## Summary of questions—Novador Gold Mine Project

This document provides a high-level summary of issues that were submitted to the Impact Assessment Agency of Canada (the Agency) about the Novador Gold Mine Project (the Project) during the public comment period on the Summary of the Initial Project Description (IPD), submitted by Probe Gold Inc. (the Proponent). The issues highlight information that will be considered by the Agency in forming its opinion on whether an impact assessment would be required. If the Agency is of the opinion that an impact assessment would be required, this information will also be considered, as applicable, in the development of further planning phase documents where the Proponent is willing to work collaboratively on the impact assessment. Original submissions from participants can be found online on the Canadian Impact Assessment Registry Internet Site (Reference Number 86020).

The Agency encourages the Proponent to provide a response to the Summary of Issues that details how it intends to address these issues, as part of its Detailed Project Description. The Detailed Project Description should contain the information from the IPD, with new information integrated throughout the main body of the document as appropriate to respond to the issues raised. This will facilitate understanding by assessment participants, including Indigenous Peoples, the public, federal authorities, provincial ministries and municipalities.

1. Project description	
It is proposed to include information on the type of mining methods planned for the mine, i.e., or and underground, in the first section of the summary ("Project name, sector, and proposed lo section).	•
Information needed on whether the project involves the manufacture or storage of explosives.	
<ul> <li>Information needed on: <ul> <li>the route trucks would take between the Courvan pit and the ore processing plant, as between the Monique sector and the processing plant;</li> <li>the use of existing roads for transport;</li> <li>the relocation of existing roads, in particular the Pascalis road, which would be affected mining operations;</li> <li>the project's impact on the Colombière River bridge;</li> </ul> </li> </ul>	
- the construction of new access roads.	
Information needed on the underground mining operations and their location.	
Clarification required on how much infrastructure is planned for each project component (ore proc plant, waste rock management, tailings management, water management) and which compone most likely to be selected.	
Clarification required on which project infrastructure locations have already been determined, and have yet to be determined.	d whicł
Information required on the environmental mining liabilities of the sites to be mined. Concerns at environmental risks associated with excavating potentially contaminated material from previous operations.	
Suggestion that former mining sites should be decontaminated before the proponent begins min site.	ning the
Information required on the proportion of energy from fossil sources versus hydroelectricity for	or eac

Information required on the proportion of energy from fossil sources versus hydroelectricity, for each phase of the project.

Information required on the fossil fuels to be used, in particular their type, method of extraction, geographical origin, and transport to the project site.

Information required on planned electricity use for each of the project's main activities, in kWh per year. Information required on the environmental studies planned as part of the project's development and their content.

# 2. Purpose of the designated project, need for the project, and alternative means of carrying out the project

It is important to justify and clarify the purpose of the gold mining project, taking into account the following comments and issues raised:

- basing project justification on more than just financial and macroeconomic considerations. It should also include environmental and social considerations, and be based on an environmental opportunity study;
- considering the need to destroy natural environments and using large quantities of water to produce gold, which would be used largely in the jewelry, investment, and banking industries, and to a lesser extent in the manufacture of useful technological products;
- providing more information on the usefulness of the gold that would be produced by the project;
- justifying the proponent's assertion of the usefulness of gold as a tool for political stabilization, given the conflicts associated with it.

More information is required on the Abitibi region's need to diversify its economy and free itself from its dependence on mining projects, which must be renewed periodically and are subject to market fluctuations.

Clarification is needed on how the proponent defines the concept of sustainable development and how it intends to implement it in its mining project.

Information required on the innovations proposed in project development and how these will limit the potential negative effects of the project and help protect the receiving environment.

More information is needed on the choice of locations for the ore processing plant, waste rock piles, and effluent discharge, including the advantages and disadvantages of each option, as well as the rationale for the options selected. It is suggested that site selection for waste rock management take into account the protection of wetlands and water environments, including the protection of the two eskers that cross the project site.

It is suggested that the proponent investigate the possibility of using existing local gold concentrators rather than building a new plant, bearing in mind that some local gold mines are at the end of their operating life. Information required on the various ore processing alternatives assessed by the proponent, including the use of existing plants. The scenarios assessed should consider the availability of the Beacon Mill and the overcapacity of the Canadian Malartic Mine.

Information required on the possibility of reusing the former tailings storage facilities at the Béliveau and Bussières mines for the project. In the event that these former tailings storage facilities cannot be reused, information is required on the restoration of these former mine sites, which should be carried out in collaboration with First Nations and the Ministère des Ressources naturelles et des Forêts.

Information required on preferred tailings storage techniques and technologies, and tailings storage facility design. In addition, information is required on the possibility of backfilling pits with excavated materials (waste rock, tailings, overburden) as an alternative for mine waste management.

As part of the assessment of alternatives, it would be advisable to:

- include tailings management in the analysis of alternatives in section 12.2 and include impacts on water quality as an assessment criterion for this element;
- include the possibility of mixing tailings with waste rock (co-disposal or inclusion) in waste rock piles;
- consider tailings storage volume rather than footprint as an indicator.

Among the potential environmental indicators presented in Table 8, it would be relevant to include indicators concerning air quality (e.g., transport distances for materials, fuel consumption, dust emissions, greenhouse gas production, etc.).

## 3. Air quality

Information required on ambient air quality at the project's local and regional scales, and on existing emission sources and their contaminants.

Provide more information about the impacts of each project phase on air quality, including:

- identifying sources of air pollutant emissions (activities or equipment);
- listing the substances and pollutants generated;
- describing potential effects on air quality and health;
- describing best management practices;
- describing monitoring and follow-up measures;
- describing mitigation measures to reduce the effects.

Concerns raised about pollutants in the dust and those generated by blasting with ammonium nitratebased explosives.

Information required on the project's resilience to climate change and how this has been taken into account in the project design.

#### 4. Surface water, drinking water, and groundwater

All watercourses and water bodies likely to be directly or indirectly affected by the project need to be identified.

Information required on the potential effects of project activities and infrastructure on surface water and groundwater quality, as well as on sediment quality, for all phases of the project, particularly on the type of contaminants generated and including those found in dust.

Concerns about the potential destruction of watercourses and water bodies. Emphasis must be placed on their preservation.

Information required on the project's effects on the quantity of surface water and groundwater, and on the level of the water table.

Information required on the monitoring wells planned for the project.

Concerns and need for information regarding potential effects of acid mine drainage and metal leaching from mine materials (overburden, waste rock, construction materials from borrow pits, ore, tailings, etc.), both on the project site and downstream from it. Information required on the methodology used to determine acid generating potential.

Information required on the maximum quantity of cyanides anticipated for the project and the potential effects associated with it, including those on the mine effluent.

General concerns about the project's effects on eskers. Concerns about the proponent's lack of commitment to not affecting eskers when carrying out the project. Additional geological and hydrogeological information needed on eskers and associated aquifers, including drinking water resources.

It is important to consider the project's potential effects on eskers (including the biodiversity that depends on them), particularly those caused by the following elements:

- construction of permanent or temporary facilities (including access roads and road transport corridors), hydroelectric lines, and gas pipelines;
- storage and management of mining waste;
- blasting and excavation;
- groundwater lowering;
- contamination by various toxic substances.

Information required on the proponent's intention to collaborate with research organizations specializing in esker studies (e.g., GRES-UQAT or SESAT) to prepare in-depth studies on the characteristics and vulnerability of eskers near the project, as well as on the protection and restoration measures to be implemented.

Concerns and need for information regarding water management for the various project components, mine effluents (management, treatment, flow rates, discharge schedules, concentrations, contaminants, etc.), and mining waste (management and treatment). Information needed on the environmental effects of mine water and drainage and on the mitigation measures to be implemented to reduce these effects in each phase of the project.

Information required on the potential effects of constructing new access roads on the study area's water system.

Information required on the potential diversion of any watercourse, such as the potential diversion of the Colombière River (OPTION PS-D, Map 4).

Concerns that the project site's footprint on two watersheds, the Harricana River's and the Nottaway River's, will increase the spread of contaminants.

## 5. Wetlands and water environments

Information required on the wetlands and water environments that will be affected (number, surface area, type, functions, etc.) by the project, as well as on the avoidance, mitigation, or offsetting measures consequently planned. It is important to develop scenarios to avoid destroying these environments and to reduce the impact on them.

Consideration must be given to the important role of wetlands in preserving biodiversity and adapting to climate change by capturing CO<sub>2</sub> and reducing flooding. Also consider their role for migratory birds or species at risk.

## 6. Terrestrial wildlife, flora, birds, and species at risk

More information needed on the biodiversity found on the project site, and on the project's effects on the forest, the terrestrial environment, flora, and fauna, including species at risk. Concerns about the project's potential impact on terrestrial and aquatic species and their habitats (toxicity, disturbance). Information needed on mitigation measures for migratory birds. Specify whether other surveys will be carried out and provide the methodologies that have been or will be used.

Concerns about the many plant and animal species with conservation status mentioned in the initial project description.

Specific impact studies required for each of the species with conservation status identified on the project site. It would be useful to include conservation and recovery projections for a scenario in which the project is not carried out.

Proposal that the reference state of each of the species with conservation status be the one that existed during the pre-industrial period.

More specifically for species at risk covered by the *Species at Risk Act* (SARA), information is needed on the following species listed on Schedule 1 of SARA: Woodland caribou—boreal population, little brown myotis, northern myotis, tri-coloured bat, wood turtle, eastern whip-poor-will, common nighthawk, bobolink, wood thrush, bank swallow, barn swallow, chimney swift, olive-sided flycatcher, Canada warbler, and eastern meadowlark.

Based on the best available information, determine the potential for finding species at risk, their habitats, and the ecological requirements of species whose distribution intersects the study area.

It is recommended to monitor regulations related to the status of wildlife and endangered species.

It is recommended to collect and submit the information necessary to determine whether a SARA permit is required.

Information needed regarding the project's potential and cumulative effects on caribou and their habitat, given the project's location within the QC-1 range identified in the Amended Recovery Strategy for the Woodland Caribou (*Rangifer tarandus caribou*), Boreal Population, in Canada (ECCC, 2020).<sup>1</sup> ECCC confirms that the mining facilities are located in Woodland caribou critical habitat. Thus, special attention and effort will be required to characterize Woodland caribou critical habitat in the study area, and to quantify habitat losses, if any.

Information required on mitigation measures planned to limit negative impacts on caribou and their habitat.

Concerns about a potential offsetting plan for caribou habitat, in collaboration with the Lac-Simon Anishnabe Nation.

It is important to stress how vulnerable the Val-d'Or herd is, with fewer than 10 members.

## 7. Fish and fish habitat

Up-to-date information needed on the characteristics of fish and fish habitat in watercourses and water bodies likely to be directly or indirectly affected by the project. This information is also needed for the rivers that flow into the Lac Tiblemont watershed.

Information required on the project's potential effects on fish (including their free passage), their reproduction, and their habitat, for all water bodies that could be directly or indirectly impacted by the project.

Information required on measures to avoid, mitigate, or offset for loss of fish habitat.

Concerns about the potential impact of mine tailings on the aquatic fauna of the Bourlamaque River, which has already been affected by previous mining operations.

Information needed on the presence of lake sturgeons (*Acipenser fulvescens*) in watercourses and water bodies likely to be impacted by the project, and on the identification of habitats potentially impacted by the project and likely to be used by this specie.

Information required on aquatic invasive species in watercourses and water bodies likely to be affected by the project, as well as on measures planned to prevent the introduction of aquatic invasive species into unaffected watercourses and water bodies.

## 8. Human health and well-being

Concerns and need for information about the measures and directions the proponent intends to take for Indigenous communities and other residents and vacationers who inhabit or use the land within or near the project site (and associated activities), particularly with regard to the following potential effects: dust; vibration; noise; visual impacts; reduction in the quality of fishing, hunting, and trapping grounds; groundwater contamination; changes in the water table; ecosystem degradation; and deterioration of road safety for land users.

Proposed measures to reduce these effects, such as monetary compensation, agreements, reclaiming of other sites, etc.

<sup>&</sup>lt;sup>1</sup> Environment and Climate Change Canada, 2020. Amended Recovery Strategy for the Woodland Caribou (*Rangifer tarandus caribou*), Boreal Population, in Canada. *Species at Risk Act* Recovery Strategy Series, Environment and Climate Change Canada, Ottawa, xiv + 155 pp.

Information needed on the proponent's plan or strategy for collecting disaggregated data that will enable it to analyze, in the impact study phase, the project's impacts on human health arising from changes in the social and economic conditions of the populations affected by the project, including vulnerable populations.

Information needed on the potential effects of new resident employees in the region, particularly on the region's childcare and health services, which serve the general population, including Indigenous peoples.

Concerns about the changes the project may bring to the harmonious coexistence of mining activities, residents, and the many seasonal vacationers, particularly in the Lac Wyeth and Lac Bonnefond areas near the project.

Concerns about the potential negative effects (e.g., noise, dust, road degradation, degradation of residents' quality of life) of heavy machinery traffic, transport of ore, and open pit operations.

Importance of considering the concern and stress related to the impact of the project on property values and expropriations, if applicable.

## 9. Social and economic conditions

Information required on the project's positive effects on the development and maintenance of the region's socio-economic network, given the volatility of gold prices and market fluctuations.

Information required on the potential effects of the project on:

- gross domestic product (GDP);
- direct and indirect jobs for the local population;
- tax revenues and royalties;
- any other positive economic impact;
- any other economic impact on the local and regional economy.

Information needed on the project's potential socio-economic effects (including its contribution to increasing social inequalities) and on the measures planned to mitigate these effects.

Concerns and a need for information regarding the potential effects of the influx of permanent and temporary workers on the rental housing stock and the real estate market in the city of Val-d'Or and surrounding communities and towns, particularly regarding access to affordable housing for other citizens.

Information required on the planned use of fly-in/fly-out for employees.

Information needed on the proponent's intention to work with local partners to maximize the hiring of local workers already trained in the employment fields targeted by the project.

Information required on the capacity of the local and regional job market to supply the workforce needed by the mine in a labour shortage situation.

It is important to adopt local and regional workforce development and training plans, including specific plans for the Indigenous workforce.

Concerns and a need for information about the migration of skilled labour (mechanics, plumbers, etc.) from local community businesses to mining companies, and the resulting potential effects on other local business sectors. Information needed on measures planned to limit these potential effects.

Concerns about the potential effects of high wages and job availability in the mining sector on school dropouts in the midst of a labour shortage.

Concerns about the project's potential impact on the market value of homes or cottages in or near the project site.

It is important to prepare a plan to mitigate the project's social impacts, taking into account the project's effects on vulnerable populations and housing affordability.

Concerns about the influence of corporate donations to environmental organizations.

Concerns about the project's potential effect on the local economy's ability to make the transition to a sustainable economy that consumes less energy and generates less waste.

Concerns about the project's effects on activities valued by local communities (hunting, fishing, berrypicking, hiking) and the traditional practices of Indigenous communities.

Information required on public and government funding contributing to the project.

Data needed on local and regional employment (hiring, retention, training) in the mining sector, including related labour policies and programs. Information needed on the number of direct and indirect jobs that would be created—full-time, part-time, permanent, and temporary—for each project phase.

It is proposed to improve the description of the health, social, and economic context in section 15, including:

- using Statistics Canada's 2021 census, to reflect recent data, for educational level (the percentage with no certificate, diploma, or degree and the percentage with a trade school certificate or diploma other than an apprenticeship certificate) and employment rate in the mining sector of the Vallée-de-l'Or RCM;
- referring to 2022 data from Canada Mortgage and Housing Corporation for average rent and vacancy rates in Val-d'Or.

Other proposals for section 15:

- adding and comparing data at provincial and national levels to contextualize the data provided, for the City of Val-d'Or and communities, for median total income, labour force participation rate, employment rate, and unemployment rate;
- correcting the median total income for men in 2020;
- adding data on underrepresented groups (e.g., visible minorities and recent immigrants) in the labour market, other than Indigenous peoples, such as their numbers, employment rates, unemployment rates, and participation rates.

Information needed on the specific economic benefits of exploration work (salaries, taxes, royalties) prior to the project.

Concerns that a new mining project could contribute to an increase in recreational tourism.

10. Vulnerable population groups (GBA+)

Information required on the project's potential effects on women and girls, and more specifically on the safety of Indigenous women and girls, within the context of the National Inquiry into Missing and Murdered Indigenous Women and Girls.<sup>2</sup> It is important to propose mitigation measures, where applicable.

It is important to adopt a strategy or policy to prevent sexual harassment and assault specifically targeting Indigenous women.

It is recommended to enhance engagement on and discussion of potential health and social impacts by consulting various population groups, including vulnerable populations.

It is recommended to include gender-based violence (GBV) risks throughout impact assessment and project implementation.

## 11. Indigenous Peoples

Information required on how each Indigenous group is consulted by the proponent. In particular, information required on how Indigenous peoples are involved in identifying measures to avoid, minimize, offset, or accommodate the project's potential negative impacts on their rights related to the use of and access to traditional lands.

<sup>&</sup>lt;sup>2</sup> Government of Canada (2019). Reclaiming Power and Place: Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls. https://publications.gc.ca/site/eng/9.867037/publication.html

Concerns about the proponent's strategy for mitigating the effects of mining project-related economic boom and bust cycles on the social, economic, and health conditions of Indigenous communities and groups.

It is important that the proponent's impact statement take into account the concerns of Indigenous peoples and include a commitment by the proponent to respect the *United Nations Declaration on the Rights of Indigenous Peoples*.

Concerns about the stereotyping of First Nations arising from the socio-economic, health, and sociocultural portrait presented in the initial project description. It is important that the Lac-Simon Anishnabe Nation obtain funding to produce an adequate portrait itself.

It is important to adopt a harassment policy that includes training to make workers/employees aware of the impact of colonization, history, and resource exploitation on Indigenous communities and social structures, with a view to reducing racism against Indigenous people working for the project or living in neighbouring communities.

Information required on the proponent's intention to collaborate with employment and training organizations serving Indigenous populations so that the scope and details of project activities, such as the type and number of jobs available, can be shared with surrounding Indigenous communities.

Information required on measures planned to counter the project's potential impact on Indigenous school dropouts due to attractive mining salaries.

Information required on the jobs that would be available to Indigenous people, especially Indigenous women, and on the basic education that would be required for these jobs. It is important to adopt a well-defined and articulated strategy as well as measures to prioritize the hiring of Indigenous people or businesses in the project area.

Information required on possible compensation for Indigenous communities.

Information required on concrete economic and social benefits for the Lac-Simon Anishnabe Nation (excluding employment-related benefits).

Clarification required regarding the pressure on wildlife and land caused by the arrival of new residents, while taking into account existing problems of coexistence between different land users.

Information required on the potential health effects of contaminants released by the project, associated with their accumulation in traditional foods (such as caribou). It is important to consider the cultural and subsistence significance of traditional foods for Indigenous peoples.

Information required on the potential effects of risk perception associated with the project's chemical contamination of the land (particularly on the current use of lands by Indigenous populations) and the mitigation measures planned to deal with these effects.

Information required on the potential effects on established or asserted rights of the Lac-Simon Anishnabe Nation.

Funding request from the Lac-Simon Anishnabe Nation to the proponent for the assessment of potential effects on the Nation's environmental assets and cultural heritage, as well as on the current use of lands and resources for traditional purposes.

Request from the Lac-Simon Anishnabe Nation to the proponent to negotiate an impact benefit agreement.

Concerns of the Lac-Simon Anishnabe Nation about the proponent's commitment to maintain a relationship based on respect and reciprocity during the negotiation of the various protocols.

Importance of the Abitibiwinni First Nation's participation in the federal consultation and accommodation process and in the completion of a federal impact assessment to ensure consideration of the following potential effects:

- the environmental assets and cultural heritage of Indigenous Peoples;
- the current use of lands and resources for traditional purposes;
- things that is of historical, archaeological, paleontological, or architectural significance;
- the health, social, and economic conditions of the Indigenous peoples of Canada.

Concerns that the project's potential impact on animals, plants and traditional activities will extend far beyond the project site.

## 12. Navigation

Information required on watercourse properties, anticipated effects (permanent or temporary) on groundwater, watersheds, average flows, and water levels, and any other factors that may affect navigability.

Importance of addressing navigation-specific issues during consultations with Indigenous communities and tallymen.

#### 13. Cumulative effects

Concerns and need for information regarding the project's potential cumulative effects on the environment, considering its location; the former mining operations included in the three project sectors (Monique, Béliveau, and Bussière); the nearby intensive open-pit mining operations; and current and future development activities in the region (mining, forestry, etc.).

Information required on whether environmental offsets to improve environmental liabilities in the project catchment area are planned.

Concerns about the characterization of the reference state of the natural environment as part of the impact statement, which considers that the land is already impacted by intensive exploration activities. Need to establish a reference state representative of the conditions that existed prior to the start of exploration activities. It is suggested that the reference value should be that which existed on a pre-industrial time scale.

Concerns about establishing post-project restoration targets based on an already-impacted reference state. Need to establish restoration objectives in line with a healthy, balanced ecosystem.

Information required on the cumulative effects of the project on the lands of the Lac-Simon Anishnabe Nation, as well as on those of all other Indigenous peoples potentially affected by the project, in particular the cumulative effects on:

- surface water in rivers affected by the project and groundwater (esker);
- wetlands and bogs;
- the forest and its flora and fauna;
- biodiversity;
- woodland caribou habitat;
- the Lac Tiblemont watershed;
- water quality, fish populations and fish habitat;
- the use of and access to Indigenous peoples' traditional lands;
- socio-economic conditions due to reduced access to land and resources;
- reserve land close to the project area.

It is important to indicate the methodologies used in the cumulative effects assessment.

Information and studies required for the entire Harricana watershed to analyze the contamination produced by mining, forestry, agriculture, and other industries, and the impacts suffered by sturgeon, including bioaccumulation. Concerns about the capacity of the Harricana River watershed to accommodate new projects.

#### 14. Accidents and malfunctions

Information required on the development of an emergency response plan to, for example, safeguarding the integrity of eskers or limiting damage in the event of actual or potential contamination. Concerns about how to access or evacuate the site in case of an emergency. Information required on the potential impact of flooding or forest fires on the mine site. Concerns about the risk of fire interacting with hazardous materials. Information required on forecasts for these extreme events.

Need to identify gas pipelines in the vicinity of the project site.

15. Climate change and greenhouse gas (GHG) emissions

Information required on the environmental and economic costs of the project's energy use (electricity and hydrocarbons), including the GHGs associated with each energy source.

Information required on the extent to which the project will potentially exacerbate the climate and environmental crisis.

It is important to incorporate climate change into the project's impact study as some of the project's impacts could be exacerbated by these changes.

Information required on how the proponent plans to reduce GHGs by using renewable energies while avoiding the project's indirect impact on the environment.

It is recommended to add the release of carbon sequestered by vegetation destroyed as a result of the project to the project's GHG emission estimates, as well as any carbon that natural environments will not sequester as a result of project development.