks for further processing. The explosive force dislodges particles from the blasted rock, propelling flyrock and airborne dust (particulate matter) into the air. Blasting produces a short-term -two to three minutes long- dust peak, which spreads with the prevailing wind. Blasting also generates gaseous emissions, including CO, NOx, and SO_2.

4.4.1 Technologies

Stemming is inert material used to confine energy inside the drill hole. Pea gravel is a common stemming material used for high explosive products for rock breaking. Proper stemming (filling the top of the blast holes with crushed rock or specialized material) and use of heavy rubber blasting mats help to physically contain the initial eruption, keeping a large portion of the fine particulates trapped inside or close to the blast holes.

Blast hole stemming optimization can be used to reduce the upward vent of a blast. Mines typically use precisely screened, angular crushed rock (often recycled from non-ore waste rock piles) to pack the top of the borehole.



Blast plugs and cones also help to reduce the amount that particulate from blasting travels. This involves dropping a plastic or plaster blasting plug into the hole before adding the stemming aggregate to wedge the material tightly against the borehole walls under explosive pressure. This forces the blast energy sideways into the ore zone, substantively reducing the vertical blowout of fine dust.

Blasting mats are heavy, flexible blankets that are also commonly used to help contain explosions and prevent flyrock. The massive weight and flexibility of the blasting mat smother the initial burst, absorbing the kinetic energy and venting the explosive gases safely while trapping the loose rock beneath it. They allow mining crews to safely blast next to critical infrastructure without needing extensive evacuation zones.

Fog cannon systems, also known as mist cannons or dust cannons, release a fine mist of water droplets over large areas. The tiny droplets, typically in the range of ten to one hundred and fifty microns, are similar in size to airborne dust particles and collide with them mid-air, causing the dust to agglomerate and fall to the ground. Fog cannons are effective at suppressing fugitive dust from open areas such as blasting zones, active pit faces, and large stockpiles where conventional water sprays cannot reach. They use substantially less water than conventional spraying because the fine droplet size maximises the contact between water and dust. Fog cannons are common and standard equipment in open-pit mining operations worldwide however they are rarely used to directly target blasting emissions.

4.4.2 Practices

Timing of blasts can be delayed if meteorological conditions are indicative of high dust generation offsite, especially in the direction of the nearest town (Appleton). During particularly dry and windy conditions in which the wind direction is towards Appleton, the blast can be held until atmospheric dispersion conditions improve.

Blast design and operational parameters, including blast size, explosive quantities, and charge distribution, can be optimized to achieve the required rock fragmentation while reducing the generation and release of particulate matter. The real-time continuous monitoring discussed in Section 4.2 will also detect higher dust levels from blasting if they occur and could identify the need for additional mitigation.

4.4.3 Summary of Technical Feasibility

A summary of the technical feasibility of each blasting technology and practice is provided in Table 4.5.

Table 4.5 Technical Feasibility Evaluation – Blasting

Aspect	Criteria	Result
Blast Hole Stemming Optimization	Maturity	Mature
	Adoption	Widespread
	Geographic Limitations	None
	Availability of Equipment or Fuel	Widespread
	Air Contaminant Emissions Reduction Potential	Medium

Table 4.5 Technical Feasibility Evaluation – Blasting

Aspect	Criteria	Result
Blast Plugs & Cones, Mats	Maturity	Mature
	Adoption	Widespread
	Geographic Limitations	None
	Availability of Equipment or Fuel	Widespread
	Air Contaminant Emissions Reduction Potential	Medium
Fog Cannons	Maturity	Mature
	Adoption	Limited (for blasting)
	Geographic Limitations	None
	Availability of Equipment or Fuel	Widespread
	Air Contaminant Emissions Reduction Potential	Low
Consideration of meteorological conditions, real-time ambient monitoring, EPP	Maturity	Mature
	Adoption	Widespread
	Geographic Limitations	None
	Availability of Equipment or Fuel	Widespread
	Air Contaminant Emissions Reduction Potential	Low

4.4.4 Summary of Economic Feasibility

A summary of the economic feasibility of blasting technology and practices is provided in Table 4.6.

Table 4.6 Economic Feasibility Evaluation – Blasting

Aspect	Criteria	Result
Blast Hole Stemming Optimization	Anticipated Capital Cost	Low
	Anticipated Operation Cost	Medium
	Overall Return on Investment	Medium
Blast Plugs & Cones, Mats	Anticipated Capital Cost	Low
	Anticipated Operation Cost	Low
	Overall Return on Investment	High
Fog Cannons	Anticipated Capital Cost	Medium
	Anticipated Operation Cost	Medium
	Overall Return on Investment	Medium
Meteorological conditions consideration in scheduling, real-time monitoring, EPP	Anticipated Capital Cost	Low
	Anticipated Operation Cost	Low
	Overall Return on Investment	High

The technologies and practices identified as technically and economically feasible are carried forward for consideration in the BACT selection presented in Section 5.

4.5 Road Travel

Mobile equipment travelling on roads can generate particulate matter, typically greater than 10 microns in size. The amount of PM emitted per equipment trip depends on the weight of the equipment, vehicle traffic speed, silt level of the surface, and moisture content of the surface. Dust is a hazard to the environment from inhalation or deposition, but can also be a hazard by reducing driver visibility. The road surface type and various practices for dust mitigation were considered in this assessment.

4.5.1 Technologies

4.5.1.1 Road Surface Type

Dust can be generated from mine haul truck tires interacting with gravel surfaced haul roads. Dust can also be tracked across asphalt roads and re-entrained by traffic or by the wind. Road material is a trade-off between equipment function, capital cost, maintenance cost, and life of service. Two options were examined, crushed stone/gravel and asphalt. Crushed stone and gravel have higher silt content than asphalt or earth roads and cost less to apply and reapply as needed, but require frequent maintenance. Asphalt has very little silt, is more expensive to apply, require less maintenance, but can become slick with ice and snow aboveground. Both options can be considered BACT with consideration to Project economics and lifetime.

In the US EPA AP-42 guidance, Chapter 13.2.2 defines particulate emissions from unpaved roads at industrial sites as:

$$E = k\left(\frac{s}{12}\right)^{a}\left(\frac{W}{3}\right)^{b}$$

where E is the size-specific emission rate (lb/vehicle miles travelled, or lb/VMT), k, a, b are model constants dependent on partial size, s is the road silt content (%), and W is the mean vehicle weight (tons). ECCC has adopted this formulation for predicting unpaved roads, but has redefined it to be metric via:

$$E = k\left(\frac{s}{12}\right)^{a}\left(\frac{W}{2.72}\right)^{b}$$

where E is now in units of kg/vehicle kilometers travelled, or kg/VKT, and W is in units of tonnes. The model parameters for total particulate matter are 1.381, 0.7, and 0.45 for k, a, b respectively. A value of 8.3% was used for the silt content from US EPA Chapter 13.2.2, Table 4.2. The mean vehicle weight (W) was 58 tonnes (64 tons). The total suspended particulate emission factor is therefore 4.23 kg/VKT.

For paved roads the US EPA AP-42 guidance, Chapter 13.2.1 defines emissions as:

$$E = k(s_L)^{0.91}(W)^{1.02}$$

where E is the emission rate (g/VKT), k is a particle size model constant, s_L is the road silt loading (g/m^2) and W is the mean vehicle weight (tons).s_L was taken as 8.2 g/m^2 following guidance for quarries (US EPA AP-42 Chapter 13.2.1, Table 4.3, to represent the open pits). For total particulate matter ($k = 3.23$ g/VKT), this results in an emission factor of 1.52 kg/VKT.

Based on the emission factors alone, paving the roads would result in emissions that are 36% of the unpaved equivalent (an effective control efficiency of 64%). However, this does not account for suppression via watering or chemical suppression. For unpaved roads, the use of water as a dust suppressant has a typical control efficiency of 70% (US EPA, Chapter 13.2.2). Therefore, only 30% of the emissions make it into the air for unpaved roads when water is routinely applied, or a corresponding emission factor of 1.27 kg/VKT. With chemical suppressants, this can be brought to a control efficiency of 80% (or more based on some studies), or 1.085 kg/KVT (assuming 80% control). Paved roads can be further controlled via sweeping and water flushing (90% control), or with vacuum sweeping and water flushing (95% control) (UDEQ 2015).

Therefore, unpaved roads plus the use of a water suppressant may be more economical when compared to the cost of paving the road alone, for similar gains in dust control. The application of chemical dust suppression on unpaved roads, may be more effective when compared to paving the roads or using water alone and would result in less applications required (as discussed further in Section 4.4.2.1). Additional dust control on paved roads could be achieved through active management practices, such as sweeping, water flushing, or vacuum sweeping; however, these practices would still represent ongoing operational requirements in addition to the initial capital cost of paving.

In summary, the following reductions are estimated, indicating that paving the roads alone would not achieve more dust control than unpaved roads with routine water application:

- Paved roads result in a 64% reduction in dust emissions over unpaved roads with no further dust control applied.
- Water application on unpaved roads results in a 70% reduction in dust emissions over unpaved roads with no dust control applied or a 6% reduction in dust emissions compared to paved roads with no further dust control applied.



4.5.2 Practices

4.5.2.1 Dust suppression

The application of water on unpaved roads is a common practice on industrial sites worldwide. Water trucks that have a sprinkler system installed can evenly spread water across roads as needed to reduce airborne dust while maintaining road safety. Wetting agents or surfactants can be added to the water to reduce the surface tension of the water, which allows for deeper penetration of water into the road surface and less frequent watering (Cypher Environmental 2024). Although the capital and operating costs associated with water application are low, long term water application can weaken the road and require more frequent road maintenance.

Chemical dust suppressants are generally longer lasting than water. Instead of daily application, some chemical dust suppressants can be reapplied every few months, which reduces a mine's fuel and water use. Modern chemical dust suppressants must be non-toxic to the environment, as run-off from the site may influence water quality. These typically form a crust on the road surface that stabilizes the road surface and repels water (Cypher Environmental 2024). Chemical dust suppressants are more expensive than using water but are still typically economical for an ongoing mine operation. The mining industry has used various chemical suppressants, such as lignosulphonates products, salts, petroleum products, polymer emulsion products, and foaming agents to control fugitive dust on haul roads (University of Alberta 2017).

The rate of water or suppressant application varies with the site and surface material, as well as the suppressant itself, and is determined by weather conditions such as rainfall, relative humidity, temperature, evaporation rate and wind speed. The University of Alberta (2017) lab-based study, conducted by their Mining Optimization Laboratory, entitled "Comparison of Chemical Suppressants Under Different Atmospheric Temperatures for The Control of Fugitive Dust Emission on Mine Haul Roads" provides some useful comparisons for four common types of suppressants used in mining. The four types of suppressants reviewed included water and selected chemical surfactants— salt, chloride free agents, polymers, and molasses. The conclusions of this study indicate that:

- There is an optimum volumetric concentration level of chemical surfactant in a solution. This optimum concentration plays an important role in the effectiveness of a chemical dust suppressant. An increase above the optimum concentration level will have little or no impact on a chemical dust suppressant's efficiency.
- Water performs differently depending on the environmental temperatures. In experiments with cold temperatures, at the initial application of water on the soil sample after 30 minutes, a dust retention efficiency of 99.81% was achieved, which gradually increased to 99.92% after 72 hours of exposure. Under hot and normal temperatures, a dust retention efficiency of 98.38% and 99.40%, respectively, was achieved after 30 minutes of application on the soil sample but the efficiency diminished over time to 48.67% and 54.57%, respectively, after 72 hours. This problem of diminished efficiency in dust retention under the hot and normal temperatures means that water has to be frequently reapplied to the soil in warmer weather to prevent fugitive dust emissions.



- The salt solution as a dust suppressant worked effectively in controlling the emissions of dust from the soil samples. After 30 minutes of applying the salt solution suppressant to the soil samples in both hot and normal temperatures, dust retention efficiencies of 99.45% and 99.80%, respectively, were achieved. These efficiencies decreased with time to 88.85% and 87.21% after 72 hours of exposure to hot and normal temperatures, respectively. In cold temperatures, a dust retention efficiency of 99.81% was achieved during the initial 30 minutes of application to the soil sample, but efficiency gradually increased to 99.93% after 72 hours of exposure. Salt combined with water proved to be more effective at dust retention than water alone.
- After 30 minutes of exposure to hot, normal, and cold temperatures, the dust retention efficiencies of the chloride-free solution were 99.30%, 99.70%, and 99.93%, respectively. The effectiveness of the chloride-free solution decreased with time to 90.15%, 93.20%, and 99.93%, respectively, after 72 hours of exposure to different temperatures. This outcome shows that the chloride-free solution has a better capacity than the water-and-salt solution to control the emission of fugitive dust into the atmosphere.
- After 30 minutes of exposure to hot, normal and cold temperatures, the polymer solution demonstrated dust retention efficiencies of 99.83%, 99.87%, and 99.88%, respectively. After 72 hours, there was a reduction in the efficiencies to 99.78%, 99.89%, and 99.94%, respectively. This stable performance showed that the polymer solution is an effective dust suppressant. Unlike water and the salt and chloride-free solutions, the polymer solution's retention efficiency is not affected by temperature.
- The molasses solution showed dust retention efficiencies of 99.93%, 99.97%, and 99.98% after 30 minutes of exposure to hot, normal and cold temperatures. After 72 hours of exposure, there were efficiencies of 99.98%, 99.99%, and 99.99%, respectively, showing that the molasses solution is an effective dust suppression agent compared to the other tested agents. As with the polymer solution, the molasses solution's retention efficiency is not affected by atmosphere temperature.
- A crusty, slippery surface formed on the soil sample under the cold temperature when water, the chloride-free solution, and the polymer solution were applied as dust suppression agents. No crusty, slippery surface formed when the salt and molasses solutions were used at a cold temperature (University of Alberta 2017).

The actual achieved control efficiency of water or suppressant application depends on the traffic volume, application rates, wind direction and other weather conditions. In addition, the equipment such as water trucks and sprinkler systems must be properly maintained to be effective.

Use of dust suppressants for Project haul roads is technically and economically feasible. As road dust is the largest contributor to air contaminant emissions for the Project, more study will be done during the detailed engineering design on specific dust suppression treatments that will be used for the Project, to optimize operational costs and dust management effectiveness in consideration of available products, required application rates and site specific influences such as local climate, silt content, detailed haul road design, vehicle sizes and numbers.



4.5.2.2 General Practices

Setting speed limits on Project roads helps to reduce dust generation, as well as encourages safe driving behaviour. When very windy days occur, reducing movements on unpaved roads can reduce the amount of dust that is suspended and blown offsite. Shrubs or taller vegetation around the Project boundary can act as wind breaks to reduce the transport of dust off-site.

The real-time continuous monitoring and EPP dust control procedures discussed in Section 4.2 will also detect higher dust levels from road travel if they occur and could identify the need for additional mitigation.

These practices are technically and economically feasible for the Project.

4.5.3 Summary of Technical Feasibility

A summary of the technical feasibility of each road travel technology and dust suppression practices are provided in Table 4.7.

Table 4.7 Technical Feasibility Evaluation – Road Travel

Aspect	Criteria	Result
Road surface type, crushed stone (unpaved road)	Maturity	Mature
	Adoption	Widespread
	Geographic Limitations	None
	Availability of Equipment or Fuel	Widespread
	Air Contaminant Emissions Reduction Potential	None (business as usual)
Road surface type, asphalt (no additional control)	Maturity	Mature
	Adoption	Widespread
	Geographic Limitations	None
	Availability of Equipment or Fuel	Widespread
	Air Contaminant Emissions Reduction Potential	Medium
Road surface type, asphalt (with sweeping and watering)	Maturity	Mature
	Adoption	Limited
	Geographic Limitations	Yes - Freezing during winter
	Availability of Equipment or Fuel	Widespread
	Air Contaminant Emissions Reduction Potential	High

Table 4.7 Technical Feasibility Evaluation – Road Travel

Aspect	Criteria	Result
Dust suppression (water) on Unpaved Road	Maturity	Mature
	Adoption	Widespread
	Geographic Limitations	None
	Availability of Equipment or Fuel	Widespread
	Air Contaminant Emissions Reduction Potential	Medium
Dust suppression (chemical) on Unpaved Road	Maturity	Mature
	Adoption	Widespread
	Geographic Limitations	None
	Availability of Equipment or Fuel	Widespread
	Air Contaminant Emissions Reduction Potential	High
Operational Practices (speed limits, reduced movements, natural and engineered wind breaks)	Maturity	Mature
	Adoption	Widespread
	Geographic Limitations	None
	Availability of Equipment or Fuel	Widespread
	Air Contaminant Emissions Reduction Potential	Medium
Real-time Monitoring, EPP	Maturity	Mature
	Adoption	Widespread
	Geographic Limitations	None
	Availability of Equipment or Fuel	Widespread
	Air Contaminant Emissions Reduction Potential	High

4.5.4 Summary of Economic Feasibility

A summary of the economic feasibility of two technologies and two dust suppression practices is provided in Table 4.8.

Table 4.8 Economic Feasibility Evaluation – Road Travel Equipment

Aspect	Criteria	Result
Road surface type, crushed stone	Anticipated Capital Cost	Medium
	Anticipated Operation Cost	Medium
	Overall Return on Investment	Medium

Table 4.8 Economic Feasibility Evaluation – Road Travel Equipment

Aspect	Criteria	Result
Road surface type, asphalt	Anticipated Capital Cost	High
	Anticipated Operation Cost	Low
	Overall Return on Investment	Low
Dust suppression (water) on unpaved road	Anticipated Capital Cost	Low
	Anticipated Operation Cost	Low
	Overall Return on Investment	Medium
Dust suppression (chemical) on unpaved road	Anticipated Capital Cost	Low
	Anticipated Operation Cost	Low-Medium
	Overall Return on Investment	Medium
General Practices	Anticipated Capital Cost	Low
	Anticipated Operation Cost	Low
	Overall Return on Investment	Medium
Real-time Monitoring	Anticipated Capital Cost	Medium
	Anticipated Operation Cost	Medium
	Overall Return on Investment	Medium

The technologies and practices identified as technically and economically feasible are carried forward for consideration in the BACT selection presented in Section 5.

4.6 Stockpiles, Crushing, Conveying and Transfer Points

Stockpiles, crushing and screening equipment, conveyors, and material transfer points are potential sources of fugitive particulate matter emissions. Emissions from these sources can result from the handling and transfer of material, including the loading and reclaiming of stockpiles, crushing and screening, and the transfer of material between conveyors and processing equipment. Wind erosion can also generate emissions from exposed stockpile surfaces.

Factors that affect the rate of dust generation of material transfers include the dropping height, silt content, moisture content, material throughput, and wind speed. For stockpiles, the size and configuration of the pile, exposed surface area, silt content, and moisture content influence wind erosion emissions.

In general, preventing dust generation is more effective than dust control. Emissions estimates indicate that, among stockpile related emissions have, the largest emissions occur from transferring materials to stockpiles or at conveyer transfer points, with lesser emissions from wind erosion and crushing and screening.

The technologies and practices that could be used to mitigate dust from stockpiles and the crushing circuit are described in the following paragraphs.



4.6.1 Technologies

4.6.1.1 Stockpiles

The key dust mitigation technology is to enclose stockpiles in a building or partially enclose with wind break walls. This reduces the flow of wind that can lift dust into the air and prevent dust from being generated. Dust that is generated during material movement onto and out of the stockpile enters the air of the building instead of entering the atmosphere directly. Because air will flow into and out of an enclosure during normal operation, the dusty air exiting the building can be directed through a system to remove dust. Various options exist, ranging from filters such as bin vent dust collectors and baghouses, cyclones that spin out dust, and wet scrubbers that capture dust in water. The selection of the system depends on dust loading, material type, and air flowrate. Such systems are in place worldwide for various sectors and applications.

A building and dust control system for the stockpiles is considered technically feasible for the Project. A building sized to cover the stockpiles and have additional space for equipment to deposit and reclaim material would be a major capital cost for the Project, such that this technology is not considered economically feasible.

Fog cannons (also called mist cannons) project a fine mist cloud over a targeted area using a turbine-driven fan. They are effective for stockpiles, transfer points, and open areas where traditional spray bars can't reach. A single unit can cover a radius of 50 to 150 meters depending on the model. They suppress wind-driven dust from stockpiles because the mist cloud travels with the wind direction. Negatives include power consumption and they are less effective in high crosswinds that scatter the mist before it contacts dust particles.

4.6.1.2 Crushing and Screening, Material Transfers

Different crushing and grinding technologies exist and the technology selection depends on the type of material, the starting size, and the final size. Primary crushers are typically jaw crushers, but may sometimes include gyratory and/or cone crushers. These crushers use compressive forces to break the ore and do not normally generate large volumes of dust. Secondary crushers may include the gyratory and cone, as well as hammermill and impact crushers. Hammermill and impact crushers use a rotating device (hammers) to thrust the ore against the outer walls of the crusher with the intent to break the ore by impaction against the outer surface. Because the ore is impacted at high velocities to induce breakage, high dust generation and liberation rates can occur from these types of crushers. After ore is fed into the crusher, it remains in the unit and continues to be crushed until it reaches a size small enough to be discharged from the unit. The two primary dust emission points of crushing and grinding units are at the feed and discharge points. This dust can be controlled by design of chutes or transfer points with rubber seals between stationary and moving components, as well as enclosing this area.

Review of crushing technologies is ongoing with the final decision not yet made. A key focus of the technology review is dust control.



Screening operations can produce high levels of dust because smaller sized material is handled. Airborne dust is generated from the vibrating screen decks that accomplish the size separation. Additionally, material must fall some distance as part of the separation process, and some dust will be suspended by this process. Dust control for screening systems is similar to that for crushers, although wet systems are generally not used due to blocking of the screen openings by the wet material. Screens can be enclosed, and water suppression systems (when compatible with the process) or dust collection and exhaust systems may be incorporated.

Technologies and design considerations for material transport to manage dust emissions include the following:

- Continuous, enclosed transport, such as covered conveyors should be used where feasible.
- Conveyors should be designed to limit material overflow or spillage and where feasible should be enclosed or housed especially for fine material.
- Optimize the conveyor speed with the use of an adjustable speed conveyor.
- Use water sprays or sprinklers at conveyor transfer points.
- Reduce drop heights at transfer points, including use of conveyors that can be raised and lowered.
- Where feasible, use sprinklers or water sprays around hoppers and other transfer points.
- Design hopper load systems to be compatible with truck size.

4.6.2 Practices

The real-time continuous monitoring discussed in Section 4.2 will detect higher dust levels from these sources if they occur and could identify the need for additional mitigation. The EPP will include the noted practices below.

4.6.2.1 Stockpiles

Practices that reduce dust generation at the source, regardless of whether the stockpile is enclosed or not, include:

- Reducing drop heights from the equipment bucket to the stockpile surface
- Applying water or a chemical dust suppression to the stockpile as needed

Uncovered stockpiles that are subject to precipitation and wind may generate dust depending on the weather conditions, the material type, and the silt content. Precipitation reduces dust generation by forming a protective layer over the material, whereas wind erodes the material surface and liberates dust. Snow cover of sufficient depth can prevent dust generation, but frequent disturbance of the stockpile may make snow cover ineffective. Progressive rehabilitation and revegetation of inactive stockpiles will also reduce dust generation by stabilizing exposed surfaces and reducing wind erosion.



The practices described in this section are technically feasible for the stockpiles included in the Project. Some practices may not be economically feasible, depending on the stockpile size, and are evaluated in Section 4.5.4.

4.6.2.2 Crushing and Screening, Material Transfers

Dust control for the crushing and grinding processes can be achieved by wet suppression. Spraying the ore with water sprays to coat the outer surface helps to prevent dust from becoming liberated. Applying the water to the ore before it enters the crushing or grinding unit is most effective.

Another important practice for dust control on crushing and grinding processes is maintaining a proper seal on the device. A preventative maintenance program can help with identifying seals that need to be replaced. Water suppression and preventative maintenance planning are technically feasible for the Project.

Other practices that can reduce dust emissions include the following:

- Where feasible, activities that take place at an existing storage pile (i.e., loading and unloading) should be confined to the downwind side of the storage pile.
- Perform regular clean-up of spillages around transfer points.
- When handling/loading/dumping material using a front-end loader, excavator, or dump truck consider dumping material in a sheltered location when feasible, limit the speed of descent; and reduce the material free fall (drop height).
- Where feasible, the loading and unloading activities should be conducted when the wind speed is low to reduce fugitive dust emissions. In very high wind conditions, these activities should be suspended where practical.

4.6.3 Summary of Technical Feasibility

A summary of the technical feasibility of each stockpile technology is provided in Table 4.9.

Table 4.9 Technical Feasibility Evaluation – Stockpiles and Crushing Circuit

Aspect	Criteria	Result
Enclosed stockpiles	Maturity	Mature
	Adoption	Limited
	Geographic Limitations	None
	Availability of Equipment or Fuel	Widespread
	Air Contaminant Emissions Reduction Potential	High

Table 4.9 Technical Feasibility Evaluation – Stockpiles and Crushing Circuit

Aspect	Criteria	Result
Dust collectors in enclosures/for Crushing and Screening	Maturity	Mature
	Adoption	Widespread
	Geographic Limitations	None
	Availability of Equipment or Fuel	Widespread
	Air Contaminant Emissions Reduction Potential	High
Design of Drop Heights and Transfer Point Seals	Maturity	Mature
	Adoption	Widespread
	Geographic Limitations	None
	Availability of Equipment or Fuel	Widespread
	Air Contaminant Emissions Reduction Potential	High
Wet suppression (including potentially fog cannons), Preventative Maintenance	Maturity	Mature
	Adoption	Widespread
	Geographic Limitations	None
	Availability of Equipment or Fuel	Widespread
	Air Contaminant Emissions Reduction Potential	High

4.6.4 Summary of Economic Feasibility

A summary of the economic feasibility of each technology judged to be technically feasible is provided in Table 4.10.

Table 4.10 Economic Feasibility Evaluation – Stockpiles and Crushing Circuit

Aspect	Criteria	Result
Enclosed stockpiles	Anticipated Capital Cost	High
	Anticipated Operation Cost	Low
	Overall Return on Investment	Low
Dust collectors and enclosures/for Crushing and Screening	Anticipated Capital Cost	Medium
	Anticipated Operation Cost	Medium
	Overall Return on Investment	Medium
Design of Drop Heights and Transfer Point Seals	Anticipated Capital Cost	Medium
	Anticipated Operation Cost	Low
	Overall Return on Investment	Medium
Wet suppression, Preventative Maintenance, Real-time monitoring, EPP	Anticipated Capital Cost	Medium
	Anticipated Operation Cost	Medium
	Overall Return on Investment	Low

The technologies and practices identified as technically and economically feasible are carried forward for consideration in the BACT selection presented in Section 6.

4.7 Stationary Equipment

The main stationary equipment at the mine will be to power the crushing, screening, and sorting. The Project will use a 6 megawatt (MW) diesel generator as a potential power solution in advance of connecting to the power grid. Although it may not be in operation for the full mine life, it was included in this assessment to potentially overstate the emissions during operation for a conservative assessment.

The equipment requires a high amount of energy. Crushers can be used with diesel (or biodiesel or renewable diesel) directly or can use electric motors. Screens tend to be run with electric motors and x-ray transmission sorting equipment uses electricity. These will temporarily be powered by the 6 MW diesel generator, prior to having access to the power grid.

Smaller stationary equipment could include light plants, dewatering pumps, and temporary generators. This equipment typically uses diesel and the information reviewed for diesel and biodiesel in mobile equipment is relevant for this stationary equipment. Renewable diesel was not carried forward for stationary equipment because it was deemed to be not economically feasible.

4.7.1 Diesel and Biodiesel

Diesel and biodiesel are available options for providing energy. With respect to capital costs and operating costs, diesel powered equipment tend to have lower capital costs but higher operating costs than electric-driven equipment. The cost of diesel and ongoing maintenance can be significant for small mines. Diesel powered crushing equipment are technically feasible and have a neutral economic feasibility. Because biodiesel is chemically different from conventional diesel, a blended fuel such as B20 (20% biodisesel and 80% petroleum diesel by volume) will produce somewhat different emissions than conventional diesel. For example, studies have shown that tailpipe emissions of particulate matter, carbon monoxide, hydrocarbons and polycyclic aromatic hydrocarbons are generally lower for biodiesel than regular diesel. Studies of emissions tests, however, also report varying and inconsistent effects on other pollutants. In 2012 Health Canada completed a full study of these health risks and benefits--compared to those associated with conventional diesel fuel. The results from the Human Health Risk Assessment for Biodiesel Production, Distribution and Use in Canada indicate that, based on currently available evidence, the potential incremental health risks or benefits of the production, distribution and use of biodiesel fuel blends in Canada are expected to be minimal compared to conventional diesel use. (Government of Canada 2017).

In terms of technologies to reduce emissions from diesel combustion in stationary devices, SO_2 is managed by the federal limits on sulphur in fuel (<15 ppm sulphur permitted under Canada's *Sulphur in Diesel Fuel Regulations*). Other emissions controls for SO_2 on diesel engines are not typically needed. US EPA Emission Tiers apply to stationary diesel engines in Canada and provide reductions over historical NO_X, particulate matter and CO emissions from uncontrolled diesel engines. Tier 4 engines introduced after 2008, focused on substantial NOx and PM reductions (up to 90%) using Selective



Catalytic Reduction (SCR) for NO_X control, Diesel Particulate Filters (DPF) for particulate control. While more costly, Tier 4 engines are more fuel efficient, providing operational savings. Tier 4 engines are generally required in Canada, other than for emergency use.

4.7.2 Grid Electricity

Two existing transmission lines run through the Project site and will be rerouted during construction. Because of this, making a connection to the electrical grid with the installation of a substation is technically feasible. The capital cost of a substation and the operating cost of electricity are considered economically feasible for the Project. The completion of the substation installation and provision of electricity from NL Hydro is expected to occur by Year 2 of operation. The use of grid electricity instead of on-site diesel combustion has the benefit of not producing air contaminants directly at the site. Indirect emissions will occur at the source of electricity generation but because the NL electrical grid has a low emissions intensity due to high amounts of hydroelectricity, fewer air contaminants emissions are generated by using the electrical grid instead of on-site diesel combustion, for the same amount of electricity use.

4.7.3 Practices

Correct sizing and load factor is important for optimizing emissions. A generator running at a quarter load burns markedly more fuel per kilowatt hour delivered than the same unit near full load, and produces more particulates through incomplete combustion. Sizing the required generator to the load is essential to avoid additional emissions.

Disciplined preventative maintenance will also help to manage air contaminant emissions. Worn injectors, fouled turbochargers and degraded air filtration raise both consumption and emissions measurably.

4.7.4 Summary of Technical Feasibility

A summary of the technical feasibility of each stationary equipment technology is provided in Table 4.11.

Table 4.11 Technical Feasibility Evaluation – Stationary Equipment

Aspect	Criteria	Result
Diesel and Biodiesel	Maturity	Mature
	Adoption	Widespread
	Geographic Limitations	Biodiesel is climate-specific
	Availability of Equipment or Fuel	Widespread
	Air Contaminant Emissions Reduction Potential	Low (business as usual)

Table 4.11 Technical Feasibility Evaluation – Stationary Equipment

Aspect	Criteria	Result
Grid Electricity	Maturity	Mature
	Adoption	Widespread
	Geographic Limitations	None
	Availability of Equipment or Fuel	Widespread
	Air Contaminant Emissions Reduction Potential	High

4.7.5 Summary of Economic Feasibility

A summary of the economic feasibility of each stationary technology judged to be technically feasible is provided in Table 4.12.

Table 4.12 Economic Feasibility Evaluation – Stationary Equipment

Aspect	Criteria	Result
Diesel and Biodiesel	Anticipated Capital Cost	Medium
	Anticipated Operation Cost	Medium
	Overall Return on Investment	Medium
On-site Diesel Generation	Anticipated Capital Cost	High
	Anticipated Operation Cost	Medium
	Overall Return on Investment	Low
Grid Electricity	Anticipated Capital Cost	Low
	Anticipated Operation Cost	Medium
	Overall Return on Investment	Medium

The technologies and practices identified as technically and economically feasible are carried forward for consideration in the BACT selection presented in Section 5.

5 BACT Selection

The preliminary BACT for each Project component was selected following the results of the technical and economic feasibility assessments in the previous sections. The selected BACT for each Project component are identified in Table 5.1. These selections will be further reviewed during detailed design and refined to meet the objectives of keeping air contaminant emissions as low as reasonably achievable in consideration of technical and economic feasibility.

Table 5.1 BACT Selection

Project Component	Technologies	Practices	Notes
Mobile Equipment	• Tier 4 engine Diesel, biodiesel, renewable diesel	• Anti-idling policy • Routine/preventative maintenance program • Real-time ambient dust monitoring with action levels and response process	• Biodiesel must be blended with diesel at a rate appropriate to the equipment manufacturer's specification. Use is limited in colder months.
Blasting	• Stemming optimization • Plugs and cones • Blast Mats	• Timing to avoid high winds/wind prevailing toward Appleton (where feasible) • Real-time ambient dust monitoring with action levels and response process	• None
Road Travel	• Unpaved roads with dust suppression (water and chemical based)	• Appropriate speed limits, reduced movements during dry, windy periods if needed, natural and engineered wind breaks • Real-time ambient dust monitoring with action levels and response process	• Roads could be paved to reduce the amount of dust suppression needed however based on currently available data unpaved roads with ongoing dust suppression should be able to achieve a similar control efficiency at lower cost. To be further evaluated during detailed design to confirm relative costs of dust suppression application versus paving and reduced dust suppression.
Stockpiles, Crushing, Conveying, Material Transfers	• Open stockpiles with fog cannons, water application during dry periods • Crushing and screening with dust filter and sealed drop points, water addition if technically feasible	• Strategic material placement as wind blocks where feasible • Low drop heights for transfers • Preventative maintenance program • Real-time ambient dust monitoring with action levels and response process	• Final design of crushing and screening to focus on lowest achievable dust emissions (technically and economically achievable)

Table 5.1 BACT Selection

Project Component	Technologies	Practices	Notes
Stationary Equipment	• Grid electricity (for main power requirements) • Diesel engines with Tier 4 certification (where available) for smaller combustion devices	• Preventative maintenance program • Monitor fuel and energy use (for diesel)	• Availability of electricity is subject to substation construction timing and provision of electricity by NL Hydro so diesel/biodiesel stationary combustion devices with low NO_X burners may need to be used as an interim BACT.

The sourcing of diesel versus biodiesel will depend on Project economics and diesel costs at the time.

Final design of crushing and screening circuit has not yet been completed and will focus on implementing economical and technically feasible dust controls as described herein. Further review of commercially available chemical dust suppressants will also be completed during detailed design to support the selection of the best option for the site in consideration of dust control efficiencies, potential water savings, cost and other environmental aspects.

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Appendix E Open House Information

NEWFOUNDGOLD

PUBLIC NOTICE ADVERTISEMENT

PUBLIC INFORMATION SESSION ON THE PROPOSED
QUEENSWAY GOLD PROJECT, NEWFOUNDLAND AND LABRADOR
SHALL BE HELD:

October 7, 2026 from 6:30-8:00 PM
Appleton Town Hall
62 Bowater Drive, Appleton, NL

This session shall be conducted by the Proponent, New Found Gold (709-722-2984), as part of the environmental assessment for this Project.

The purpose of this session is to describe all aspects of the proposed Project, to describe the activities associated with it, and to provide an opportunity for all interested persons to request information or state their concerns.

ALL ARE WELCOME

SUBMIT QUESTIONS FOR DISCUSSION

Do you have questions about the Queensway Gold Project? Scan the QR code to submit your question ahead of the Public Information Session, and the New Found Gold team will provide detailed responses during the meeting.

Any information collected is for internal use only. All questions will be addressed anonymously.

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NEWFOUNDGOLD

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Appendix F Table of Commitments

Activity/VC	Commitment Description	Type*	Source**
Site Clearing, Site Preparation, and Erosion and Sediment Control	Vegetation clearing will be scheduled outside the critical bird nesting period and bat roosting period where feasible.	Mitigation	Environmental Registration
	Clearing and grubbing will be limited to the necessary footprint and comply with applicable permits.	Mitigation	Environmental Registration
	Buffer zones of undisturbed vegetation (minimum 15 m) will be established and maintained between work areas and water bodies, and identified sensitive areas (e.g., wetlands, rare plant occurrences, roosts, dens), where practicable. These buffer zones will be designated as no-activity areas, and the limits of approved disturbance activities (including clearing, grubbing, and topsoil and overburden removal) will be clearly marked in the field (e.g., flagging or survey stakes) prior to the commencement of work.	Mitigation	Environmental Registration
	Timber will be felled inward toward the work area to avoid damaging standing trees within the immediate work area.	Mitigation	Environmental Registration
	Cleared vegetation will be mulched and spread, and merchantable timber will be donated to local communities for firewood.	Mitigation	Environmental Registration
	Measures will be implemented to reduce and control sediment-laden runoff, including leaving stumps and roots in place to maintain soil cohesion and promote natural revegetation.	Mitigation	Environmental Registration
	Grubbed areas will be left exposed for the shortest time practicable to limit erosion.	Mitigation	Environmental Registration
	Working areas and laydown areas will be covered with blasted rock to reduce dust.	Mitigation	Environmental Registration
	Grading, if required, will be directed away from wetlands, where possible, and grading will be reduced within wetland boundaries unless required for site-specific purposes.	Mitigation	Environmental Registration
	Erodible areas (including excavated materials) will be stabilized, regularly inspected and maintained until they are permanently stabilized.	Mitigation	Environmental Registration
	Drainage ditches will be stabilized using vegetation, rock armouring, or other suitable erosion control methods.	Mitigation	Environmental Registration
	Sediment control measures (e.g., silt fences, mulching, straw wattles or fibre rolls, revegetation) will be implemented if needed to reduce soil loss from exposed areas and stabilize surfaces.	Mitigation	Environmental Registration
	Erosion control structures will be monitored and maintained to prevent sediment buildup and to confirm they are functioning properly.	Mitigation	Environmental Registration

Activity/VC	Commitment Description	Type*	Source**
Soil Management	Cleared materials, including organics, topsoil, overburden, and bedrock, will be segregated and stored in low, stable piles for use in rehabilitation.	Mitigation	Environmental Registration
	Stockpiles of topsoil, overburden, and other potentially dust-generating materials will be managed to reduce dust generation, including through revegetation where feasible. Where applicable, stockpiled material will be used or removed as soon as practical.	Mitigation	Environmental Registration
	Unsuitable material will be disposed of in approved areas.	Mitigation	Environmental Registration
	An undisturbed buffer zone of at least 300 m will be maintained around Gander Lake and at least 100 m along both sides of streams and main tributaries (including scheduled salmon rivers) running into Gander Lake.	Mitigation	Environmental Registration
	A buffer zone of at least 100 m will be maintained for Gander River and main tributaries.	Mitigation	Environmental Registration
	Project infrastructure will be sited to avoid fish habitat to the extent practicable. Where the harmful alteration, disruption, or destruction of fish habitat cannot be avoided, the habitat will be offset, as required by the *Fisheries Act*.	Mitigation	Environmental Registration
	No work will be conducted below the high-water mark without prior assessment and applicable permits.	Mitigation	Environmental Registration
	In-stream work will be avoided when sensitive fish life stages are present (Sept 30 to May 31), unless authorized.	Mitigation	Environmental Registration
	Culverts on fish-bearing streams will be installed using best practices to protect fish habitat and stabilize stream banks, including countersinking, alignment with natural stream flow, being sized appropriately, and being designed to facilitate passage.	Mitigation	Environmental Registration
	When fording watercourses, the NL Department of Environment, Conservation and Climate Change (NLDECCC) Environmental Guidelines will be adhered to.	Mitigation	Environmental Registration
	Water intakes will have appropriately sized screens to prevent harm to fish.	Mitigation	Environmental Registration
	Best efforts will be made by a qualified environmental professional to relocate fish from areas of in-water works (e.g., South Herman's Pond) to an appropriate location in the same watershed, as required.	Mitigation	Environmental Registration
	Work will be scheduled to heed weather advisories to avoid periods that may result in high flow volumes and increase the potential for erosion and sedimentation.	Mitigation	Environmental Registration
	When working in-water, machinery will be operated on land in dry stable areas, as practically feasible.	Mitigation	Environmental Registration
	When working in-water, excavated material will be placed above the high-water mark or top of bank of nearby waterbodies to prevent re-entry of sediments.	Mitigation	Environmental Registration

Activity/VC	Commitment Description	Type*	Source**
Soil Management cont'd	Exposed non-biodegradable erosion and sediment control materials will be removed once the work area is stabilized.	Mitigation	Environmental Registration
	Areas to be de-watered will be done so gradually to prevent sediment resuspension and bank destabilization.	Mitigation	Environmental Registration
	Water being pumped or diverted from areas of in-water works will meet applicable guidelines before being discharged to the receiving environment.	Mitigation	Environmental Registration
	Emergency spill kits will be readily available when working within 15 m of watercourses and waterbodies.	Mitigation	Environmental Registration
Site Water Management	Cofferdams may be installed to isolate in-water work areas and maintain dry conditions, including controlling flow toward excavations and pits.	Mitigation	Environmental Registration
	Trenches or drains will be installed to gravity-drain low areas of ponds or excavation areas toward sump pits, which will be constructed at the pond bottom and dewatered using pumps for appropriate discharge.	Mitigation	Environmental Registration
	Dewatering, trench water, and surface water runoff will be routed to vegetated areas, following natural drainage patterns, and treated using filtration systems or turbidity controls (e.g., straw bales, geotextile, settling ponds) such that applicable water quality thresholds are met prior to discharge to the receiving environment, where practicable.	Mitigation	Environmental Registration
	Site drainage systems will be designed to limit impacts on downstream watercourses, wetlands, and associated vegetation, and to allow wildlife crossing opportunities, where feasible.	Mitigation	Environmental Registration
	Water quality monitoring will be conducted to verify implementation and compliance with applicable effluent standards (e.g., provincial *Environmental Control Water and Sewage Regulations, 2003*; federal MDMER).	Mitigation	Environmental Registration
	Monitoring will be conducted at nearby residential wells, if applicable, within 1 km of the Project Area to confirm dewatering activities do not affect residential water supplies.	Mitigation	Environmental Registration
	Initial dewatering activities will be scheduled to avoid sensitive periods for aquatic life, to the extent practically feasible, and a fish rescue program will be completed prior to dewatering.	Mitigation	EPR, Section 4.2.1.2
	Inspections of the water management infrastructure will include visual inspections of facility infrastructure including identification of potentially unstable areas, identification of changes in drainage patterns, and surface water flow, inspections of instruments and equipment to verify they are working properly.	Mitigation	EPR, Section 4.3.4
	Performance of the water management infrastructure will be measured by confirming compliance with regulatory requirements, monitoring the predictions of effects of the Project on water quality, identifying changes in drainage patterns and surface flow, and determining if additional mitigation or emergency response measures are required.	Mitigation	EPR, Section 4.3.4

Activity/VC	Commitment Description	Type*	Source**
Site Water Management cont'd	The Project will apply source control and contact-water management through construction, operation, rehabilitation, and closure.	Mitigation	EPR, Section 5.3.6
	Interceptor wells and deep sumps will be constructed around the perimeter of the waste rock and ore stockpiles as required to collect groundwater seepage that exceeds MDMER limits for arsenic and convey it to water management ponds and eventual treatment in the water treatment plant.	Mitigation	EPR, Section 5.3.6
Blasting	Use of explosives in or near water will be avoided; however, if required, will follow applicable permit requirements.	Mitigation	Environmental Registration
	Blasting activities will follow best practices outlined in the Blasters Handbook and the Environmental Code of Practice for Metal Mines.	Mitigation	Environmental Registration
	Blasting activities will be scheduled between 9:00 a.m. and 5:00 p.m. Blasting on days of cultural importance will be avoided and identified in consultation with Indigenous groups.	Engagement / Mitigation	Environmental Registration
	The Blast Management Plan will guide safe and controlled blasting practices and address associated risks including flyrock and infrastructure damage.	Plan	Environmental Registration
	Fugitive dust emissions will be controlled by adjusting the crushing rate and the blast size.	Mitigation	Environmental Registration
	Emulsion will be the primary explosive agent, and the sequencing of the blasts will be designed to reduce vibration and noise.	Mitigation	EPR, Section 5.6.3
Vehicles / Equipment / Roads	Planning efficient waste rock and ore haulage will be implemented to reduce amount of fuel consumed.	Plan	Environmental Registration
	Practices to reduce idling of mining vehicles and equipment will be implemented, where practicable.	Mitigation	Environmental Registration
	Use of biodiesel or renewable diesel (up to manufacturer-recommended blend) will be considered where commercially available to reduce combustion-related GHG emissions.	Mitigation	Environmental Registration
	Fuel use will be tracked to identify inefficiencies and support adaptive management of equipment performance.	Mitigation	Environmental Registration
	Vehicles and equipment (including generators) will be equipped with proper exhaust systems and include regular inspections, servicing, and maintenance to reduce emissions.	Mitigation	Environmental Registration
	Mufflers will be checked to maintain proper functioning.	Mitigation	Environmental Registration
	Equipment maintenance and fueling will be conducted in designated areas.	Mitigation	Environmental Registration
	Drip pans and inspections will be used to prevent leaks.	Mitigation	Environmental Registration

Activity/VC	Commitment Description	Type*	Source**
Vehicles / Equipment / Roads Cont'd	Dust generated by truck movement along the site roads will be reduced by speed control, proper truck loading, application of water to suppress, and proper road maintenance.	Mitigation	Environmental Registration
	Water or an environmentally acceptable alternative will be used to reduce dust generation on unpaved roads.	Mitigation	Environmental Registration
	Waste oil will not be used for dust control. Other agents such as calcium chloride may be used with regulatory approval.	Mitigation	Environmental Registration
	Vehicle use will be restricted to designated routes to reduce emissions and disturbance. Vehicles and equipment will be operated within previously cleared or disturbed areas, wherever feasible.	Mitigation	Environmental Registration
	Prioritization will be given to purchasing off-road equipment that meets the most stringent available emission standards, including the latest applicable tier of the Off-Road Compression-Ignition Engine Emission Regulations.	Mitigation	Environmental Registration
	Sensitive areas will not be entered by motorized vehicles without prior approval from the Mine Manager and/or the Environment Department.	Mitigation	Environmental Registration
	Bog mats will be used to reduce impacts in wetland areas that may serve as wildlife habitat.	Mitigation	Environmental Registration
	The Traffic Management Plan will encourage carpooling and require Project drivers and employees to observe speed limits and take safety precautions.	Plan	Environmental Registration
	When practicable, shift changes and truck movements will be scheduled to avoid peak traffic hours and school bus pick-up and drop-off times.	Plan	Environmental Registration
	Water management infrastructure associated with road construction will include cross drainage culverts, drainage ditches, and erosion control features.	Mitigation	EPR, Section 4.1.4.1.2
	Oversized loads will be scheduled in coordination with NL Department of Transportation and Infrastructure and local authorities to reduce disruption.	Mitigation	EPR, Section 4.2.1.2
	Site roads will be routinely inspected and maintained throughout the life of the Project.	Mitigation	EPR, Section 4.3.6
	Transport requirements will be reviewed during the site preparation and construction phase to identify opportunities to reduce traffic volumes.	Mitigation	EPR, Section 5.6.7
Light Emissions	Project lighting will be optimized and limited to what is necessary for safe and efficient Project activities.	Mitigation	Environmental Registration
	Lighting design guidelines will be followed, such as the Commission Internationale de L'Éclairage, International Dark Sky Association, Illuminating Engineering Society.	Mitigation	Environmental Registration
	Full cut-off luminaires will be used where practicable to reduce glare, light trespass, and sky glow from the Project.	Mitigation	Environmental Registration

Activity/VC	Commitment Description	Type*	Source**
Light Emissions Cont'd	Lighting will be designed to avoid excessive use of mobile flood lighting units and will be turned off when they are not needed.	Mitigation	Environmental Registration
	To the extent practicable, mobile and permanent lighting will be located such that unavoidable light spill off the working area is not directed toward receptors outside of the Project Area.	Mitigation	Environmental Registration
	Automatic sensors or strobe lighting will be used in areas where continuous lighting is not essential.	Mitigation	Environmental Registration
	Light fixtures will be located so that they are not directed toward oncoming traffic on nearby roads on or off site.	Mitigation	Environmental Registration
Materials Handling and Waste Management	The Waste Management Plan will be updated and implemented to include wastes associated with Project components and activities.	Plan	Environmental Registration
	Rock materials with ML/ARD potential will be characterized prior to construction in accordance with the Mine Environment Neutral Drainage Program's *Prediction Manual for Drainage Chemistry from Sulphidic Geologic Materials.*	Mitigation	Environmental Registration
	An ML/ARD Management Plan will be implemented to guide testing, handling, and treatment of PAG materials. Ongoing geochemical testing will inform adaptive management of waste rock and contact water handling.	Plan	Environmental Registration
	Waste rock used for upgrading or constructing Project infrastructure (e.g., roads), or used during site rehabilitation and closure, will consist of non-ML/ARD-generating material.	Mitigation	Environmental Registration
	PAG waste rock and the remaining MMBCG (at the end of the mine life) will be placed in a mined-out pit. The need for waste rock piles to include engineered bases and drainage controls to reduce ML/ARD risk is being evaluated.	Mitigation	Environmental Registration
	Solid waste will be handled according to the NL *Environmental Protection Act*, prioritizing recycling/reuse.	Mitigation	Environmental Registration
	Waste storage areas will include measures to reduce the attraction of wildlife (e.g., secure containers, regular removal).	Mitigation	Environmental Registration
	Hazardous materials will be stored in appropriately labelled containers in designated areas.	Mitigation	Environmental Registration
	Solvents used for parts cleaning will be stored, handled, and disposed of in accordance with hazardous materials management protocols.	Mitigation	Environmental Registration
	Waste oil and filters will be removed from the site for proper disposal and recycling.	Mitigation	Environmental Registration
	Explosives will be handled, transported, stored and used by a licensed contractor employing trained and qualified personnel.	Mitigation	Environmental Registration

Activity/VC	Commitment Description	Type*	Source**
Rehabilitation and Closure	Desired land and resource end-uses will be considered in the preparation of the RCP.	Plan / Engagement	Environmental Registration
	Areas which are temporarily disturbed by the Project and no longer required will be progressively reclaimed, with the objective of returning them to as close as possible to, or better than, baseline conditions.	Mitigation	Environmental Registration
	Areas where natural revegetation may take longer to establish will be seeded to mitigate against erosion and sedimentation development.	Mitigation	Environmental Registration
	Closure rehabilitation will involve complete demolition and removal of site infrastructure, re-vegetation of disturbed areas, removal of contaminated materials if applicable, water management, and reshaping the landscape.	Mitigation	Environmental Registration
Atmospheric Environment	Idling of equipment will be reduced, where practicable to reduce noise and air contaminant emissions.	Mitigation	Environmental Registration
	Speed limits will be implemented on Project roads to limit fugitive dust from vehicle travel on unpaved roads.	Mitigation	Environmental Registration
	Grid electricity, which is primarily generated from hydroelectric power in NL, will be used as the primary source of energy for the facility, reducing air contaminant emissions at the Project site.	Mitigation	Environmental Registration
	Tier 4 engines are considered Best Available Control Technology for air contaminant emissions from diesel engines and will be used for mobile equipment.	Mitigation	Environmental Registration
	Regular inspections, servicing, and maintenance of engines and exhaust systems will be conducted on mobile equipment and vehicles.	Mitigation	Environmental Registration
	Disturbed areas will be revegetated as soon as practicable to limit dust emissions, and already disturbed areas will be used for Project infrastructure where feasible to limit the extent of disturbance.	Mitigation	Environmental Registration
	Implementation of an adaptive management plan for dust, which will involve ongoing assessment of the effectiveness of the dust mitigation measures and determine when and where to enhance levels of dust control to further reduce project impacts on surrounding air quality if needed. The adaptative management plan will include:	Plan	Environmental Registration
	• Real time air quality monitoring	Mitigation	Environmental Registration

Activity/VC	Commitment Description	Type*	Source**
Atmospheric Environment Cont'd	• Water or an approved chemical dust suppressant will be used to stabilize the surface of Project unpaved roads that may generate fugitive dust. The application of dust suppressants other than water to roads as an alternative option to watering will be considered in consultation with NLDECCC. Dust suppression would be applied on an as-needed basis during dry and high wind conditions or if measured ambient particulate matter concentrations are approaching the NL Air Quality Standards. The chosen dust suppressant will be approved by the NLDECCC prior to application. These suppressants, if required, will be applied, as per the manufacturer's recommendations.	Engagement / Mitigation	Environmental Registration
	• In the event that real time monitoring indicates that standard dust suppression measures are insufficient to maintain compliance during dry and windy periods, additional mitigation will be implemented. This may include reductions or temporary suspension of Project activities such as hauling and crushing as needed to maintain compliance with NL Air Quality Standards.	Plan	Environmental Registration
	• Where practicable in accessible areas (e.g., along cleared rights-of-way), trees and other vegetation will be left in place or encouraged to grow to obstruct the view of Project facilities and act as a wind break to reduce the transportation of fugitive dust, reducing the change in viewshed and muffling nuisance noise.	Mitigation	Environmental Registration
	• Enclosures, berms, or other barriers may be considered for activities involving excessive noise emissions. Specifically, a 10 metres (m) high earth berm is proposed to reduce potential effects of sound emissions on nearby receptors in Appleton.	Mitigation	Environmental Registration
	• Blasting activities will be scheduled to occur during daytime hours, once per day.	Mitigation	Environmental Registration
	• Project lighting will be limited to that which is necessary for safe and efficient Project activities. Lighting design guidelines will be followed, such as from the Commission Internationale de L'Éclairage (Commission on Illumination), International Dark Sky Association, Illuminating Engineering Society.	Mitigation	Environmental Registration
	• Light fixtures will be located so that they are not directed toward oncoming traffic on nearby roads on or off site.	Mitigation	Environmental Registration
	• Lighting will be designed to avoid excessive use of mobile flood lighting units and will be turned off when they are not needed.	Mitigation	Environmental Registration
	• To the extent practicable, mobile and permanent lighting will be located such that unavoidable light spill off from the working area is not directed toward receptors outside of the Project Area.	Mitigation	Environmental Registration
	• Full cut-off luminaires (i.e., lighting with shades angling light downward) will be used where practicable to reduce glare, light trespass, and sky glow from the Project, while maintaining a safe work environment for staff.	Mitigation	Environmental Registration

Activity/VC	Commitment Description	Type*	Source**
Groundwater Resources	Groundwater quantity and quality will be monitored and adaptively managed, as required, using a network of groundwater monitoring wells to document Project effects on groundwater flow and quality. Monitoring locations will be maintained until the water levels and water quality have stabilized post-closure. Twenty-one monitoring wells were installed and sampled between 2023 and 2025. The monitoring wells have been strategically placed outside of the direct footprint and downgradient of key infrastructure so they can be incorporated into the long-term groundwater monitoring program during mine operations, at closure, and post-closure monitoring.	Mitigation	Environmental Registration
	Interception wells or deep sumps within the perimeter drainage ditches around the WRSF, ore stockpile, and overburden storage facility will be installed to intercept groundwater seepage that exceeds MDMER Schedule 4 Table 1 limits prior to discharging to local surface water receivers (as required). Water will be transferred to the site-wide contact water management system for treatment prior to discharge to the environment. Accepted industry best practice geochemistry methods will be used to predict mine contact runoff and seepage quality.	Mitigation	Environmental Registration
	Seepage from the WRSF to local surface water receivers during closure is predicted to potentially require treatment during the post-closure phase. Passive treatment systems will be potentially installed (as required) in seepage collection ditches and sedimentation ponds (e.g., permeable reactive barriers, engineered wetlands) to reduce metal/metalloid concentrations to baseline concentrations.	Mitigation	Environmental Registration
Surface Water Resources	Water management infrastructure, such as ponds and catch basins, will be constructed to manage via water transfer (i.e., pumping the design storm volume [1:100-year design storm]).	Mitigation	Environmental Registration
	Development of a site-specific Water Management Plan for the Project	Plan	Environmental Registration
	Water inventory will be reduced through perimeter berms and promotion of overland flow of non-contact runoff.	Mitigation	Environmental Registration
	Flow to fish bearing streams and wetlands will be maintained by maintaining pre-development catchments and/or flows to the extent practicable.	Mitigation	Environmental Registration
	Water management pumping and energy requirements during operation will be reduced through grading and gravitational drainage.	Mitigation	Environmental Registration
	Mine water management infrastructure will be developed to control mine contact water.	Mitigation	Environmental Registration
	Runoff will be directed away from active work areas before construction commences, reducing the volume of sediment-laden water to be managed.	Mitigation	Environmental Registration
	Site contact water will be directed through grading of ditches and construction of diversion channels to a central collection pond (IT-TP-01) so it can be managed and discharged through two final discharge points (FDPs) for the Project: P-9 Pond and North Herman's Pond.	Mitigation	Environmental Registration

Activity/VC	Commitment Description	Type*	Source**
Surface Water Resources Cont'd	Interception wells or deep sumps within the perimeter drainage ditches around the WRSF, ore stockpile, and overburden storage facility will be installed as needed to intercept groundwater seepage that exceeds MDMER Schedule 4 Table 1 limits prior to discharging to local surface water receivers (as required). Water will be transferred to the site-wide contact water management system for treatment prior to discharge to the environment. Accepted industry best practice geochemistry methods will be used to predict mine contact runoff and seepage quality.	Mitigation	Environmental Registration
	The amount and timing of exposed soil left open at any one time will be limited to reduce the potential for erosion.	Mitigation	Environmental Registration
	Mine contact water will be treated via a sedimentation pond (IT-TP-01) and mine water treatment plant (as required) to provide effluent compliance with regulatory effluent limits.	Mitigation	Environmental Registration
	Mine effluent will discharge via two FDPs to assist in maintaining stream flows downstream of P-Pond and North Herman's Pond, where feasible.	Mitigation	Environmental Registration
	Mean monthly and daily effluent water quality at FDPs will be managed to be below MDMER Schedule 4 Table 1 limits.	Mitigation	Environmental Registration
	Dewatering will be carried out gradually to prevent sediment resuspension and bank destabilization.	Mitigation	Environmental Registration
	Only rock materials characterized as not acid-generating, non-potentially acid-generating and non-metal-leaching will be used for Project works.	Mitigation	Environmental Registration
	Seepage from the WRSF to local surface water receivers during closure is predicted to potentially require treatment during the post-closure phase. Passive treatment systems will be potentially installed (as required) in seepage collection ditches and sedimentation ponds (e.g., permeable reactive barriers, engineered wetlands) to reduce metal/metalloid concentrations to baseline concentrations.	Mitigation	Environmental Registration
	Pit overflows can have in-pit treatment (if required) applied to precipitate out metals/metalloids or discharge into a passive treatment system (e.g., engineered wetland) prior to discharge to local surface water receivers	Mitigation	Environmental Registration
	The Water Management Plan is a living document that will be reviewed and updated on a regular basis to reflect the latest in Project design.	Plan	EPR, Section 4.1.4.1
	If discharge quality criteria are observed to be exceeded at the FDPs, discharge will stop and investigations will be conducted using adaptive management approaches to bring discharge quality into compliance.	Mitigation	EPR, Section 4.3.10

Activity/VC	Commitment Description	Type*	Source**
Fish and Fish Habitat	Mine waste will not be disposed of or placed in fish-bearing waters.	Mitigation	Environmental Registration
	New culverts will be sized appropriately, embedded and designed to be passable to fish to provide fish passage.	Mitigation	Environmental Registration
	Equipment will be inspected and cleaned prior to use onsite to prevent the transfer of non-native aquatic invasive species.	Mitigation	Environmental Registration
	In-water work areas will be isolated from receiving fish bearing waters as required by applicable permits.	Mitigation	Environmental Registration
	The amount of water requiring treatment on site will be reduced through perimeter berms which will promote overland flow of clean non-contact runoff away from the mine site.	Mitigation	Environmental Registration
	Flows to fish-bearing streams and ponds will be maintained by designing water management within the pre-development catchments to the extent practicable.	Mitigation	Environmental Registration
	Treated mine effluent will discharge via two FDPs to assist in maintaining stream flows, downstream of P9 (P-Pond) and North Herman's Ponds (P1), where feasible.	Mitigation	Environmental Registration
	If sediment laden water is observed, work will be stopped and additional mitigation measures will be implemented to prevent dispersal.	Mitigation	Environmental Registration
	Use of explosives in or near water will be avoided, however, if required, Fisheries and Oceans Canada (DFO) blasting guidelines will be followed.	Mitigation	Environmental Registration
	Fish rescues will be conducted in isolated areas of streams or ponds that experience reductions in flow, as required by applicable regulators	Mitigation	Environmental Registration
	Works in or near water will be conducted in accordance with applicable DFO codes of practice, standards, and measures to protect fish and fish habitat.	Mitigation	EPR, Section 5.4.4
	New Found Gold will develop and implement a Fish Relocation Plan prior to undertaking fish relocation activities and as part of the *Fisheries Act* Authorization for the Project to avoid the death of fish as defined in the *Fisheries Act*.	Plan	EPR, Section 5.4.8
Terrestrial Environment (including species at risk [SAR])	Equipment will arrive at the construction site clean and free of soil and vegetative debris, to reduce the risk of introducing or spreading non-native and/or invasive vascular plant species. Equipment will be inspected and either approved for use or cleaned, re-inspected, and approved for use.	Mitigation	Environmental Registration
	If potentially invasive vascular plant species are noted within or near the Project Area during construction or operation, the extent of the species will be assessed and a plan for removal and/or control will be developed.	Plan	Environmental Registration
	A Section 48 permit will be obtained for work to be completed within 15 m of a body of water, which includes wetlands, shown on Natural Resources Canada 1:50,000 scale National Topographic System mapping, as defined by the Water Resources Management Division of NLDECCC.	Mitigation	Environmental Registration

Activity/VC	Commitment Description	Type*	Source**
Terrestrial Environment (including species at risk [SAR]) Cont'd	Vehicles will yield to wildlife encountered on site.	Mitigation	Environmental Registration
	Vegetation clearing will be scheduled to avoid the migratory bird nesting period (approximately mid-April to mid-August), where feasible. Avoiding this window also helps protect species with overlapping sensitive periods, including SAR such as little brown and northern myotis (maternity roosting), Newfoundland marten (denning), and insect SAR during the active bee and beetle seasons (e.g., May to August for yellow-banded bumble bee).	Mitigation	Environmental Registration
	Nests, eggs, and shelters of migratory birds or other wildlife will not be disturbed or destroyed. If an active nest is found, the surrounding area will remain undisturbed until fledging has occurred, or the nest is abandoned. If a raptor nest is encountered, work in the vicinity will stop until the Wildlife Division provides direction.	Mitigation / Engagement	Environmental Registration
	Non-intrusive nesting surveys will be completed prior to vegetation clearing for raptors throughout the year as well as breeding birds within the breeding bird window (approximately mid-April to mid-August; ECCC 2025). Active or suspected active nests (forested birds such as passerines, upland game birds) should receive a minimum 30 m setback distance and for SAR (e.g., rusty blackbird) a minimum 75 m setback is required. Raptors nests require a year-round minimum setback of 200 m, and an 800 m setback is required for Bald Eagle and Osprey during the nesting season (March 15 to July 31). The location of any raptor nest site will be reported to the Wildlife Division at endanqeredspecies@gov.nl.ca.	Survey / Mitigation	Environmental Registration
	If possible, large diameter trees will be maintained, especially those that are dead or dying. These types of trees typically have peeling bark, crevices and cavities that provide important roosting habitats for bats. Additional mitigation may involve offering alternate habitat (e.g., artificial structures such as bat boxes) to off set the loss of roosting habitat.	Mitigation	Environmental Registration
	Caves, sinkholes, fissures, or other underground cavities that are identified as a result of Project activities will be inspected for evidence of overwintering bats and reported to the Wildlife Division if evidence is present.	Mitigation	Environmental Registration
	Before demolition or removal of existing structures during the breeding bird or active bat season, wildlife surveys will be conducted to identify potential nesting and roosting sites. Additional mitigation may involve offering alternate habitat (e.g., artificial structures such as bat boxes) to off-set habitat loss.	Survey / Mitigation	Environmental Registration
	The discovery of bat roosts or hibernacula, or active dens (e.g., marten dens), will be reported immediately to the Site Manager (or designate) and work will cease. A plan for protection, avoidance, and/or mitigation will be established by New Found Gold, guided by engagement with a qualified biologist and/or federal or provincial regulators.	Plan / Mitigation	Environmental Registration
	Observations of bat colonies, potential hibernacula sites, or sick or dead bats will be reported to the provincial Wildlife Division at 709-637-2025 or through the toll-free bat hotline: 1-877-434-2287 (BATS).	Mitigation	Environmental Registration

Activity/VC	Commitment Description	Type*	Source**
Terrestrial Environment (including species at risk [SAR]) Cont'd	Where revegetation or rehabilitation is planned, native flowering plant species known to support bumble bees (e.g., goldenrod, clover, fireweed, yarrow) will be used where possible.	Mitigation	Environmental Registration
	Site orientation will include information on SAR identification and protocols (e.g., buffers, bee sting protocols); sitings of potential SAR species will be reported to the Site Manager (or designate).	Mitigation	Environmental Registration
	Waste storage areas will include measures to reduce the attraction of wildlife (e.g., secure containers, regular removal).	Mitigation	Environmental Registration
	Employees and contractors associated with the Project will be prohibited from fishing, hunting, trapping, gathering plants, or using off-road vehicles for recreational purposes within the Project Area, or from using the Project Area to access surrounding areas for these purposes, unless such access is specifically granted to enable the exercise of Indigenous rights.	Mitigation	Environmental Registration
	Hunting / fishing / harvesting of wildlife will be strictly prohibited on the mine site.	Mitigation	Environmental Registration
	New Found Gold will continue to engage with local resource users regarding the overlap of the Project with land use areas in the Project Area. This will include the communication of Project information, updates on ongoing and planned activities, a discussion of issues and concerns, and a potential means of addressing them.	Engagement	Environmental Registration
	Chasing, catching, diverting, following, or otherwise harassing wildlife will be prohibited.	Mitigation	Environmental Registration
	Nuisance animals (e.g., bears, coyotes) will be managed by the Site Manager (or designate) in consultation with Wildlife Division.	Engagement / Mitigation	Environmental Registration
	Observations of caribou in the Project Area will be reported immediately to the Site Manager (or designate) and work will cease. The Site Manager (or designate) will determine if Project activities will be reduced or delayed, as applicable. New Found Gold will consult with the Wildlife Division on this issue.	Engagement / Mitigation	Environmental Registration
	Project lighting will be controlled, while meeting regulatory, operational, health, and safety requirements, to mitigate attraction and disorientation of migratory birds, taking into account the Convention on Migratory Species' *International Light Pollution Guidelines for Migratory Species*.	Mitigation	Environmental Registration
	On-site wildlife observations, including caribou, will be documented year-round (e.g., location, date) on a wildlife observation form.	Mitigation	Environmental Registration
	Trees and snags with a diameter at breast height of greater than 25 cm will be surveyed for potential active bat colonies prior to clearing between May 1 to September 1, with a 250 m no-cut buffer applied until September 1 should an active bat colony be detected.	Mitigation	EPR, Section 5.5.3
	An EEMP will be developed that includes preventative measures, long-term monitoring objectives, performance indicators, reporting requirements, and adaptive management measures for species listed under the NL *Endangered Species Act,* SOCC, and wetlands, for the life of the Project, including the decommissioning and reclamation phase.	Mitigation	EPR, Section 5.5.3

Activity/VC	Commitment Description	Type*	Source**
Communities	New Found Gold will continue to work with municipalities and economic development organizations to identify opportunities to reduce negative impacts of the population growth and enhance positive socio-economic benefits to Local Assessment Area communities.	Engagement / Mitigation	Environmental Registration
	New Found Gold will implement a grievance redress mechanism to investigate and resolve incidents and complaints from Project employees and community members in a fair and timely way.	Engagement / Mitigation	Environmental Registration
	New Found Gold will continue to engage with local resource users (hunters, trappers, anglers, outfitters), including the communication of Project information, updates on ongoing and planned activities and a discussion of issues and concerns and potential means of addressing them.	Engagement	Environmental Registration
	New Found Gold is committed to hiring locally and will communicate employment information to local communities in a timely manner so that local residents have an opportunity to acquire the necessary skills to qualify for potential Project-related employment.	Engagement / Mitigation	Environmental Registration
	Procurement packages will be developed and posted in a timely manner with consideration for capacity and capabilities of local and regional businesses.	Mitigation	Environmental Registration
	New Found Gold will promote equitable hiring and promotion processes throughout the Project lifecycle.	Mitigation	Environmental Registration
	New Found Gold commits to consider bids from qualified locally owned businesses first, including those submitted from companies owned by diverse groups.	Mitigation	Environmental Registration
	Prior to decommissioning, New Found Gold will implement strategies to help transition the workforce.	Mitigation	Environmental Registration
	New Found Gold will continue to provide diversity and cultural sensitivity training for Project employees.	Mitigation	Environmental Registration
	New Found Gold will prohibit the use and possession of drugs and alcohol during work hours or at the Project site.	Mitigation	Environmental Registration
	New Found Gold will not tolerate harassment, bullying, discrimination, and violence, including sexual harassment, and will provide access to assault counselling, as well as confidential and culturally sensitive care.	Mitigation	Environmental Registration
	New Found Gold will continue to provide Project employees with health services (physical, mental, and social health), including Employee Assistance Programs and on-site emergency service infrastructure, including security and fire-fighting equipment.	Mitigation	Environmental Registration
	New Found Gold will continue to coordinate its Emergency Response Plan with the local emergency services departments.	Plan	Environmental Registration
	New Found Gold will implement a Traffic Management Plan, which may include the establishment of carpooling and shuttle stations at key locations, to bus workers and to encourage carpooling.	Plan	Environmental Registration
	When practicable, shift changes and truck movements will be scheduled to avoid peak traffic hours and school bus pick-up and drop-off times.	Mitigation	Environmental Registration

Activity/VC	Commitment Description	Type*	Source**
Communities Cont'd	Signage will be installed around the Project Area to alert the public and land users of the presence of the Project and its facilities.	Mitigation	Environmental Registration
	Employees and contractors associated with the Project will be prohibited from fishing, hunting, trapping, gathering plants, or using off-road vehicles for recreational purposes within the Project Area, or from using the Project Area to access surrounding areas for these purposes, unless such access is specifically granted to enable the exercise of Indigenous rights.	Mitigation	Environmental Registration
	During operation, New Found Gold will provide community updates and maintain Community Participation Committee meetings.	Engagement	EPR, Section 4.3.11
	The company will update its Gender, Equity, and Diversity Plan to promote inclusive workforce participation.	Plan	EPR, Section 3
	If community members identify concerns with respect to noise from operation of the Project, New Found Gold will implement adaptive management procedures in consultation with regulators and the community, which could include noise monitoring, mitigation review and implementation of additional noise mitigation if required.	Mitigation	EPR, Section 4.1.3.2
Land and Resource Use	Signage will be installed around the mine site to alert the public and land users of the presence of the Project and its facilities.	Mitigation	Environmental Registration
	Where practicable in accessible areas (e.g., along cleared rights-of-ways), trees and other vegetation will be left in place or encouraged to grow to obstruct the view of Project facilities, reducing the change in viewshed and muffling nuisance noise.	Mitigation	Environmental Registration
	Employees and contractors associated with the Project will be prohibited from fishing, hunting, trapping, gathering plants, or using off-road vehicles for recreational purposes within the Project Area, or from using the Project Area to access surrounding areas for these purposes, unless such access is specifically granted to enable the exercise of Indigenous rights.	Mitigation	Environmental Registration
	Chasing, catching, diverting, following, or otherwise harassing wildlife will be prohibited.	Mitigation	Environmental Registration
	New Found Gold will continue to engage with local resource users regarding the overlap of the Project with land use areas in the Project Area. This will include the communication of Project information, updates on ongoing and planned activities, a discussion of issues and concerns, and a potential means of addressing them.	Engagement	Environmental Registration
	If complaints are received from land users regarding Project-related effects, New Found Gold will work with the affected land users to address their concerns through a grievance redress mechanism and the potential implementation of additional mitigation measures as needed.	Engagement / Mitigation	Environmental Registration
	Project activities, locations, and timing will be communicated to communities, affected land and resource users, environmental non-government organizations, the provincial government, and local authorities throughout the life of the Project. New Found Gold will communicate in advance with respect to Project activities that may limit / affect use of the access road. This information will be communicated through local town councils, local radio stations, and/or social media.	Engagement	Environmental Registration

Activity/VC	Commitment Description	Type*	Source**
Land and Resource Use Cont'd	New Found Gold will consult with the relevant authorities to support a public education program around the new mine access crossing on the T'Railway Provincial Park.	Engagement	Environmental Registration
	New Found Gold has, and will continue to, consult cabin owners in the Project Area about their occupancy, future use of the cabins, and possible mitigation steps.	Engagement	Environmental Registration
	New Found Gold will implement safety measures at the T'Railway crossing including warning signage for trail users approaching the crossing, appropriate traffic control, public notification of construction activities that may affect trail users, and educational materials promoting safe use of the crossing. Project personnel and contractors operating vehicles near the T'Railway crossing will receive site orientation regarding crossing protocols and will be required to reduce speed and exercise caution when approaching and traversing the crossing.	Mitigation	EPR, Section 4.2.6
	New Found Gold will continue to engage with Crown Lands and other applicable regulators regarding access management for land users.	Engagement	EPR, Section 4.3.6
Historic Resources	A Discovery of Historic Resources Contingency Plan will be included as part of the updated Environmental Protection Plan to mitigate the potential of adverse effects on historic resources (i.e., archaeological and palaeontological resources) resulting from an accidental discoveries during Project activities. The Plan will include mitigation measures to protect and manage chance finds of previously unidentified structures, sites, or things of historical, archaeological, paleontological, or architectural significance discovered within the Project Area. If a suspected discovery occurs, work in the immediate area will be stopped until authorized personnel from New Found Gold, following consultation with the Provincial Archaeology Office (PAO), authorize resumption of work.	Plan / Engagement	Environmental Registration
	Mitigation measures will include the following procedures:	Mitigation	Environmental Registration
	• Immediately stop work in the vicinity of the discovery and delineate the area as a no-work zone.	Mitigation	Environmental Registration
	• Report the find immediately to New Found Gold's representative, the Health, Safety and Environmental Superintendent or designate.	Mitigation	Environmental Registration
	• Mark the site's visible boundaries. Personnel will not move or remove artefacts or associated material unless the integrity of the material is threatened.	Mitigation	Environmental Registration
	The New Found Gold representative will report the find with the following information to the PAO and will comply with the instructions provided:	Engagement / Mitigation	Environmental Registration
	• Nature of the find	Mitigation	Environmental Registration
	• Precise descriptive and map location and the time of the find	Mitigation	Environmental Registration
	• Nature of the activity resulting in the find	Mitigation	Environmental Registration

Activity/VC	Commitment Description	Type*	Source**
Historic Resources Cont'd	• Identity of the worker(s) making the find	Mitigation	Environmental Registration
	• Present location of the material, if moved, and protective measures initiated for the material and the site	Mitigation	Environmental Registration
	For the other watercourse or waterbody shorelines within the New Found Gold mineral claim that were not assessed in 2023 under Archaeological Investigations Permit 23.35, the following measures will be implemented where practical:	Survey / Mitigation	Environmental Registration
	• The generalized 50 m-wide high archaeological potential buffer zone identified during the desktop Historic Resources Overview Assessment (HROA) remains in place and continued avoidance of those areas by Project-related ground disturbing activities is recommended.	Mitigation	Environmental Registration
	• If avoidance of these areas is not possible, New Found Gold and its archaeologists will consult with the PAO regarding which of these new interaction locations warrant a walkover survey based on the results of the HROA and the observations from the field program completed in 2023. If new areas identified for walkover survey are confirmed, this will be completed in 2026, prior to groundbreaking activities in these locations.	Survey	Environmental Registration

Notes:

* Type: Plan, Survey, Engagement, or Mitigation

** Source: Environmental Registration or New to EPR