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# **DRAFT ENVIRONMENTAL IMPACT STATEMENT GUIDELINES**

**Guidelines for the preparation of an  
Environmental Impact Statement (EIS) for an  
environmental assessment conducted pursuant to the  
*Canadian Environmental Assessment Act, 2012.***

**Rainy River Gold Project**

**Rainy River Resources Limited**

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**DISCLAIMER**

This document is not a legal authority, nor does it provide legal advice or direction; it provides information only, and must not be used as a substitute for the *Canadian Environmental Assessment Act, 2012 (CEAA, 2012)* or its regulations. In the event of a discrepancy, the *CEAA, 2012* and its regulations prevail. Portions of *CEAA, 2012* have been paraphrased in this document, but must not be relied upon for legal purposes.

# Part 1 - Background

## 1 INTRODUCTION

The purpose of this document is to identify for the proponent the information requirements for the preparation of an Environmental Impact Statement (EIS) for a designated project<sup>1</sup> to be assessed pursuant to the *Canadian Environmental Assessment Act, 2012 (CEAA, 2012)*. This document specifies the nature, scope and extent of the information required.

It is the responsibility of the proponent to provide sufficient data and analysis on any potential changes to the environment to permit a thorough evaluation of the environmental effects of the project by the Canadian Environmental Assessment Agency (the Agency). The EIS Guidelines set out minimum information requirements. It is the proponent's responsibility to provide any additional information required to assess the environmental effects of the project. Except where specified by the Agency, the proponent has the discretion to select the most appropriate methods to compile and present data, information and analysis in the EIS.

## 2 GUIDING PRINCIPLES

### 2.1 Environmental assessment as a planning tool

Environmental Assessment (EA) is a planning tool used to ensure that projects are considered in a careful and precautionary manner in order to avoid or mitigate the possible adverse effects of projects on the environment and to encourage decision makers to take actions that promote sustainable development.

### 2.2 Public participation

One of the purposes identified in subsection 4(1)(e) of *CEAA, 2012* is to ensure opportunities for meaningful public participation during an EA. The Act requires that the Agency provide the public with an opportunity to participate in the EA and an opportunity to comment on the draft EA report.

The overall objective of meaningful public participation is best achieved when all parties have a clear understanding of the proposed project as early as possible in the review process. The proponent is required to provide current information about the project to the public and especially to the communities likely to be most affected by the project.

### 2.3 Aboriginal consultation

One of the purposes of *CEAA, 2012* is to promote communication and cooperation with Aboriginal peoples, including First Nations, Inuit and Métis. To work toward this goal, the proponent must ensure that it engages with Aboriginal people and groups that may be affected by the project, or that have potential or established Aboriginal and Treaty rights and related interests in the project area, as early as possible in the project planning process.

All information gathered through the EA process and associated consultation and engagement with Aboriginal peoples will be used to inform decisions under *CEAA, 2012*, as well as the Crown's

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1 In this document, "project" has the same meaning as "designated project" as defined in the *CEAA, 2012*.

understanding of the potential adverse impacts of the project on potential or established Aboriginal and Treaty rights and related interests, and the effectiveness of measures proposed to avoid or minimise those impacts.

### **3 PREPARATION AND PRESENTATION OF THE EIS**

#### **3.1 Agency guidance**

The proponent is encouraged to consult relevant Agency [Policy and Guidance](#)<sup>2</sup> on topics to be addressed in the EIS. The proponent is further encouraged to consult with the Agency and federal authorities (see section 3.4.1) during the planning and development of the EIS materials.

#### **3.2 Study strategy and methodology**

The proponent is expected to respect the intent of the EIS Guidelines and to consider the effects that are likely to arise from the project (including situations not explicitly identified in these guidelines), the technically and economically feasible mitigation measures that will be applied, and the significance of any residual effects. It is possible that the EIS Guidelines may include matters that, in the judgement of the proponent, are not relevant or significant to the project. If such matters are omitted from the EIS, they must be clearly indicated and the justification for their conclusion provided so that the Agency, federal authorities, Aboriginal groups, the public and any other interested party have an opportunity to comment on this decision. Where the Agency disagrees with the proponent's decision, it may require the proponent to provide the specified information.

In describing methods, the proponent will document how it used scientific, engineering, traditional and local knowledge to reach its conclusions. Assumptions must be clearly identified and justified. All data, models and studies should be documented such that the analyses are transparent and reproducible. All data collection methods should be specified. The uncertainty, reliability and sensitivity of models used to reach conclusions should be indicated.

All significant gaps in knowledge and understanding related to key conclusions presented in the EIS should be identified. The steps to be taken by the proponent to address these gaps should also be identified. Where the conclusions drawn from scientific and technical knowledge are inconsistent with the conclusions drawn from traditional knowledge, the EIS will contain a balanced presentation of the issues and a statement of the proponent's conclusions.

#### **3.3 Integration of EA, Aboriginal and public consultation information**

In preparing the EIS, the proponent is encouraged to integrate Aboriginal and public consultation outcomes into the consideration and mitigation of environmental effects at the appropriate EA analytical steps shown on the next page (Figure 1). The proponent must ensure that public and Aboriginal concerns are well documented at each stage of the environmental assessment. The proponent must identify and explain all unresolved questions or concerns as part of its analysis of the impacts of the project.

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<sup>2</sup> <http://www.ceaa-acee.gc.ca/default.asp?lang=En&n=F1F30EEF-1>

This information will help the Crown assess adequacy of consultation, the as set out in the [Updated Guidelines for Federal Officials to Fulfill the Duty to Consult](#) (2011)<sup>3</sup>.

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<sup>3</sup> <http://www.aadnc-aandc.gc.ca/eng/1100100014680/1100100014681>

<sup>4</sup> <http://www.ceaa-acee.gc.ca/050/documents-eng.cfm?evaluation=80007>

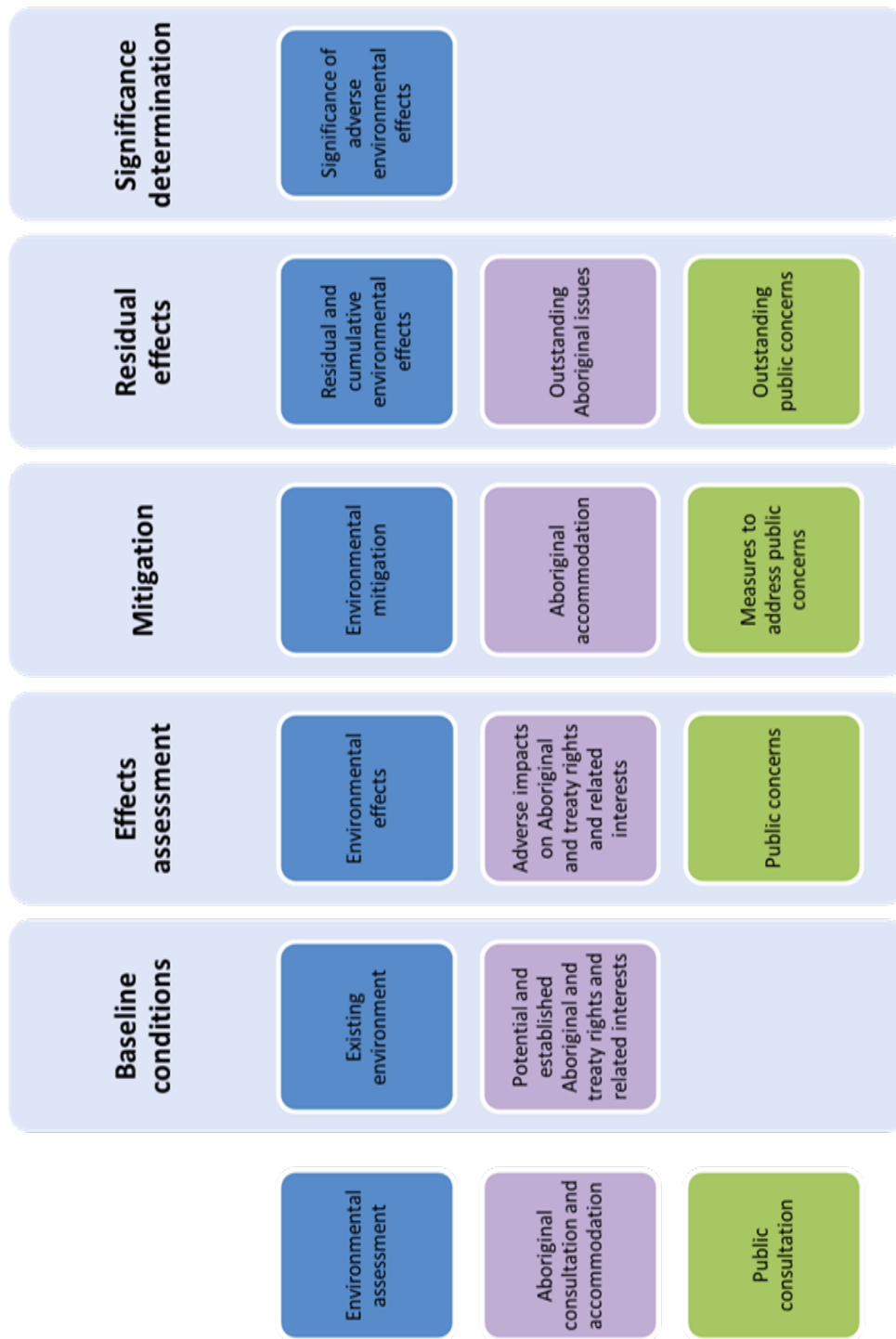


Figure 1. Integration of environmental assessment, Aboriginal and public consultation information into the Environmental Impact Statement.



### **3.4 Use of information**

#### **3.4.1 Scientific advice**

Section 20 of *CEAA, 2012* requires that every federal authority with specialist or expert information or knowledge with respect to a project subject to an EA make that information or knowledge available to the Agency. The Agency will advise the proponent of the availability of any pertinent information or knowledge so that it can be incorporated into the EIS, along with, as appropriate, expert and specialist knowledge provided by other levels of government.

#### **3.4.2 Community knowledge and Aboriginal traditional knowledge**

Sub-section 19(3) of the Act states that “community knowledge and Aboriginal traditional knowledge may be considered in conducting an EA”. For the purposes of these guidelines, community knowledge and Aboriginal traditional knowledge should be understood to refer to knowledge acquired and accumulated by a community or an Aboriginal community, through generations of living in close contact with nature.

The proponent shall incorporate into the EIS the community and Aboriginal traditional knowledge to which it has access or that is acquired through Aboriginal engagement activities, in keeping with appropriate ethical standards and without breaking obligations of confidentiality, if any. Agreement should be obtained from Aboriginal groups regarding the use, management and protection of their existing traditional knowledge information during and after the EA.

#### **3.4.3 Existing information**

In preparing the EIS, the proponent is encouraged to make use of existing information relevant to the project. However, when relying on existing information to meet requirements of the EIS Guidelines, the proponent must either include the information directly in the EIS or clearly direct the reader to where it may obtain the information (i.e., through cross-referencing). When relying on existing information, the proponent must also comment on how the data have been applied to the project, clearly separate factual lines of evidence from inference, and state any limitations on the inferences or conclusions that can be drawn from the existing information.

#### **3.4.4 Confidential information**

In implementing CEAA 2012, the Government of Canada is committed to promoting public participation in the environmental assessment of projects and providing access to the information on which environmental assessments are based. All documents prepared or submitted by the proponent or any other stakeholder in relation to the environmental assessment are included in the Canadian Environmental Assessment Registry (CEAR) and made available to the public on request. For this reason, the EIS should not contain:

- information that is sensitive or confidential (i.e. financial, commercial, scientific, technical, personal, cultural or other nature), that is treated consistently as confidential, and the person affected has not consented to the disclosure; or,
- information that is likely to endanger the life, liberty or security of a person through its disclosure.

The proponent must advise the public and Aboriginal communities that all information in the EIS is considered public. The proponent should consult with the Agency regarding whether specific information requested through these guidelines should be treated as confidential.

### **3.5 Presentation and organization of the EIS**

To facilitate the identification of the documents submitted and their placement in the Canadian Environmental Assessment Registry, the title page of the EIS and its related documents should contain the following information:

- project name and location;
- title of the document, including the term “environmental impact statement”;
- subtitle of the document;
- name of the proponent; and
- the date.

The EIS should be written in clear, precise language. A glossary defining technical words, acronyms and abbreviations shall be included. The proponent shall provide charts, diagrams, tables, maps and photographs, where appropriate, to clarify the text. Perspective drawings that clearly convey the various components of the project shall also be provided. Wherever possible, maps shall be presented in common scales and datum to allow for comparison and overlay of mapped features.

For purposes of brevity and to avoid repetition, cross-referencing is preferred. The EIS may make reference to the information that has already been presented in other sections of the document, rather than repeating it. The exception to this preference is the cumulative effects assessment, which should be provided in a stand-alone section as described in section 12.1.2. Detailed studies (including all relevant and supporting data and methodologies) shall be provided in separate appendices and shall be referenced by appendix, section and page in the text of the main document of the EIS. A complete list of supporting literature and references should also be provided.

The proponent is encouraged to prepare an EIS that meets the requirements of the provincial and federal processes. If the proponent chooses this option, a Table of Concordance, which cross references the information presented in the EIS with the information requirements identified in the EIS Guidelines, should be provided. The proponent shall provide and or distribute a number of copies of the EIS for distribution (the number of which will be specified at a later time) an electronic version in an unlocked, searchable PDF format. This also applies to the summary that is to be provided as a separate document. It is strongly recommended that the proponent have the summary translated into the appropriate Aboriginal language(s) in order to facilitate consultation activities during the environmental assessment (and requisite number of printed copies to be distributed to recipients to be specified at a later date).

The EIS shall specify the organization of the document. This should include a list of all tables, figures, and photographs referenced in the text of the EIS. A Table of Concordance, which cross references the information presented in the EIS with the information requirements identified in the EIS Guidelines, should be provided.

# Part 2 – Content and Structure of the EIS

## 4 EXECUTIVE SUMMARY

The proponent will prepare a summary of the EIS which will include the following:

- a concise description of all key components of the project;
- a summary of the consultation conducted with Aboriginal groups, the public, and government agencies, including a summary of the issues raised and the proponent's responses;
- an overview of the key effects of the project and proposed technically and economically feasible mitigation measures; and
- the proponent's conclusions on the environmental effects of the project and the significance of adverse environmental effects after taking mitigation commitments into account.

The summary is to be provided as a separate document, in French and English. It is to include a summary of the EIS, the proponent's analysis approach, and the activities conducted for data collection and consultations. The summary must have a sufficient level of detail for the reader to learn and understand the entire project, the potential impacts, the measures proposed by the proponent, the residual effects and the conclusions. The proponent is advised to follow the outline provided in Appendix A.

## 5 INTRODUCTION AND PROJECT OVERVIEW

### 5.1 Project overview and Geographical setting

The proponent shall summarize the project, by presenting the project components, associated and ancillary works, activities, scheduling details, the timing of each phase of the project and other characteristics that will assist in understanding the environmental effects. If the project is part of a larger sequence of projects, the proponent shall outline the larger context and present the relevant references, if available.

The EIS shall include expanded descriptions of the construction, operation, maintenance, foreseeable modifications, and where relevant, closure, decommissioning and restoration of sites and facilities associated with the proposed project.

This would include detailed descriptions of the activities to be carried out during each phase, the location of each activity, expected outputs and an indication of the activity's magnitude and scale.

Although a complete list of project activities is required, the emphasis should be on activities with the greatest potential to have environmental effects. Sufficient information should be included to predict environmental effects and address public concerns identified. Highlight activities that involve periods of increased environmental disturbance or the release of materials into the environment.

The EIS shall include a detailed schedule including time of year, frequency, and duration for all project activities.

The EIS should contain a concise description of the geographical setting in which the project will take place, including a map of the project's location at an appropriate scale. The location map should include the boundaries of the proposed site including UTM coordinates, the major existing infrastructure, adjacent land uses and any important environmental features. In addition, site plans/sketches and photographs

showing project location, site features and the intended location of project components should be included.

This description should focus on those aspects of the project and its setting important for understanding the potential environmental effects of the project. The description should address the natural and human elements of the environment in order to explain the interrelationships between the biophysical environment and people and communities. The following information must be included:

- environmentally sensitive areas, such as national, provincial and regional parks, ecological reserves, wetlands, estuaries, and habitats of provincial or federally listed species at risk and other sensitive areas;
- current land use in the area and the relationship of the project facilities and components with any federal lands;
- local communities;
- traditional Aboriginal territories, treaty lands, Indian reserve lands
- the UTM coordinates of the main project site; and
- the environmental significance and value of the geographical setting in which the project will take place and the surrounding area.

The EIS will provide expanded description and mapping of the project location, including each of the project components as outlined in section 6.3 of this document.

## **5.2 Regulatory framework and the role of government**

To understand the context of the EA, this section should identify, for each jurisdiction, the government bodies involved in the EA as well as the EA processes. More specifically identify:

- any federal power duty or function to be exercised that may permit the carrying out (in whole or in part) of the project or associated activities
- the environmental and other specific regulatory approvals and legislation that are applicable to the project at the federal, provincial, regional and municipal levels;
- government policies, resource management, planning or study initiatives pertinent to the project and/or EA and discuss their implications;
- policies and guidelines of the Aboriginal groups being consulted that are pertinent to the project and/or EA and discuss their implications;
- any treaty or self government agreements with Aboriginal groups that are pertinent to the project and/or EA;
- any relevant Land Use Plans, Land Zoning, or Community Plans;
- major components of the project and identify those being applied for and constructed within the duration of approvals under provincial and federal legislation; and
- in a summary form the regional, provincial and/or national objectives, standards or guidelines that have been used by the proponent to assist in the evaluation of any predicted environmental effects.

## **5.3 Participants in the environmental assessment**

Clearly identify the main participants in the EA including jurisdictions other than the federal government, Aboriginal groups, community groups, and environmental organizations.

## 6 PROJECT DESCRIPTION

The scope of project for the purposes of the EA includes the components, activities and federal decisions in sections 6.1, 6.4.1 and in the [Project Description](#) (August 2012)<sup>4</sup>. The proponent will consider all the components, activities and federal decisions identified within these sections and the project description document as part of the effects assessment.

### 6.1 The proponent

The proponent shall:

- provide contact information (e.g. name, address, phone, fax, email)
- identify itself and the name of the legal entity that would develop, manage and operate the project;
- explain corporate and management structures, as well as insurance and liability management related to the project;
- specify the mechanism used to ensure that corporate policies will be implemented and respected for the project;
- summarize key elements of its environment, health and safety management system and discuss how the system will be integrated into the project; and
- identify key personnel, contractors, and/or sub-contractors responsible for preparing the EIS.

### 6.2 Purpose of the project

The proponent shall establish the fundamental rationale for the project, explaining the background, the problems or opportunities that project is intended to satisfy and the stated objectives. The 'purpose of' the project should be established from the perspective of the proponent. If the objectives of the project are related to or contribute to broader private or public sector policies, plans or programs, this information should also be included.

### 6.3 Scope of Project

#### 6.3.1 Designated project

Based on the information contained in the project description received from the proponent, the Agency defines the scope of the project to be assessed as a minimum all components, infrastructure, ancillary structures associated with the following:

- an open-pit and underground mine;
- mineral waste stockpile(s);
- primary crusher and processing plant;
- tailings management area;
- transmission line;
- relocation of gravel-surfaced Highway 600;
- associated buildings, facilities and infrastructure: garage, warehouse and administration complex, potential accommodations complex(es), fuel storage, laydown area(s), explosives manufacturing and storage facilities, access roads and nonhazardous waste facilities; and
- related piping and power infrastructure as needed.

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<sup>4</sup> <http://www.ceaa-acee.gc.ca/050/documents-eng.cfm?evaluation=80007>

## **6.4 Project Description**

Rainy River Resources Limited is proposing the construction, operation and decommissioning of an open-pit and underground gold mine. The proposed mine site is in the Township of Chapple, Ontario, approximately 65 kilometres northwest of Fort Frances.

Open-pit mining is proposed to occur at a rate of approximately 18,000 to 20,000 tonnes per day of ore production. The underground component will produce approximately 2,000 tonnes per day of ore, mined at a depth of 800 metres below the surface. The anticipated mine life is approximately 15 to 20 years. As part of the project, the proponent is also proposing to realign a portion of Highway 600 south of the intended mine site before it is reconnected to the existing local road network. Power for later construction and operations phases is proposed to be supplied by a 230-kilovolt transmission line connected to the existing Hydro One Networks Inc. line, approximately 20 kilometres northeast of the proposed mine site.

### **6.4.1 Decisions by federal authorities**

In order for the project and/or associated physical activities to be carried out in whole or in part, federal authorities may be required to exercise a power or perform a duty or function (other than under *CEAA, 2012*). Table 1 summarizes the types of Federal approvals that are likely to be required for the project.

**Table 1: Potential Federal Approvals**

<b>Permit/License Responsible</b>	<b>Agency</b>	<b>Rationale</b>
<i>Fisheries Act</i> Authorization(s) for Harmful Alteration, Disruption or Destruction of Fish Habitat	Fisheries and Oceans Canada	Potentially required for the infilling of water bodies to establish mine rock stockpile(s) and TMA; Highway 600 and mine access, creek crossings; in-water structures such as for freshwater taking; watercourse diversions / re-routing; and/or mine dewatering groundwater effects that would cause permanent alteration or destruction to watercourses supporting fisheries.
<i>Navigable Waters Protection Act</i> Review of Works in Navigable Waters	Transport Canada	Potentially required for alteration of Navigable Waters, such as through establishment of a road crossing(s) over the Pinewood River (if determined to be a Navigable Water); and potentially for the construction of transmission line crossing(s) over Navigable Waters (if not meeting the Operational Standard).
<i>Fisheries Act - Metal Mining Effluent Regulations (MMER)</i> Schedule 2 Listing	Environment Canada	It is expected that the overprinting of waters frequented by fish by tailings and mine rock stockpiles (or other deleterious material) may be necessary and will also require a listing under Schedule 2 of the Federal MMER, pursuant to the Fisheries Act.
<i>Explosives Act</i> Explosives Licence	Natural Resources Canada	Mining operations will be supported by the development of an explosives manufacturing and storage facility. Natural Resources Canada may take action in relation to paragraph 7(1)(a) of the <i>Explosives Act</i> .

## **7 SCOPE OF ASSESSMENT**

### **7.1 Factors to be considered**

#### **7.1.1 Effects of the project on the environment**

The proponent will identify the Environmental Components (ECs) deemed appropriate to ensure the full consideration of the factors listed in subsection 19(1) of CEAA, 2012 as well as the 2012 amendment to

section 79 of the Species at Risk Act. A list of minimum required ECs is provided in section 9.1 of this document. This list must be completed according to the evolution and design of the project and according to the knowledge acquired on the environment and on public and Aboriginal concerns. The proponent will describe how other ECs were selected.

The ECs should be described in sufficient detail to allow the reviewer to understand their importance and assess the potential for environmental effects arising from the project activities. The rationale for selecting these components as ECs and for excluding others should be stated. Challenges may arise regarding particular exclusions, so it is important to document the information and the criteria used to make each determination. Examples of justification include primary data collection, computer modelling, literature references, public consultation, expert input or professional judgement.

#### **7.1.2 Effects of potential accidents or malfunctions**

The proponent must identify the probability of potential accidents and malfunctions related to the project, including an explanation of how those events were identified, potential consequences (including the environmental effects), the worst case scenarios and the effects of these scenarios.

The geographical and temporal boundaries for the assessment of malfunctions and accidents may be different than those in the scope of factors for each EC. This must include an identification of the magnitude of an accident and/or malfunction, including the quantity, mechanism, rate, form and characteristics of the contaminants and other materials likely to be released into the environment during the accident and malfunction events.

The EIS must also describe the safeguards that have been established to protect against such occurrences and the contingency/emergency response procedures in place if accidents and/or malfunctions do occur. Detailed contingency and response plans should be presented.

#### **7.1.3 Effects of the environment on the project**

The EIS must take into account how local conditions and natural hazards, such as severe and/or extreme weather conditions and external events (e.g. drought, flooding, ice jams, landslides, avalanches, fire, outflow conditions and seismic events) could adversely affect the project and how this in turn could result in impacts to the environment (e.g., extreme environmental conditions result in malfunctions and accidental events). These events should be considered in different probability patterns (i.e. 5-year flood vs. 100-year flood). Longer-term effects of climate change must also be discussed up to the projected post-closure phase of the project. This discussion should include a description of climate data used.

The EIS must provide details of a number of planning, design and construction strategies intended to minimize the potential environmental effects of the environment on the project.

### **7.2 Scope of the factors**

Scoping establishes the boundaries of the EA and focuses the assessment on relevant issues and concerns. The spatial and temporal boundaries used in the assessment may vary depending on the EC.

#### **7.2.1 Spatial boundaries**

The EIS will clearly indicate the spatial boundaries to be used in assessing the potential adverse environmental effects of the proposed project and provide a rationale for each boundary. It is recognized that the spatial boundaries for each EC may not be the same.



Study boundaries must be defined taking into account as applicable the appropriate scale and spatial extent of potential environmental effects, community and Aboriginal traditional knowledge, current land and resource use by Aboriginal groups, ecological, technical and social and cultural considerations. The description of the project setting must be presented in sufficient detail to address the relevant environmental effects of the project.

The proponent is advised to consult with the Agency, federal and provincial government departments and agencies, local government and Aboriginal groups, and take into account public comment when defining the spatial boundaries used in the EIS.

#### 7.2.2 Temporal boundaries

The temporal boundaries of the EA should span all phases of the project: construction, operation, maintenance, foreseeable modifications, and where relevant, closure, decommissioning and restoration of the sites affected by the project. Temporal boundaries shall also consider seasonal and annual variations related to ECs for all phases of the project, where appropriate. Community and Aboriginal traditional knowledge should factor into decisions around appropriate temporal boundaries.

If the temporal boundaries do not span all phases of the project, the EIS must identify the boundaries used and provide a rationale.

## **8 ALTERNATIVE MEANS OF CARRYING OUT THE PROJECT**

The EIS must identify and consider the effects of alternative means of carrying out the project that are technically and economically feasible. The proponent will complete the following procedural steps for addressing alternative means:

- identify the alternative means to carry out the project.
  - develop criteria to determine the technical and economic feasibility of the alternative means; and,
  - identify those alternative means that are technically and economically feasible, describing each alternative means in sufficient detail.
- identify the effects of each alternative means.
  - identify those elements of each alternative means that could produce effects in sufficient detail to allow a comparison with the effects of the project; and
  - the effects referred to above include both environmental effects and potential adverse impacts on potential or established Aboriginal and Treaty rights and related interests.
- identify the preferred means.
  - identify the preferred means based on the relative consideration of effects; and of technical and economic feasibility; and
  - determine criteria to examine the effects of each remaining alternative means to identify the preferred means.

### **8.1 Assessment of alternatives for mine waste disposal**

With respect to the assessment of alternative means of disposing of mine waste, the following guidance is intended to assist the proponent in developing a robust assessment of alternatives. The proponent is strongly encouraged to utilize the methodology provided by Environment Canada, outlined below, to

conduct a robust and thorough assessment of alternatives for mine waste disposal. The proponent shall also continue to meet with involved parties to ensure that their concerns and input are addressed in the alternatives analysis.

The proponent has identified the potential need to use natural water bodies frequented by fish for the disposal of mine waste, including tailings and waste rock, and for the management of process water. Before any fish frequented natural water bodies can be used for mine waste disposal, the Metal Mining Effluent Regulations would need to be amended to add these water bodies to Schedule 2 to designate them as Tailings Impoundment Areas (TIAs). This regulatory process would not be initiated until a detailed assessment of alternatives for mine waste disposal has been undertaken by the proponent. As per Section 8, the EIS shall also include an assessment of the alternative means of carrying out the Project, which includes the disposal of mine waste.

It is strongly recommended that the proponent undertake the assessment of alternatives for mine waste disposal as a component of the EIS to streamline the overall regulatory review process and minimize the time required to proceed with the MMER amendment process.

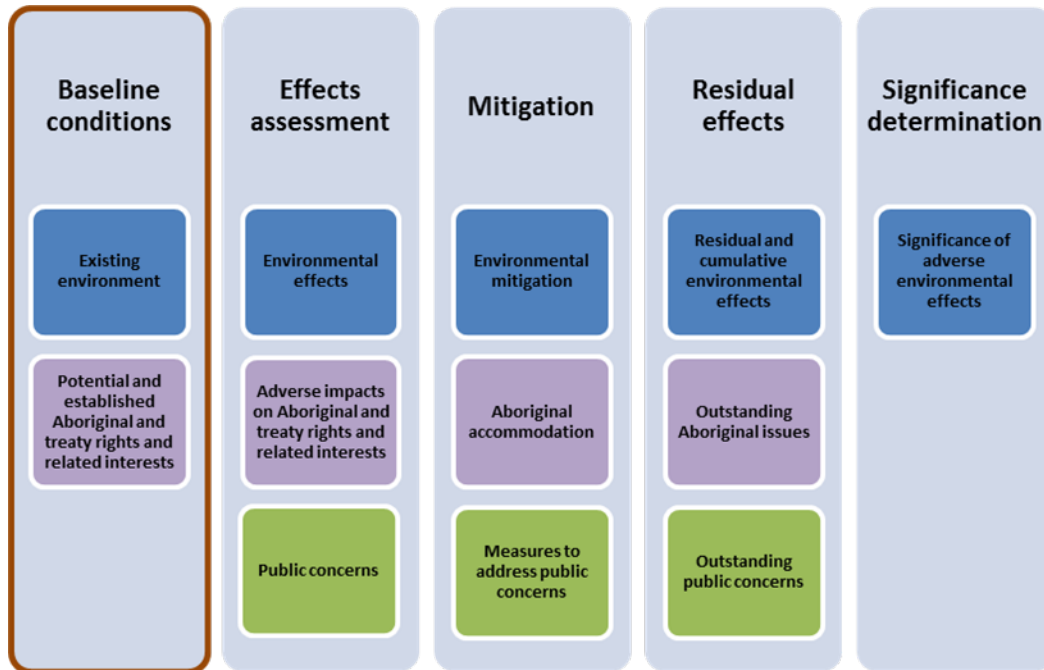
The assessment of alternatives for mine waste disposal should objectively consider all available options for mine waste disposal, including one that does not impact a natural water body frequented by fish. This assessment should qualitatively and quantitatively assess the environmental, technical and socio-economic aspects of each alternative. Both the short term impacts of each alternative and the long term risks through the closure and post-closure phases should be assessed. The assessment of alternatives for mine waste disposal needs to include all aspects of the Project that may contribute to the predicted impacts associated with the proposed TIA. The economic component of the assessment for mine waste alternatives should consider the full costs of each alternative throughout the mine life cycle, from construction through post-closure, including long term maintenance and monitoring requirements, as well as costs associated with the legislated requirement for a compensation plan to offset fish habitat loss.

For further guidance, the proponent should consult Environment Canada's [Guidelines for the Assessment of Alternatives for Mine Waste Disposal](#) (2011)<sup>5</sup>.

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<sup>5</sup> <http://www.ec.gc.ca/pollution/default.asp?lang=En&n=C6A98427-1>

## 9 BASELINE CONDITIONS



### 9.1 Existing environment

#### 9.1.1 Methodology

The EIS must include a description of the environment, including the components of the existing environment and environmental processes, their interrelations and interactions as well as the variability in these components, processes and interactions over time scales appropriate to the EIS. The description should be sufficiently detailed to characterize the environment before any disturbance to the environment due to the project and to identify, assess and determine the significance of the potential adverse environmental effects of the project. In describing the physical and biological environment, the proponent should take an approach that considers both scientific and traditional knowledge. The proponent must identify and justify the indicators and measures of ecosystem health and integrity used for analysis.

For the biophysical environment, baseline data in the form of inventories alone are not sufficient to assess effects. The proponent shall consider the resilience of relevant species populations, communities and their habitats. The proponent shall summarize all pertinent historical information on the size and geographic extent of relevant animal populations as well as density, based on best available information. Where little or no information is available, specific studies shall be designed to gather further information on species populations and densities.

The habitat at regional and local scales should be defined by type of use, frequency and duration (e.g. spawning, breeding, migration, feeding, nursery, rearing, wintering). The assessment must cover all relevant seasonal variations in the use by all ECs as appropriate. Emphasis must be on those species, communities and processes identified as ECs. However, the interrelations of these components and their relation to the entire ecosystem and communities of which they are a part must be indicated. The proponent must address issues such as habitat, nutrient and chemical cycles, food chains, productivity, to

the extent that they are appropriate to understanding the effect of the project on ecosystem health and integrity. Range and probability of natural variation over time must also be considered.

If the baseline data have been extrapolated or otherwise manipulated to depict environmental conditions in the study areas, modelling methods and equations must be described and must include calculations of margins of error and other relevant statistical information, such as confidence intervals and possible sources of error.

### 9.1.2 Environmental components

The definition of environmental components should be interpreted broadly when evaluating whether the project may result in environmental effects under *CEAA, 2012*. Based on the scope of project described in section 6 and in the project description document, the following ECs should be identified and described in the relevant sections of the EIS:

- acoustic environment;
- aquatic environment, including:
  - fish, including *parts of fish*, shellfish, crustaceans, marine animals and any parts of shellfish, crustaceans or marine animals, and the eggs, sperm, larvae, spat and juvenile stages of fish, shellfish, crustaceans and marine animals,
  - fish habitat, including spawning grounds and any other areas, including nursery, rearing, food supply and migration areas, on which fish depend directly or indirectly in order to carry out their life processes, and
  - marine plants, including all benthic and detached algae, marine flowering plants, brown algae, red algae, green algae and phytoplankton;
  - aquatic species which are listed under the *Species at Risk Act*;
- atmospheric environment, including air quality;
- climate;
- fauna, including:
  - migratory birds listed under the *Migratory Birds Convention Act*, and migratory bird habitat that is likely to be affected by the project, and
  - potential or known wildlife species in the project area, which are listed under the *Species at Risk Act* or other provincial or territorial endangered species legislation, and critical habitat that are likely to be affected by the project;
- flora, including potential or known plant species in the project area, which are listed under the *Species at Risk Act* or other provincial or territorial endangered species legislation, and critical habitat that are likely to be affected by the project;
- wetlands;
- geology and geochemistry;
- terrain, soils and sediment;
- water quality and quantity including:
  - hydrology and hydrogeology;
  - water quality and aquatic ecology; and
  - sediment quality and benthos.

The species selected within each biotic EC should include those of importance to health and socio-economic conditions, cultural heritage and the current use of land and resources for traditional purposes by Aboriginal persons.

### 9.1.3 Human environment

The definition of the human environment should be interpreted broadly. Based on the scope of project described in section 6, the following elements should be identified and described in the relevant sections of the EIS:

- land use context;
- health and socio-economic conditions;
- physical and cultural heritage, including structures, sites or things of historical, archaeological, paleontological or architectural significance;
- current use of land and resources for traditional purposes by Aboriginal persons; and
- navigable waters.

In describing the socio-economic environment, the proponent must provide information on the functioning and health of the socio-economic environment, encompassing a broad range of matters that affect communities and Aboriginal peoples in the study area in a way that recognizes interrelationships, system functions and vulnerabilities. A description of the rural and urban settings likely to be affected by the project should be provided.

In describing physical and cultural heritage, the proponent must provide information on heritage resources, including structures, sites or things of historical, archaeological, paleontological or architectural significance.

In describing current uses of land and resources by Aboriginal groups for traditional purposes, the proponent should include activities related, but not limited, to hunting, fishing, trapping, cultural and other traditional uses of the land (e.g. collection of medicinal plants, use of sacred sites). Potential effects on current uses include access to areas that are of importance or concern to Aboriginal groups.

## **9.2 Potential or established Aboriginal and Treaty rights and Related Interests**

The proponent must ensure that it engages with Aboriginal groups which have potential or established Aboriginal or Treaty rights, or related interests, which could potentially be impacted by the Project. In preparing the EIS, the proponent must ensure that Aboriginal groups, especially those most likely to be affected by the Project, have access to timely and relevant information that they require in respect of the Project and how the Project may adversely impact them.

For the Aboriginal groups previously identified by the Agency, the proponent will hold meetings and facilitate these by making key EA summary documents (baseline studies, draft/Final EIS and key findings) accessible and making plain language summaries of these documents available in English, French, and Ojibwe.

At a minimum, the EIS will summarize available information on the potential or established Aboriginal and Treaty rights and related interests of the named Aboriginal groups that have the potential to be adversely impacted by the project. As part of this summary, the EIS will include for each Aboriginal group:

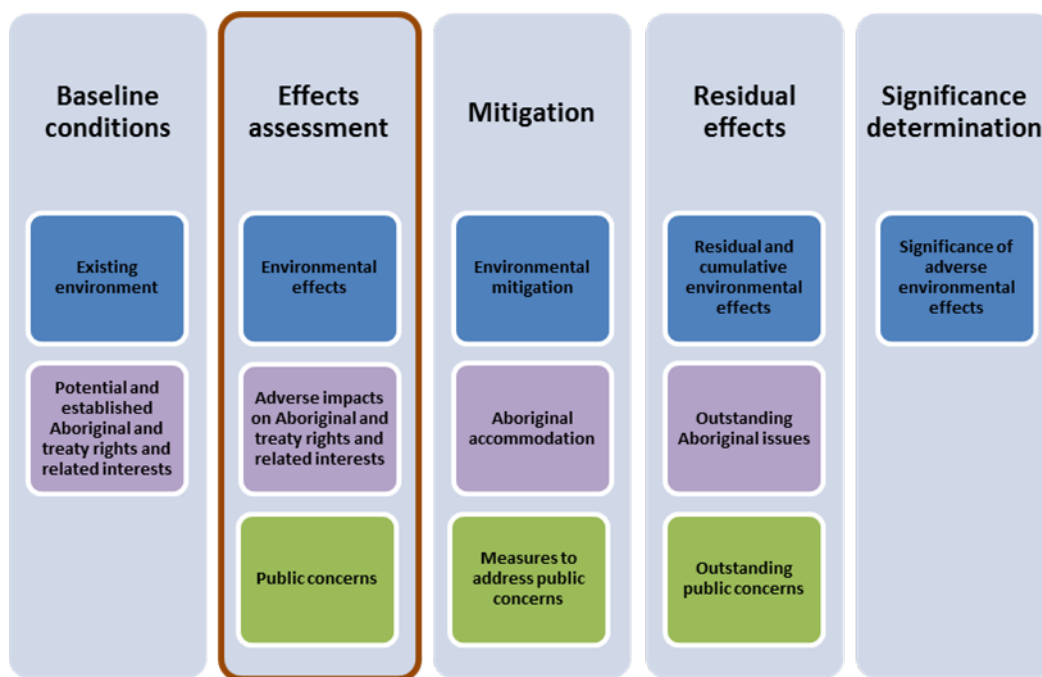
- background information and a map of the group's traditional territory;

- a summary engagement activities conducted prior to the submission of the EIS, including the date and means of engagement (e.g., meeting, mail, telephone);
- information on each group’s potential or established rights (including geographical extent, nature, frequency, timing), including maps and data sets (e.g. fish catch numbers) when this information is provided by a group to the proponent;
- an overview of key comments and concerns provided by each group to the proponent;
- responses provided by government and/or the proponent, as appropriate; and
- future planned engagement activities.

The Agency will provide additional instructions to the proponent in cases where further research and/or consultation effort is required to support Canada’s ability to fulfil the duty to consult with one or more Aboriginal groups that may be adversely affected by the project.

Should the proponent have knowledge of potential adverse impacts to an Aboriginal group not previously identified by the Agency, the proponent should bring this to the attention of the Agency at the earliest opportunity.

## 10 EFFECTS ASSESSMENT



### 10.1 Environmental effects

#### 10.1.1 Methodology

The proponent shall indicate the project’s effects during construction, operation, maintenance, foreseeable modifications, and where relevant, closure, decommissioning and restoration of sites and facilities associated with the project, and describe these effects using appropriate criteria. To the maximum extent possible, this documentation should include, for each potential project-related environmental effect, an indication of the nature of the effect, mechanism, magnitude, direction, duration, frequency and timing, geographic extent, and the degree to which it may be reversible. The proponent

shall consider both the direct and indirect, reversible and irreversible, short- and long-term environmental effects of the project. In predicting and assessing the project's effects, the proponent shall indicate important details and clearly state the elements and functions of the environment that may be affected, specifying the location, extent and duration of these effects and their overall impact.

The assessment of the effects of each of the project components and physical activities, in all phases, shall be based on a comparison of the biophysical and human environments between the predicted future conditions with the project and the predicted future conditions without the project. In undertaking the environmental effects assessment, the proponent will use best available information and methods. All conclusions must be substantiated. Predictions shall be based on clearly stated assumptions. The proponent shall describe how it has tested each assumption. With respect to quantitative models and predictions, the proponent shall discuss the assumptions that underlie the model, the quality of the data and the degree of certainty of the predictions obtained.

#### *Risk assessment framework*

The proponent is expected to employ standard ecological risk assessment frameworks that categorize the levels of detail and quality of the data required for the assessment. These tiers are as follows:

- Tier 1: qualitative (expert opinion, including traditional and local knowledge, literature review, and existing site information);
- Tier 2: semi-quantitative (measured site-specific data and existing site information); and
- Tier 3: quantitative (recent field surveys and detailed quantitative methods).

Thus, if the Tier 2 assessment still indicates a potential for effects to ECs, a Tier 3 assessment would need to be conducted to reduce the level of uncertainty. If the risk characterization component is uncertain this may necessitate the probabilistic modelling of the population-level consequences of the proposed project.

#### *Impact matrix*

An impact matrix methodology in combination with identification of ECs should be used to evaluate various social and environmental effects of the proposed project, including those related to Aboriginal peoples. The assessment should include the following general steps:

- identification of the activities and components of the project;
- predicting/evaluating the likely effects on identified valued components;
- identification of technically and economically feasible mitigation measures for any significant adverse environmental effects;
- determination of any residual environmental effects;
- ranking of each residual adverse environmental effect based on various criteria; and
- determination of the potential significance of any residual environmental effect following the implementation of mitigation.

#### *Application of precautionary approach*

In documenting the analyses included in the EIS, the proponent shall:

- demonstrate that all aspects of the project have been examined and planned in a careful and precautionary manner in order to ensure that they would not cause serious or irreversible damage

- to the environment, especially with respect to environmental functions and integrity, system tolerance and resilience, and/or the human health of current or future generations;
- outline and justify the assumptions made about the effects of all aspects of the project and the approaches to minimize these effects;
- ensure that in designing and operating the project, priority has been and would be given to strategies that avoid the creation of adverse effects;
- develop contingency plans that explicitly address accidents and malfunctions; and
- identify any proposed follow-up and monitoring activities, particularly in areas where scientific uncertainty exists in the prediction of effects.

### 10.1.2 Changes to the environment

Section 5 of *CEAA, 2012* describes specific categories of direct and indirect environmental effects that must be considered in the EA (see Figure 2).

#### *Changes to components of the environment within federal jurisdiction*

The EIS will include a stand-alone section that summarises those changes that may be caused by the project on the components of the environment listed in paragraph 5(1)(a) of *CEAA, 2012*, namely fish and fish habitat, aquatic species within the meaning of *Species at Risk Act* and migratory birds.

#### *Changes to the environment that would occur on federal or transboundary lands*

The EIS will include a stand-alone section that summarises any change the project may cause to the environment that may occur on federal lands or lands outside the province in which the project is to be located (including outside of Canada).

#### *Changes to the environment that are directly linked or necessarily incidental to federal decisions*

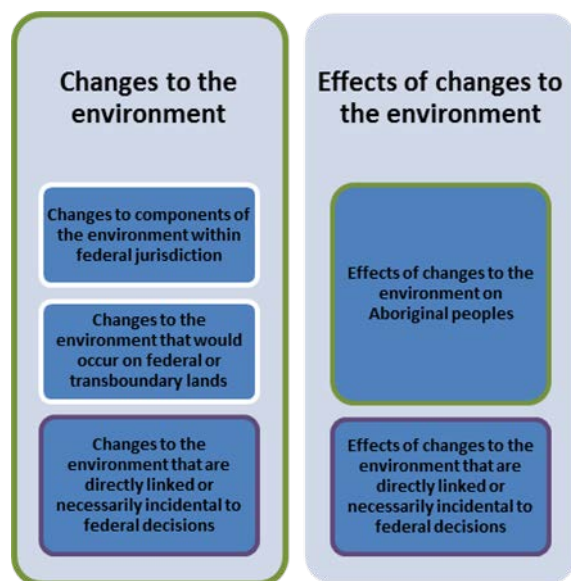
In situations where the project requires one or more federal decisions identified in section 6.4.1, the EIS will also include a stand-alone section that describes any change that may be caused by the project on the environment that is directly linked or necessarily incidental to these decisions.

These descriptions shall be integrated into the sections on effects assessment of each component identified in section 9.1.

### 10.1.3 Effects of changes to the environment

#### *Effects of changes to the environment on Aboriginal peoples*

The EIS will describe the effects of any changes the project may cause to the environment, with respect to Aboriginal peoples, on health and socio-economic conditions, physical and cultural heritage, the current use of lands and resources for traditional purposes, or any structure, site or thing that is of historical, archaeological, paleontological or architectural significance.





### *Effects of changes to the environment that are directly linked or necessarily incidental to federal decisions*

In situations where the EIS has identified changes to the environment that are directly linked or necessarily incidental to federal decisions identified in section 6.4.1, the EIS will also include a stand-alone section that describes the effects of these changes on health and socio-economic conditions, physical and cultural heritage, or any structure, site or thing that is of historical, archaeological, paleontological or architectural significance, other than as they pertain to Aboriginal peoples (who are considered in the previous section).

## **10.2 Adverse Impacts on Aboriginal and Treaty Rights and Related Interests**

The EIS will describe the potential adverse impacts of the project on the ability of Aboriginal peoples to exercise the potential or established Aboriginal and Treaty rights and related interests identified in section 9.2. As part of this description, this section will summarise:

- potential adverse impacts (on potential or established Aboriginal and Treaty rights and related interests) that were identified through the environmental effects described in sections 10.1.2 and 10.1.3;
- specific issues and concerns raised by Aboriginal groups in relation to the potential adverse impacts of the project on potential or established Aboriginal and Treaty rights and related interests;
- where and how Aboriginal traditional knowledge or other Aboriginal views were incorporated into the consideration of environmental effects and potential adverse impacts on potential or established Aboriginal and Treaty rights and related interests; and
- efforts undertaken to engage with Aboriginal groups as part of collecting the information identified above.

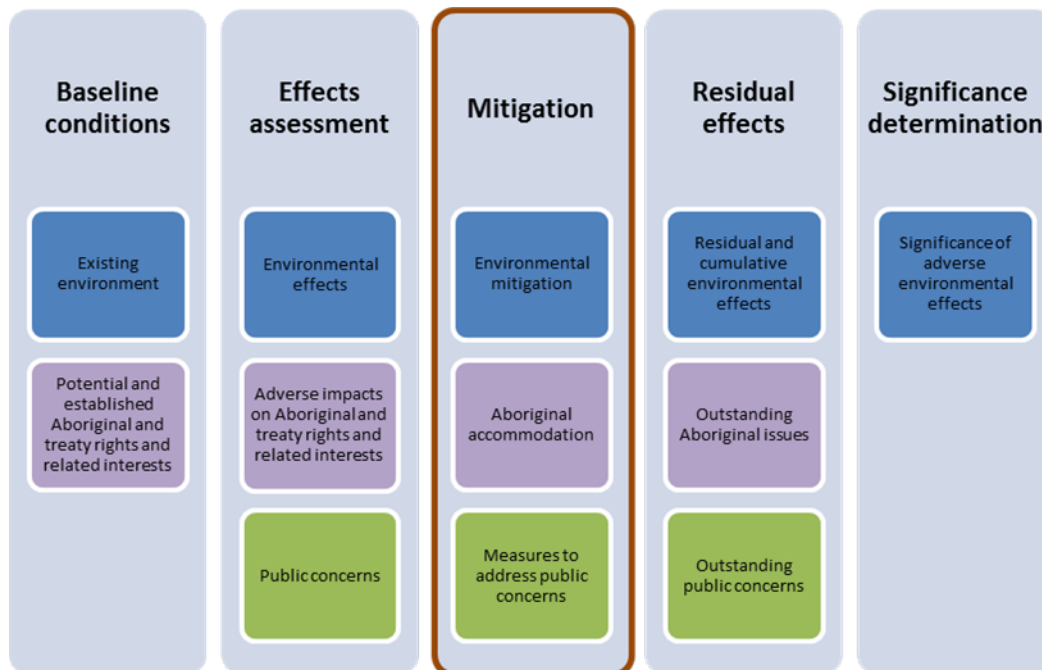
The assessment of the potential adverse impacts of each of the project components and physical activities, in all phases, shall be based on a comparison of the exercise of the identified rights between the predicted future conditions with the project and the predicted future conditions without the project. It is recommended that the impact matrix methodology described in section 10.1.1 be adapted for this purpose.

## **10.3 Public concerns**

This section will provide a summary of public concerns raised in relation to the project, including through public consultation conducted prior to the preparation of the EIS.

For any consultations undertaken with the general public, the EIS will describe the ongoing and proposed consultations and information sessions with respect to the project at the local, regional and provincial levels, where applicable. The EIS will provide a summary of discussions, indicate the methods used and their relevance, locations, the persons and organizations consulted, the concerns raised, the extent to which this information was incorporated in the design of the project as well as in the EIS, and the resultant changes. The proponent will also provide a description of efforts made to distribute project information and provide a description of information and materials that were distributed during the consultation process.

## 11 MITIGATION



### 11.1 Environmental mitigation

#### 11.1.1 Methodology

Every EA conducted under CEEA, 2012 must consider clear, enforceable measures that are technically and economically feasible and that would mitigate any significant adverse environmental effects of the project. The measures must be drafted as a specific commitment that clearly describes how the proponent intends to implement them.

As a first step, the proponent is encouraged to use an approach based on the avoidance and reduction of the effects at the source. Such an approach may include the modification of the design of the project or relocation of project components. In particular, when it is determined that a work or an activity will have adverse effects on fish habitat, the proponent must, after having considered and documented the possibility of relocating or modifying the project, plan mitigation measures in an effort to reduce the project's effects on fish habitat<sup>6</sup>. In accordance with the principle of no net loss, set out in Fisheries and Oceans' Policy for the Management of Fish Habitat, unavoidable and authorized harmful alteration, disruption and destruction of fish habitat must be compensated.

The EIS will specify the actions, works, minimal disturbance footprint techniques, best available technology, corrective measures or additions planned during the project's various phases to eliminate or reduce the significance of adverse effects. The environmental impact statement shall also present an assessment of the effectiveness of the proposed technically and economically feasible mitigation

<sup>6</sup> The proponent can use the pathways of effects (available on the Fisheries and Oceans Canada website at: <http://www.dfo-mpo.gc.ca/habitat/what-quoi/pathways-sequences/index-eng.asp>) to identify the potential effects and mitigation measures that will be implemented to reduce or avoid impacts on fish habitat.

measures. The reasons for determining if the mitigation measure reduces the significance of an adverse effect shall be made explicit.

Where mitigation measures are proposed to be implemented for which there is little experience or for which there is some question as to their effectiveness, the potential risks and effects to the environment should those measures not be effective should be clearly and concisely described. In addition, the EIS will identify the extent to which technology innovations will help mitigate environmental effects. Where possible, it will provide detailed information on the nature of these measures, their implementation, management and the development of the Follow-up Program as described in section 11.4.

Adaptive management is not considered a valid mitigation measure, but if the Follow-up Program indicates that corrective action is required, the proposed approach for managing the response could be identified.

#### 11.1.2 Environmental mitigation measures

In addition, the EIS will summarise the mitigation measures, follow-up and related commitments identified to address the categories of environmental effects specified in sections 10.1.2 and 10.1.3:

- changes to components of the environment within federal jurisdiction;
- changes to the environment that would occur on federal or transboundary lands;
- changes to the environment that are directly linked or necessarily incidental to federal decisions;
- effects of changes to the environment on Aboriginal peoples; and
- effects of changes to the environment that are directly linked or necessarily incidental to federal decisions.

### **11.2 Measures to address aboriginal concerns**

This section will describe the measures identified to mitigate the potential adverse impacts of the project described in section 10.2 on the potential or established Aboriginal and Treaty rights and related interests identified in section 9.2. These measures should be written as specific commitments that clearly describe how the proponent intends to implement them. This description will include a summary of:

- specific suggestions raised by Aboriginal groups for accommodating the potential adverse impacts of the project on potential or established Aboriginal and Treaty rights and related interests in relation to environmental effects specified in sections 10.1.2 and 10.1.3;
- environmental mitigation measures identified in section 11.1 that also serve to mitigate potential adverse impacts on potential or established Aboriginal and Treaty rights and related interests ;
- any potential cultural, social and/or economic impacts or benefits to Aboriginal groups that may arise as a result of the project;
- where and how Aboriginal traditional knowledge or other Aboriginal views were incorporated into the mitigation of environmental effects of potential adverse impacts on potential or established Aboriginal and Treaty rights and related interests; and
- efforts undertaken to engage with Aboriginal groups as part of developing the information identified above.

In preparing the EIS, the proponent shall ensure that Aboriginal people and groups have access to the information that they require in respect of the Project and of how it may impact them. The proponent will describe all efforts, successful or not, taken to solicit the information required to prepare the EIS.

The proponent will structure its Aboriginal engagement activities to provide adequate time for Aboriginal groups to have reviewed the relevant information in advance and to ensure there are sufficient opportunities for individuals and groups to provide oral input in the language of their choosing. Consultation activities must be appropriate to the groups' needs and should be arranged through discussions with the groups.

### **11.3 Measures to address public concerns**

This section will summarize measures identified for addressing public concerns in relation to the project identified in section 10.3. Measures should be written as specific commitments that clearly describe how the proponent intends to implement them.

### **11.4 Follow-Up Program**

A Follow-up Program is designed to verify the accuracy of the effects assessment and to determine the effectiveness of the measures implemented to mitigate the adverse effects of the project. The EIS should describe the proposed Follow-up Program in sufficient detail to allow independent judgment as to the likelihood that it will deliver the type, quantity and quality of information required to reliably verify predicted effects (or absence of them), and to confirm both the assumptions and the effectiveness of mitigation. The Follow-up Program should include specific commitments that clearly describe how the proponent intends to implement them.

The Follow-up Program must incorporate:

- the objectives of the follow-up and the list of components requiring environmental follow-up;
- a schedule indicating the frequency and duration of the effects monitoring mechanism;
- a description of the proposed follow-up methods and the list of parameters to be measured and the thresholds;
- the planned actions in the event of unanticipated environmental degradation: emergency adaptive, mitigation and compensation measures; and
- the method for informing the population concerned of the follow-up results.

The Follow up Program must also be designed to monitor the implementation of mitigation and accommodation measures resulting from Aboriginal consultation, including:

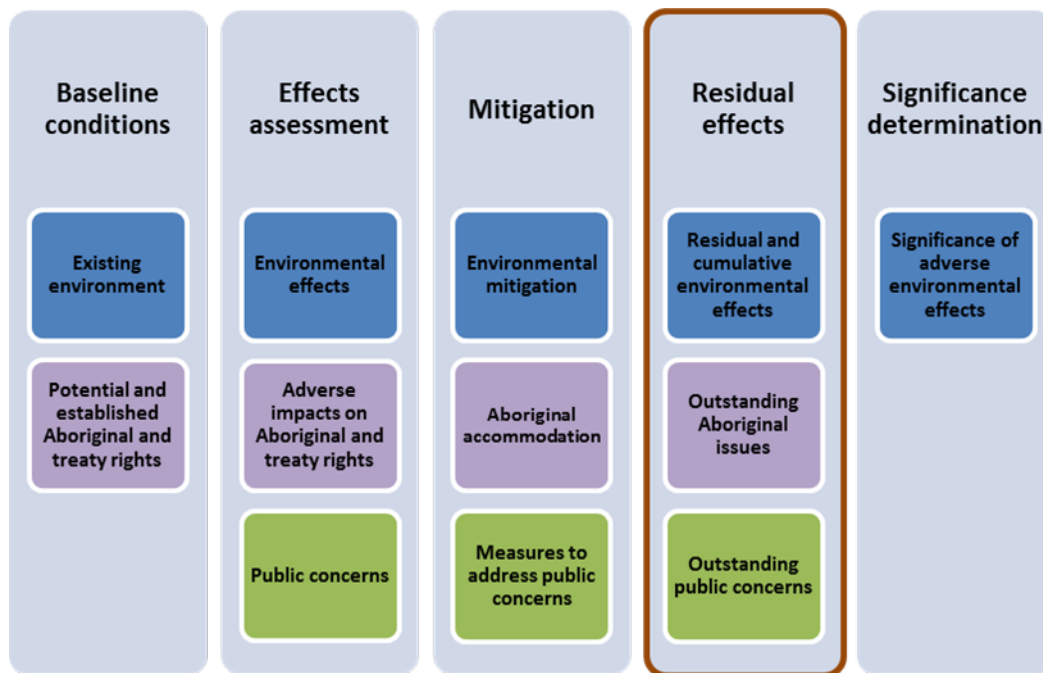
- verifying predictions of environmental effects with respect to Aboriginal peoples, as well as residual impacts that could not be accommodated within the context of the EA;
- determining the effectiveness of mitigation and accommodation measures as they relate to environmental effects with respect to Aboriginal peoples in order to modify or implement new measures where required;
- supporting the implementation of adaptive management measures to address previously unanticipated adverse environmental effects with respect to Aboriginal peoples or unanticipated adverse impacts to Aboriginal rights;
- verifying measures identified to prevent, mitigate or otherwise accommodate potential adverse effects of the project on potential or established Aboriginal and Treaty rights; and,
- providing information that can be used to improve and/or support future EAs and Aboriginal consultation processes.

Where appropriate, the Follow-up Program can also encompass measures identified to address public concerns identified in section 11.3.

## 11.5 Proponent commitments

Proponent commitments identified in the EIS, including environmental mitigation, Aboriginal accommodation, measures to address public concern, and Follow-up Program elements, will be considered for inclusion as conditions in the EA decision statement (see Appendix B) and/or as part of other compliance and enforcement mechanisms. Each commitment should be specific, achievable, measurable and verifiable, and described in a manner that avoids ambiguity in intent, interpretation and implementation.

## 12 RESIDUAL EFFECTS



### 12.1 Residual and cumulative environmental effects

#### 12.1.1 Residual environmental effects

After having established the technically and economically feasible mitigation measures, the EIS should present any residual environmental effects of the project on the biophysical and human environments after these mitigation measures have been taken into account. The residual effects, even if very small or deemed insignificant should be described.

#### 12.1.2 Cumulative environmental effects

The proponent shall identify and assess the project's cumulative effects using the approach described in the Agency's Operational Policy Statement [Addressing Cumulative Environmental Effects under the Canadian Environmental Assessment Act](#) (November 2007)<sup>7</sup>.

<sup>7</sup> <http://www.ceaa-acee.gc.ca/default.asp?lang=En&n=1F77F3C2-1>

Cumulative effects are defined as changes to the environment due to the project combined with the existence of other works or other past, present and reasonably foreseeable physical activities. Cumulative effects may result if:

- implementation of the project being studied caused direct residual negative effects on the environmental components, taking into account the application of technically and economically feasible mitigation measures; and/or,
- the same environmental components are affected by other past, present or reasonably foreseeable physical activities.

The EIS must describe the analysis of the total cumulative effect on a EC over the life of the project, including the incremental contribution of all current and proposed physical activities, in addition to that of the project. The EIS must include different forms of effects (e.g. synergistic, additive, induced, spatial or temporal) and identify impact pathways and trends.

The potential for cumulative environmental effects associated with the Rainy River Gold Mine and other proposed mining project in the area, including Josephine Cone Iron Mine and Hammond Reef Gold Mine, should also be assessed in this section.

The cumulative effects assessment may consider the results of any relevant study conducted by a committee established under section 73 or 74 of *CEAA, 2012*.

### 12.1.3 Summary of residual environmental effects

In addition, the EIS will summarise the residual environmental effects (including cumulative environmental effects) identified in relation to the categories of environmental effects specified in sections 10.1.2 and 10.1.3:

- changes to components of the environment within federal jurisdiction;
- changes to the environment that would occur on federal or transboundary lands;
- changes to the environment that are directly linked or necessarily incidental to federal decisions;
- effects of changes to the environment on Aboriginal peoples; and
- effects of changes to the environment that are directly linked or necessarily incidental to federal decisions.

## 12.2 **Outstanding Aboriginal issues**

If applicable, this section will describe the potential adverse impacts on potential or established Aboriginal and Treaty rights and related interests that have not been fully mitigated or accommodated as part of the environmental assessment and associated consultations with Aboriginal groups. This includes potential adverse impacts (on potential or established Aboriginal and Treaty rights and related interests) that may result from the residual and cumulative environmental effects described in section 12.1.

The information in this section will assist the Crown in assessing the adequacy of consultation and accommodation as set out in the [Updated Guidelines for Federal Officials to Fulfill the Duty to Consult \(2011\)](#)<sup>8</sup>.

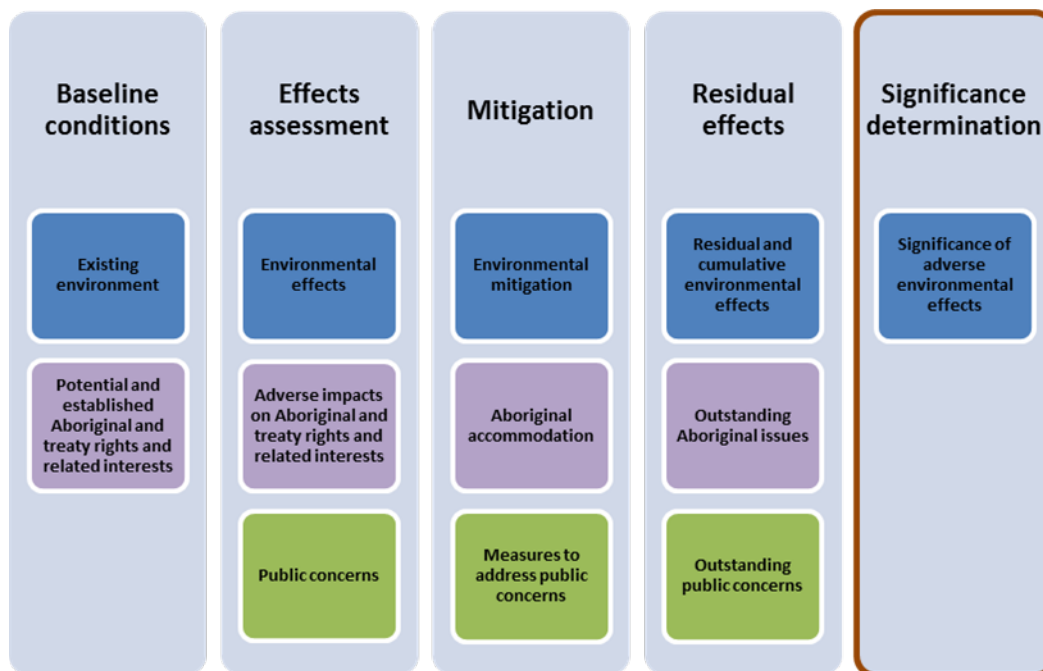
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<sup>8</sup> <http://www.aadnc-aandc.gc.ca/eng/1100100014664/1100100014675>

### **12.3 Outstanding public concerns**

If applicable, this section will describe the outstanding public concerns in relation to the project that have not been resolved as a result of changes to the project, mitigation measures, or public consultation. The proponent must explain why they are not able to resolve the outstanding public concerns.

## 13 SIGNIFICANCE DETERMINATION



### 13.1 Significance of adverse environmental effects

#### 13.1.1 Methodology

This section will provide a detailed analysis of the significance of the residual environmental effects (including cumulative environmental effects) that are considered adverse, using the approach described in the Agency's Reference Guide [Determining Whether a Project is Likely to Cause Significant Adverse Environmental Effects](#) (November 1994)<sup>9</sup>.

The EIS must identify the criteria used to assign significance ratings to any predicted adverse effects. It must contain clear and sufficient information to enable the Agency, technical and regulatory agencies, Aboriginal groups and the public to understand and review the proponent's judgment of the significance of effects. The proponent must define the terms used to describe the level of significance.

The following elements should be used in determining the significance of residual effects:

- magnitude;
- geographic extent;
- timing, duration and frequency;
- reversibility;
- ecological and social context; and
- existence of environmental standards, guidelines or objectives for assessing the impact.

In assessing significance against these criteria the EIS must, where possible, employ relevant existing regulatory documents, environmental standards, guidelines, or objectives such as prescribed maximum

<sup>9</sup> <http://www.ceaa-acee.gc.ca/default.asp?lang=En&n=D213D286-1&offset=&toc=hide>



levels of emissions or discharges of specific hazardous agents into the environment. The EIS should contain a section which explains the assumptions, definitions and limits to the criteria mentioned above in order to maintain consistency between the effects on each EC.

Where significant adverse effects are identified, the EIS will set out the probability (likelihood) that they will occur, and describe the degree of scientific uncertainty related to the data and methods used within the framework of its environmental analysis.

#### 13.1.2 Summary of significant adverse environmental effects

In addition, the EIS will summarise the significant adverse environmental effects identified in relation to the categories of environmental effects specified in sections 10.1.2 and 10.1.3:

- changes to components of the environment within federal jurisdiction;
- changes to the environment that would occur on federal or transboundary lands;
- changes to the environment that are directly linked or necessarily incidental to federal decisions;
- effects of changes to the environment on Aboriginal peoples; and
- effects of changes to the environment that are directly linked or necessarily incidental to federal decisions.

## **14 SUMMARY TABLES**

The EIS should contain a series of tables summarising the following key information:

- potential environmental effects (section 10.1), adverse impacts on potential or established Aboriginal and Treaty rights and related interests (section 10.2) and public concerns (section 10.3);
- proponent commitments identified in relation to environmental mitigation (section 11.1), Aboriginal accommodation (section 11.2), measures to address public concerns (section 11.3), and Follow-up Program (section 11.4);
- potential residual and cumulative environmental effects (section 12.1); outstanding Aboriginal issues (section 12.2) and outstanding public concerns (section 12.3);
- comments from the public and responses;
- comments from Aboriginal groups and individuals and responses; and
- relationship of the identified EC to Aboriginal groups' potential or established Aboriginal and Treaty rights and related interests (section 9.2).

The summary tables will be used in the EA Report prepared by the Agency; proponent commitments will be considered for inclusion as conditions in the EA decision statement (see Appendix B) and/or as part of other compliance and enforcement mechanisms.

## **15 BENEFITS TO CANADIANS**

### **15.1 Changes to the project since initially proposed**

The EIS will include a summary of the changes that have been made to the project since originally proposed, including the benefits of these changes to the environment, Aboriginal peoples, and the public.

## **15.2 Benefits of the project**

The EIS will include a section describing the predicted environmental, economic and social benefits of the project. This information will be considered in assessing the justifiability of the significant adverse environmental effects, if necessary.

## **16 ENVIRONMENTAL MANAGEMENT**

### **16.1 Monitoring implementation of mitigation measures**

The goal of a monitoring program is to ensure that proper measures and controls are in place in order to decrease the potential for environmental degradation during all phases of project development, and to provide clearly defined action plans and emergency response procedures to account for human and environmental health and safety. In the EIS, the proponent shall describe the monitoring activities at all stages of the project, the proponent's commitment to implementing these activities and the resources provided for this purpose. The program must describe the contacts, protocols, measured parameters, deadlines, intervention in case of non-compliance of legal requirements, production of monitoring reports, etc.

Simply referring to the company's environmental management plan (EMG) is not sufficient in this section. If the proponent refers to an EMG, the EIS must describe and explain how each project step is sufficiently controlled within the context of the EMG.

The finalization of the detailed monitoring program will occur through consultation with federal and provincial government agencies, Aboriginal groups, the public and other stakeholders. This may occur after the environmental assessment but must be consistent with the information presented in the EIS. Pertinent legislation, regulations, industry standards, documents and legislative guides shall be used in the development of the monitoring program.

### **16.2 Decommissioning and reclamation plan**

The EIS shall provide the preliminary outline of a decommissioning and reclamation plan for any components associated with the project. This shall include ownership, transfer and control of the different project components as well as the responsibility for monitoring and maintaining the integrity of some of the structures. The full preparation and submission of the plan to appropriate authorities will occur prior to the decommissioning of the temporary components of the project. The plan would serve to provide guidance on specific actions and activities to be implemented to decrease the potential for environmental degradation in the long-term during decommissioning and abandonment activities for temporary facilities, and to clearly define the proponent's ongoing environmental commitments. A conceptual discussion on how decommissioning could occur shall be provided for permanent facilities.

# **Appendix A – Outline of EIS Executive Summary**

1. Introduction and environmental assessment context
2. Project overview
3. Scope of project and assessment
4. Alternative means of carrying out the project
5. Advice and consultation activities
6. Summary of environmental effects assessment
7. Proponent commitments
8. Proposed significance determination

## Appendix B – EA Decision Statement

Under *CEAA, 2012* the Minister of the Environment (the Minister) must decide, taking into account the implementation of any mitigation measures, whether the designated project:

- Is likely to cause significant adverse environmental effects on components of the environment within federal legislative jurisdiction (subsection 5(1)); or
- Is likely to cause significant adverse environmental effects linked to or necessarily incidental to a federal decision (subsection 5(2)).

If the Minister decides that the designated project is likely to cause significant adverse environmental effects in either case (subsection 5(1) or 5(2)), then the decision is referred to the Governor in Council to determine if the environmental effects can be justified in the circumstances.

If the Minister decides that the designated project will not result in significant adverse environmental effects, or the Governor in Council decides that environmental effects can be justified, the Minister must establish conditions in relation to the environmental effects with which the proponent must comply. Conditions must be established for both the subsection 5(1) and 5(2) environmental effects.

The EA Decision Statement will inform the proponent of the Ministers' decision and will describe the conditions that the proponent must comply with for the project to proceed. The conditions will consist of the implementation of mitigation measures that were taken into account in the decision making and the implementation of a follow-up program.

Under section 6 of *CEAA, 2012*, the proponent must not proceed with any part of the project that could have an environmental effect referred to in section 5, unless the proponent complies with the conditions included in the EA Decision Statement. Contravention of section 6 is an offence under section 99.