

**Decision Statement**  
**Issued under Section 54 of the *Canadian Environmental Assessment Act, 2012***

to  
Greenstone Gold Mines  
c/o Stephen Lines, Manager, Environmental Assessment and Permitting

2381 Bristol Circle, Suite B203  
Oakville, Ontario  
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for the  
**Hardrock Gold Mine Project**

**Description of the Designated Project**

Greenstone Gold Mines is proposing the construction, operation, decommissioning and abandonment of an open-pit gold mine and on-site metal mill located approximately five kilometres south of Geraldton, Ontario, at the intersection of Highway 11 (Trans-Canada Highway) and Michael Power Boulevard. As proposed, the gold mine would have an ore production capacity of 30,000 tonnes per day, and the metal mill would have an ore input capacity of 30,000 tonnes per day.

**Conduct of the environmental assessment**

The Canadian Environmental Assessment Agency (the Agency) conducted an environmental assessment of the Designated Project in accordance with the requirements of the *Canadian Environmental Assessment Act, 2012*. The Agency commenced the environmental assessment on June 13, 2014 and submitted its report to me in my capacity as Minister of Environment and Climate Change.

**Decision on environmental effects referred to in subsection 5(1) of the *Canadian Environmental Assessment Act, 2012***

In accordance with paragraph 52(1)(a) of the *Canadian Environmental Assessment Act, 2012*, after considering the report of the Agency on the Designated Project and the implementation of mitigation measures that I consider appropriate, I have determined that the Designated Project is not likely to cause significant adverse environmental effects referred to in subsection 5(1) of the *Canadian Environmental Assessment Act, 2012*.

In accordance with subsection 53(1) of the *Canadian Environmental Assessment Act, 2012*, I have established the conditions below in relation to the environmental effects referred to in subsection 5(1) of the *Canadian Environmental Assessment Act, 2012*, with which the Proponent must comply.

## **Decision on environmental effects referred to in subsection 5(2) of the *Canadian Environmental Assessment Act, 2012***

The carrying out of the Designated Project may require the following federal authorities to exercise a power or perform a duty or function conferred on them under an Act of Parliament other than the *Canadian Environmental Assessment Act, 2012*:

- The Minister of Fisheries and Oceans may issue authorization(s) under paragraph 35(2)(b) of the *Fisheries Act*;
- The Minister of Environment and Climate Change may propose an amendment under Schedule 2 of the *Metal and Diamond Mining Effluent Regulations*; and
- The Minister of Natural Resources may issue a licence under subsection 7(1) of the *Explosives Act*.

In accordance with paragraph 52(1)(b) of the *Canadian Environmental Assessment Act, 2012*, after considering the report of the Agency on the Designated Project and the implementation of mitigation measures that I consider appropriate, I have determined that the Designated Project is not likely to cause significant adverse environmental effects referred to in subsection 5(2) of the *Canadian Environmental Assessment Act, 2012*.

In accordance with subsection 53(2) of the *Canadian Environmental Assessment Act, 2012*, I have established the conditions below in relation to the environmental effects referred to in subsection 5(2) of the *Canadian Environmental Assessment Act, 2012*, with which the Proponent must comply.

### **Consultation with Indigenous groups**

In establishing the conditions below in relation to the environmental effects referred to in subsections 5(1) and 5(2) of the *Canadian Environmental Assessment Act, 2012*, I took into account the concerns and interests identified in the consultation process with Indigenous groups. I also considered the measures to address these concerns and interests that have been identified in the environmental assessment and consultation processes. I am satisfied that the consultation process undertaken is consistent with the honour of the Crown and, with the conditions I have established, that the concerns and interests of Indigenous groups are appropriately accommodated for the purpose of issuing this Decision Statement.

### **1 Definitions**

- 1.1 *Agency* means the Canadian Environmental Assessment Agency.
- 1.2 *Baseline* means the environmental conditions prior to initiating construction of the Designated Project as described in the Environmental Impact Statement.
- 1.3 *Construction* means the phase of the Designated Project during which the Proponent undertakes the site preparation, building or installation of any components of the Designated Project, including periods during which these activities may temporarily cease.
- 1.4 *Contact water* means water which has come into contact with, or seeped from or through, any mine site components, including the open pit, the tailings management facility, the waste rock

storage areas, the overburden storage area, the process plant, the ore stockpile and the historical tailings locations.

- 1.5 *Days* means calendar days.
- 1.6 *Decommissioning* means the phase of the Designated Project during which the Proponent permanently ceases commercial production and commences removal from service of any components of the Designated Project, and that continues until the Proponent completes the reclamation of the site of the Designated Project and the pit lake is connected with Kenogamisis Lake.
- 1.7 *Designated Project* means the Hardrock Gold Mine Project as described in section 2 of the environmental assessment report prepared by the Canadian Environmental Assessment Agency (Canadian Environmental Assessment Registry Reference Number 80068).
- 1.8 *Effluent* means “effluent” as defined in subsection 1(1) of the *Metal and Diamond Mining Effluent Regulations*.
- 1.9 *Environment and Climate Change Canada* means the Department of the Environment as established under subsection 2(1) of the *Department of the Environment Act*.
- 1.10 *Environmental assessment* means “environmental assessment” as defined in subsection 2(1) of the *Canadian Environmental Assessment Act, 2012*.
- 1.11 *Environmental effects* means “environmental effects” as described in section 5 of the *Canadian Environmental Assessment Act, 2012*.
- 1.12 *Environmental Impact Statement* means the July 2017 document entitled *Environmental Impact Statement* (Canadian Environmental Assessment Registry Reference Number 80068, document Number 17).
- 1.13 *Fish* means “fish” as defined in subsection 2(1) of the *Fisheries Act*.
- 1.14 *Fish habitat* means “fish habitat” as defined in subsection 2(1) of the *Fisheries Act*.
- 1.15 *Fisheries and Oceans Canada* means the Department of Fisheries and Oceans as established under subsection 2(1) of the *Department of Fisheries and Oceans Act*.
- 1.16 *Follow-up program* means “follow-up program” as defined in subsection 2(1) of the *Canadian Environmental Assessment Act, 2012*.
- 1.17 *Heritage value* means the aesthetic, historic, scientific, cultural, social or spiritual importance or significance for past, present or future generations.
- 1.18 *Indigenous groups* means the following Aboriginal Peoples: Animbiigoo Zaagi'igan Anishinaabek, Aroland First Nation, Ginoogaming First Nation, Long Lake #58 First Nation and Métis Nation of Ontario.

- 1.19 *Listed species at risk* means a species that is listed on the List of Wildlife Species at Risk set out in Schedule 1 of the *Species at Risk Act*.
- 1.20 *Migratory bird* means “migratory bird” as defined in subsection 2(1) of the *Migratory Birds Convention Act, 1994*.
- 1.21 *Mitigation measures* means “mitigation measures” as defined in subsection 2(1) of the *Canadian Environmental Assessment Act, 2012*.
- 1.22 *Offsetting plan* means “offsetting plan” as defined in section 1 of the Applications for Authorization under paragraph 35(2)(b) of the Fisheries Act Regulations and “compensation plan” as described in subsection 27.1 of the *Metal and Diamond Mining Effluent Regulations*.
- 1.23 *Operation* means the phase of the Designated Project during which the commercial production takes place, including periods during which commercial production may temporarily cease, and which continues until the start of decommissioning.
- 1.24 *Progressive reclamation* means reclamation which is carried out by the Proponent concurrently with all phases of the Designated Project to progressively return any physically disturbed areas to a state as close to the baseline as possible, as soon after the disturbance as practical.
- 1.25 *Project development area* means the area labelled “project development area” on figure 1 of the environmental assessment report prepared by the Canadian Environmental Assessment Agency.
- 1.26 *Proponent* means Greenstone Gold Mines and its successors or assigns.
- 1.27 *Qualified individual* means someone who, through education, experience and knowledge relevant to a particular matter, may be relied on by the Proponent to provide advice within his or her area of expertise. Knowledge relevant to a particular matter may include community and Indigenous traditional knowledge.
- 1.28 *Record* means “record” as defined in subsection 2(1) of the *Canadian Environmental Assessment Act, 2012*.
- 1.29 *Relevant authorities* means federal and/or provincial authorities that are in possession of specialist or expert information or knowledge, or that have a responsibility for the administration of a law or regulation, with respect to the subject matter of a condition set out in this Decision Statement.
- 1.30 *Reporting year* means October 1 of a calendar year through September 30 of the subsequent calendar year.
- 1.31 *Serious harm* means "serious harm" as defined in subsection 2(2) of the *Fisheries Act*.
- 1.32 *Structure, site or thing of historical, archeological, paleontological or architectural significance* means a structure, site or thing that is determined by a qualified individual, on the basis of heritage value, to be associated with an aspect of the history or culture of the people of Canada, including Indigenous groups.

## **Conditions**

These conditions are established for the sole purpose of the Decision Statement issued under the *Canadian Environmental Assessment Act, 2012*. They do not relieve the Proponent from any obligation to comply with other legislative or other legal requirements of the federal, provincial, or local governments. Nothing in this Decision Statement document shall be construed as reducing, increasing, or otherwise affecting what may be required of the Proponent to comply with all applicable legislative or legal requirements.

## **2 General conditions**

2.1 The Proponent shall ensure that its actions in meeting the conditions set out in this Decision Statement during all phases of the Designated Project are considered in a careful and precautionary manner, promote sustainable development, are informed by the best information and knowledge available at the time the Proponent takes action, including community and Indigenous traditional knowledge, are based on methods and models that are recognized by standard-setting bodies, are undertaken by qualified individuals, and have applied the best available economically and technically feasible technologies.

## ***Consultation***

2.2 The Proponent shall, where consultation is a requirement of a condition set out in this Decision Statement:

2.2.1 provide a written notice of the opportunity for the party or parties being consulted to present their views and information on the subject of the consultation;

2.2.2 provide all information relevant and applicable on the scope and the subject matter of the consultation and a period of time agreed upon with the party or parties being consulted, not to be less than 15 days, to prepare their views and information;

2.2.3 undertake an impartial consideration of all views and information presented by the party or parties being consulted on the subject matter of the consultation; and

2.2.4 advise in a timely manner the party or parties being consulted on how the views and information received have been considered by the Proponent.

2.3 The Proponent shall, where consultation with Indigenous groups is a requirement of a condition set out in this Decision Statement, communicate with each Indigenous group with respect to the manner to satisfy the consultation requirements referred to in condition 2.2, including methods of notification, the type of information and the period of time to be provided when seeking input, the process to be used by the Proponent to undertake impartial consideration of all views and information presented on the subject of the consultation, and the period of time and the means to advise Indigenous groups of how their views and information were considered by the Proponent.

## ***Follow-up and adaptive management***

2.4 The Proponent shall, where a follow-up program is a requirement of a condition set out in this Decision Statement, determine, as part of the development of each follow-up program and in

consultation with the party or parties being consulted during the development, the following information:

- 2.4.1 the methodology, location, frequency, timing and duration of monitoring associated with the follow-up program;
  - 2.4.2 the scope, content and frequency of reporting of the results of the follow-up program;
  - 2.4.3 the levels of environmental change relative to baseline conditions that would require the Proponent to implement modified or additional mitigation measure(s), including instances where the Proponent may require Designated Project activities to be stopped; and
  - 2.4.4 the technically and economically feasible mitigation measures to be implemented by the Proponent if monitoring conducted as part of the follow-up program shows that the levels of environmental change referred to in condition 2.4.3 have been reached or exceeded.
- 2.5 The Proponent shall maintain the information referred to in condition 2.4 during the implementation of each follow-up program in consultation with the party or parties being consulted during the development of each follow-up program.
- 2.6 The Proponent shall provide the follow-up programs referred to in conditions 3.15, 3.16, 3.17, 4.6, 4.7, 5.3, 5.4, 5.5 and 6.9 to the Agency and to the party or parties being consulted during the development of each follow-up program prior to the implementation of each follow-up program. The Proponent shall also provide any update(s) made pursuant to condition 2.5 to the Agency and to the party or parties being consulted during the development of each follow-up program within 30 days of the follow-up program being updated.
- 2.7 The Proponent shall, where a follow-up program is a requirement of a condition set out in this Decision Statement:
- 2.7.1 conduct the follow-up program according to the information determined pursuant to condition 2.4;
  - 2.7.2 undertake monitoring and analysis to verify the accuracy of the environmental assessment as it pertains to the particular condition and/or to determine the effectiveness of any mitigation measure(s);
  - 2.7.3 determine whether modified or additional mitigation measures are required based on the monitoring and analysis undertaken pursuant to condition 2.7.2; and
  - 2.7.4 if modified or additional mitigation measures are required pursuant to condition 2.7.3, develop and implement these mitigation measures in a timely manner and monitor them pursuant to condition 2.7.2.
- 2.8 Where consultation with Indigenous groups is a requirement of a follow-up program, the Proponent shall discuss with each Indigenous group opportunities for their participation in the implementation of the follow-up program, including the analysis of the follow-up results and whether modified or additional mitigation measures are required, as set out in condition 2.7.

### ***Annual reporting***

- 2.9 The Proponent shall, commencing in the reporting year during which the Proponent begins the implementation of the conditions set out in this Decision Statement, prepare an annual report that sets out:
- 2.9.1 the activities undertaken by the Proponent in the reporting year to comply with each of the conditions set out in this Decision Statement;
  - 2.9.2 how the Proponent complied with condition 2.1;
  - 2.9.3 for conditions set out in this Decision Statement for which consultation is a requirement, how the Proponent considered any views and information that the Proponent received during or as a result of the consultation;
  - 2.9.4 the information referred to in conditions 2.4 and 2.5 for each follow-up program;
  - 2.9.5 the results of the follow-up program requirements identified in conditions 3.15, 3.16, 3.17, 4.6, 4.7, 5.3, 5.4, 5.5 and 6.9; and
  - 2.9.6 any modified or additional mitigation measures implemented or proposed to be implemented by the Proponent, as determined under condition 2.7.
- 2.10 The Proponent shall submit to the Agency the annual report referred to in condition 2.9, including an executive summary in both official languages, no later than December 31 following the reporting year to which the annual report applies.

### ***Information sharing***

- 2.11 The Proponent shall publish on the Internet, or any medium which is publicly available, the annual reports and the executive summaries referred to in conditions 2.9 and 2.10, the information submitted to the Agency pursuant to condition 2.15, the offsetting plan(s) referred to in condition 3.12, the communication plan referred to in condition 5.7, the communication plan referred to in condition 6.4, the concerns raised pursuant to condition 6.5 and measures taken by the Proponent to address these concerns, the bald eagle (*Haliaeetus leucocephalus*) protection plan referred to in condition 7.1, the reports related to accidents and malfunctions referred to in conditions 9.4.2 and 9.4.3, the communication plan referred to in condition 9.5, the schedules referred to in conditions 10.1, and 10.2, and any update(s) or revision(s) to the above documents, upon submission of these documents to the parties referenced in the respective conditions. The Proponent shall keep these documents publicly available for 25 years following the end of operation, or until the end of decommissioning of the Designated Project, whichever comes first. The Proponent shall notify the Agency and Indigenous groups of the availability of these documents within 48 hours of their publication.
- 2.12 When the development of any plan is a requirement of a condition set out in this Decision Statement, the Proponent shall submit the plan to the Agency prior to construction, unless otherwise required through the condition.

### ***Change of Proponent***

- 2.13 The Proponent shall notify the Agency and Indigenous groups in writing no later than 30 days after the day on which there is any transfer of ownership, care, control or management of the Designated Project in whole or in part.

### ***Change to the Designated Project***

- 2.14 The Proponent shall consult with Indigenous groups and relevant authorities prior to initiating any changes to the Designated Project that may result in adverse environmental effects, and shall notify the Agency in writing no later than 60 days prior to initiating the change(s).
- 2.15 In notifying the Agency pursuant to condition 2.14, the Proponent shall provide the Agency with a description of the potential adverse environmental effects of the change(s) to the Designated Project, the proposed mitigation measures and follow-up requirements to be implemented by the Proponent and the results of the consultation with Indigenous groups and relevant authorities.

## **3 Fish and fish habitat**

- 3.1 The Proponent shall salvage and relocate fish prior to conducting any Designated Project activity requiring removal of fish habitat in a manner consistent with any authorization issued under the *Fisheries Act* and its regulations. The Proponent shall salvage and relocate fish in consultation with Indigenous groups and to the satisfaction of Fisheries and Oceans Canada and other relevant authorities.
- 3.1.1 The Proponent shall discuss, prior to the start of fish salvaging and relocating activities, with each Indigenous group, opportunities for their participation in these activities.
- 3.2 The Proponent shall develop, prior to the start of blasting activities in or near water, and implement, during blasting activities in or near water, mitigation measures to avoid or prevent adverse effect to fish and fish habitat from the use of explosives in a manner consistent with the *Fisheries Act* and its regulations. When developing these measures, the Proponent shall take into account Fisheries and Oceans Canada's *Measures to avoid causing harm to fish and fish habitat including aquatic species at risk* as it pertains to the use of explosives in or near water. The Proponent shall submit these measures to the Agency before implementing them.
- 3.3 The Proponent shall design, install and operate the water intake structures in Kenogamisis Lake in a manner which reduces the incidental capture of fish by entrainment and impingement through the use of an appropriately sized fish screen, taking into account Fisheries and Oceans Canada's *Freshwater Intake End-of-Pipe Fish Screen Guideline* and in a manner consistent with the *Fisheries Act* and its regulations.
- 3.4 The Proponent shall comply with the *Metal and Diamond Mining Effluent Regulations* and the pollution prevention provisions of the *Fisheries Act*.
- 3.5 The Proponent shall collect and direct contact water from the waste rock storage areas (including any temporary storage location of excavated historical tailings), overburden storage area and ore

stockpile to contact water collection ditches for reuse in Designated Project activities, and treat excess water that cannot be reused.

- 3.6 The Proponent shall collect and direct, during operation, contact water from the tailings management facility, including the final location of the excavated historical tailings, to the collection ponds associated with the tailings management facility.
- 3.7 The Proponent shall install, prior to operation, and use a cyanide destruction circuit to reduce cyanide concentrations in tailings before the tailings are directed to the tailings management facility during operation.
- 3.8 The Proponent shall maintain the contact water collection ditches around the waste rock storage areas, overburden storage area, ore stockpile and the tailings management facility after operation and as necessary to comply with the *Metal and Diamond Mining Effluent Regulations* and the pollution prevention provisions of the *Fisheries Act*.
- 3.9 The Proponent shall not connect the pit lake to Kenogamisis Lake until such time that water in the pit lake complies with the pollution prevention provisions of the *Fisheries Act*.
- 3.10 The Proponent shall treat contact water taking into account the Canadian Council of Minister of the Environment's *Canadian Water Quality Guidelines for Protection of Aquatic Life*.
- 3.11 The Proponent shall mitigate, in consultation with Indigenous groups and relevant authorities, the adverse environmental effects on water quality, including in the Southwest Arm, Central Basin and Barton Bay of Kenogamisis Lake, Goldfield Creek Tributary, Mosher Lake and the Southwest Arm Tributary, caused by the presence of unexcavated historical tailings. In doing so, the Proponent shall promote runoff and reduce infiltration by:
  - 3.11.1 covering the exposed portions of the *in situ* historical tailings. The Proponent shall complete the covering of the *in situ* historical tailings as soon after tailings have been excavated as technically feasible; and
  - 3.11.2 managing contaminated soils near the historical Hardrock and MacLeod-Mosher plant sites and the unexcavated historical tailings.
- 3.12 The Proponent shall develop, to the satisfaction of Fisheries and Oceans Canada and Environment and Climate Change Canada and in consultation with Indigenous groups, any offsetting plan(s) related to any residual serious harm to fish associated with the carrying out of the Designated Project. The Proponent shall implement the plan. The Proponent shall submit any approved offsetting plan(s) to the Agency prior to implementation.
- 3.13 The Proponent shall, for any fish habitat offsetting measure(s) proposed in any offsetting plan(s) referred to in condition 3.12 that may cause adverse environmental effects not considered in the environmental assessment, develop and implement, following consultation with Indigenous groups, Fisheries and Oceans Canada and Environment and Climate Change Canada, measures to mitigate those effects. The Proponent shall submit these measures to the Agency before implementing them.

- 3.14 The Proponent shall develop, prior to construction, and implement, during all phases of the Designated Project and in a manner consistent with the *Fisheries Act* and its regulations, measures to control erosion and sedimentation in the project development area. The Proponent shall submit these measures to the Agency before implementing them. Among other measures, the Proponent shall maintain stream bank stability using ditches and diversion berms.
- 3.15 The Proponent shall develop, prior to the start of blasting activities in or near water and in consultation with relevant authorities, a follow-up program to determine the effectiveness of the mitigation measures as it pertains to the adverse environmental effects of blasting on fish and fish habitat, including aquatic listed species at risk. The Proponent shall implement the follow-up program during blasting activities. As part of the implementation of the follow-up program, the Proponent shall:
- 3.15.1 monitor instantaneous pressure and peak particle velocity during the first blasting event;
  - 3.15.2 if the results of the monitoring referred to in conditions 3.15.1 demonstrate that modified or additional mitigation measures are required to protect fish and fish habitat, including aquatic listed species at risk, from blasting, develop, prior to the next blasting event and in consultation with relevant authorities, modified or additional mitigation measures pursuant to condition 2.7; and
  - 3.15.3 implement the modified or additional mitigation measures referred to in condition 3.15.2 during all subsequent blasting events. The Proponent shall submit these measures to the Agency before implementing them.
- 3.16 The Proponent shall develop, prior to construction and in consultation with Indigenous groups and relevant authorities, a follow-up program to verify the accuracy of the environmental assessment and to determine the effectiveness of the mitigation measures as it pertains to adverse environmental effects on fish and fish habitat caused by changes in water quality in Kenogamisis Lake, Mosher Lake and the Southwest Arm Tributary. The Proponent shall implement the follow-up program during all phases of the Designated Project, including the environmental effects monitoring requirements set out in Schedule 5 of the *Metal and Diamond Mining Effluent Regulations*. As part of the implementation of the follow-up program, the Proponent shall:
- 3.16.1 monitor, at least quarterly during all phases of the Designated Project, nutrient levels, algae abundance, and dissolved oxygen levels in Kenogamisis Lake, Mosher Lake and the Southwest Arm Tributary;
  - 3.16.2 monitor, at least quarterly during the time that effluent is discharged in Kenogamisis Lake, concentrations of arsenic, unionized ammonia and total phosphorus in Kenogamisis Lake;
  - 3.16.3 monitor, at least quarterly during all phases of the Designated Project, concentrations of arsenic in Mosher Lake, Barton Bay and the Southwest Arm Tributary; and
  - 3.16.4 if the results of the monitoring referred to in conditions 3.16.1, 3.16.2 or 3.16.3 demonstrate that modified or additional mitigation measures are required to protect fish and fish habitat from changes to water quality, develop and implement modified or additional mitigation measures pursuant to condition 2.7. The Proponent shall submit these measures to the Agency before implementing them.

- 3.17 The Proponent shall develop, prior to construction and in consultation with Indigenous groups and relevant authorities, a follow-up program to verify the accuracy of the environmental assessment and to determine the effectiveness of the mitigation measures as it pertains to the adverse environmental effects on fish and fish habitat of from changes in groundwater quality caused by the Designated Project. The Proponent shall implement the follow-up program during all phases of the Designated Project. As part of the implementation of the follow-up program, the Proponent shall:
- 3.17.1 monitor groundwater seepage flows, levels and quality at sites located upgradient, downgradient and cross-gradient of the tailings management facility, waste rock storage areas, overburden storage area, ore stockpile and historical MacLeod and Hardrock tailings, using as benchmarks the concentrations predicted by the Proponent in Table 9-20 of the Environmental Impact Statement; and
  - 3.17.2 if the results of the monitoring referred to in condition 3.17.1 demonstrate that modified or additional mitigation measures are required to mitigate adverse environmental effects on fish and fish habitat of changes in groundwater quality caused by the Designated Project, develop and implement modified or additional mitigation measures pursuant to condition 2.7. The Proponent shall submit these measures to the Agency before implementing them.

#### **4 Migratory birds**

- 4.1 The Proponent shall carry out the Designated Project in a manner that protects migratory birds and avoids harming, killing or disturbing migratory birds or destroying, disturbing or taking their nests or eggs. In this regard, the Proponent shall take into account Environment and Climate Change Canada's *Avoidance Guidelines* and the risk of incidental take. The Proponent's actions when carrying out the Designated Project shall be in compliance with the *Migratory Birds Convention Act, 1994*, the *Migratory Birds Regulations* and the *Species at Risk Act*.
- 4.2 The Proponent shall undertake, in consultation with Indigenous groups and relevant authorities, progressive reclamation of the project development area. The Proponent shall identify, prior to the start of progressive reclamation and in consultation with Indigenous groups and relevant authorities, plant species native to the area of the Designated Project to use for revegetation as part of the progressive reclamation, including species suitable to create habitat for migratory birds.
- 4.3 The Proponent shall compensate, in consultation with relevant authorities, the loss of barn swallow (*Hirundo rustica*) nesting sites as a result of the Designated Project, taking into account Ontario's *Recovery Strategy for Barn Swallow (Hirundo rustica)*. In doing so, the Proponent shall install, prior to construction, and maintain, during three years, artificial barn swallow (*Hirundo rustica*) nesting structures.
- 4.4 The Proponent shall establish, during construction, a speed limit of no more than 65 kilometres per hour on all roads within the project development area, including the portion of Highway 11 to be realigned by the Proponent located within the project development area, and shall require employees and contractors associated with the Designated Project to abide by this limit.

- 4.5 The Proponent shall establish, during operation and decommissioning, a speed limit of no more than 65 kilometres per hour on all roads within the project development area, excepting the portion of Highway 11 located within the project development area, and shall require employees and contractors associated with the Designated Project to abide by this limit.
- 4.6 The Proponent shall develop, prior to construction and in consultation with Indigenous groups and relevant authorities, a follow-up program to verify the accuracy of the environmental assessment as it pertains to the use by migratory birds of surface water facilities in the project development area. As a part of the implementation of the follow-up program, the Proponent shall:
- 4.6.1 monitor, at times migratory birds may be present in the project development area, the use by migratory birds of the tailings management facility, contact water collection ditches and collection ponds during all phases of the Designated Project until such time that water quality in these structures meet legislative requirements and water quality objectives. The water quality objectives are to be established using an ecological risk based approach, developed in consultation with Indigenous groups and relevant authorities;
  - 4.6.2 monitor, at times migratory birds may be present in the project development area, the use by migratory birds of the pit lake from the start of filling of the pit lake and until the end of decommissioning; and
  - 4.6.3 if results of the monitoring referred to in conditions 4.6.1 or 4.6.2 indicate that migratory birds use the tailing management facility, the contact water collection ditches, the collection ponds or the pit lake, develop and implement deterrent measures pursuant to condition 2.7. The Proponent shall submit these measures to the Agency before implementing them.
- 4.7 The Proponent shall develop, prior to construction and in consultation with Indigenous groups and relevant authorities, a follow-up program to verify the accuracy of the environmental assessment and to determine the effectiveness of all mitigation measures to avoid harm to migratory birds, their eggs and nests, including the mitigation measures used to comply with conditions 4.1 to 4.5. As part of the development of the follow-up program, the Proponent shall identify performance indicators that shall be used by the Proponent to evaluate the effectiveness of the progressive reclamation referred to in condition 4.2. The Proponent shall implement the follow-up program during all phases of the Designated Project. As part of the implementation of the follow-up program, the Proponent shall:
- 4.7.1 conduct migratory bird surveys annually for the first five years following completion of construction to assess migratory bird use of the project development area. The Proponent shall determine the methodology for the migratory bird surveys in consultation with Indigenous groups and relevant authorities. The Proponent shall determine, in consultation with Indigenous groups and relevant authorities and based on the results of the initial surveys, if additional surveys within the project development area are required after the first five years following completion of construction and at what frequency and in which locations these additional surveys shall occur;
  - 4.7.2 monitor the effectiveness of the progressive reclamation referred to in condition 4.2, including the establishment of native plant species to create habitat for migratory birds,

annually during operation and during the first five years of decommissioning and every five years thereafter until the Proponent has determined, in consultation with Indigenous groups and relevant authorities, that the performance indicators have been met;

- 4.7.3 monitor barn swallow (*Hirundo rustica*) nesting activity and use of the artificial nesting structures referred to in condition 4.3 annually during the first three years following the installation of the nesting structures and at times barn swallow (*Hirundo rustica*) may be present in the project development area; and
- 4.7.4 monitor collisions between vehicles associated with the Designated Project and migratory birds within the project development area during all phases of the Designated Project.

## **5 Health and socio-economic conditions of Indigenous Peoples**

- 5.1 The Proponent shall develop, prior to construction and in consultation with Indigenous groups, measures to mitigate emissions of dust generated by the Designated Project, including dust from vehicles associated with the Designated Project on roads located within the project development area and dust generated during the transport of historical tailings, that take into account the standards and criteria set out in the Canadian Council of Ministers of the Environment's *Canadian Ambient Air Quality Standards* and Ontario's *Ambient Air Quality Criteria*. The Proponent shall submit these measures to the Agency before implementing them. The Proponent shall implement these measures during construction, operation and the first five years of decommissioning.
- 5.2 The Proponent shall install prior to operation, and use during ore crushing and transfer, crushers with dust collection systems.
- 5.3 The Proponent shall develop, prior to construction and in consultation with Indigenous groups and relevant authorities, a follow-up program to verify the accuracy of the environmental assessment and to determine the effectiveness of the mitigation measures as it pertains to the adverse environmental effects on the health of Indigenous Peoples of changes to air quality. As part of the follow-up program, the Proponent shall:
  - 5.3.1 identify, as part of the development of the follow-up program, monitoring locations for air contaminants within areas used by Indigenous groups for traditional purposes or within areas representative of air quality in areas used by Indigenous groups for traditional purposes;
  - 5.3.2 monitor, during construction, operation and the first five years of decommissioning, total suspended particulates, particulate matter (PM<sub>10</sub>), fine particulate matter (PM<sub>2.5</sub>) and nitrogen dioxide at the monitoring locations identified pursuant to condition 5.3.1, using as benchmarks the standards and criteria set out in the Canadian Council of Ministers of the Environment's *Canadian Ambient Air Quality Standards* and Ontario's *Ambient Air Quality Criteria*. The Proponent shall monitor total suspended particulates, fine particulate matter (PM<sub>2.5</sub>) and nitrogen dioxide at least monthly and shall monitor particulate matter (PM<sub>10</sub>) in real-time;
  - 5.3.3 monitor, at least annually during construction and for the first two years of operation, airborne benzene and benzo(a)pyrene at the monitoring locations identified pursuant to condition 5.3.1. The Proponent shall determine, in consultation with Indigenous groups and relevant authorities and based on the results of the monitoring, if additional

monitoring is required after the first two years of operation and at what frequency this additional monitoring shall occur; and

- 5.3.4 monitor, during construction and for the first two years of operation, silt content on roads within the project development area. The Proponent shall determine, in consultation with Indigenous groups and relevant authorities and based on the results of the monitoring, if additional monitoring is required after the first two years of operation and at what frequency this additional monitoring shall occur.
- 5.4 The Proponent shall develop, prior to construction and in consultation with Indigenous groups and relevant authorities, a follow-up program to verify the accuracy of the environmental assessment as it pertains to the adverse environmental effects on the health of Indigenous Peoples of changes in concentrations of contaminants in water and fish. As part of the implementation of the follow-up program, the Proponent shall:
- 5.4.1 monitor, at least quarterly during construction and the first five years of operation, mercury in the Southwest Arm Tributary, using as a benchmark a concentration of 0.04 micrograms per litre. The Proponent shall determine, in consultation with Indigenous groups and relevant authorities and based on the results of the monitoring, if additional monitoring is required after the first five years of operation and at what frequency this additional monitoring shall occur; and
  - 5.4.2 monitor, at least quarterly during construction and the first five years of operation, methylmercury in the Southwest Arm Tributary, using as a benchmark a concentration of 0.0001 micrograms per litre. The Proponent shall determine, in consultation with Indigenous groups and relevant authorities and based on the results of the monitoring, if additional monitoring is required after the first five years of operation and at what frequency this additional monitoring shall occur.
- 5.5 The Proponent shall develop, prior to construction and in consultation with Indigenous groups and relevant authorities, a follow-up program to verify the accuracy of the environmental assessment and to determine the effectiveness of the mitigation measures as it pertains to the adverse environmental effects on the health of Indigenous Peoples of changes in concentrations of contaminants in country foods caused by the Designated Project. The Proponent shall implement the follow-up program during all phases of the Designated Project. As part of the development of the follow-up program, the Proponent shall identify, in consultation with Indigenous groups and relevant authorities, species of vegetation, fish and wildlife that shall be monitored and shall determine, in consultation with Indigenous groups and relevant authorities, the sampling and analytical methodology that shall be applied for the monitoring of each species, including how samples will be collected. As part of the implementation of the follow-up program, the Proponent shall:
- 5.5.1 monitor, at least every two years, during the first six years of operation, mercury, methylmercury and arsenic concentrations in walleye (*Sander vitreus*) tissue according to the methodology determined pursuant to condition 5.5. The Proponent shall determine, in consultation with Indigenous groups and relevant authorities and based on the results of the monitoring, if additional monitoring is required after the first six years of operation and at what frequency this additional monitoring shall occur; and

- 5.5.2 monitor, at least every two years, during the first six years of operation, concentrations of metals, including mercury and arsenic, in small mammals according to the methodology determined pursuant to condition 5.5. The Proponent shall determine, in consultation with Indigenous groups and relevant authorities and based on the results of the monitoring, if additional monitoring is required after the first six years of operation and at what frequency this additional monitoring shall occur.
- 5.6 The Proponent shall participate in any regional initiative that is established for the analysis of contaminants in moose (*Alces alces*) tissue in the region, should there be any such initiative(s) during construction or operation of the Designated Project.
- 5.7 The Proponent shall develop, in consultation with Indigenous groups and relevant authorities, a communication plan to share the results of the follow-up programs referred to in conditions 5.3, 5.4 and 5.5 with Indigenous groups and relevant authorities, including any potential health risks, in plain language, and the modified or additional mitigation measures developed and implemented by the Proponent pursuant to condition 2.7. The Proponent shall develop the communication plan prior to construction and shall implement and maintain it up to date during the periods of time that the follow-up programs referred to in conditions 5.3, 5.4 and 5.5 are implemented.

## **6 Current use of lands and resources for traditional purposes**

- 6.1 The Proponent shall establish, in consultation with Indigenous groups and prior to undertaking construction activities that will restrict access to the Southwest Arm of Kenogamisis Lake, alternate unrestricted access to the Southwest Arm of Kenogamisis Lake and shall maintain that alternate access during all phases of the Designated Project, to the extent that such access is safe.
- 6.2 The Proponent shall maintain unrestricted access along Goldfield Road during all phases of the Designated Project and to the Goldfield Creek diversion channel starting when the Proponent has completed the progressive reclamation referred to in condition 4.2 and until the end of decommissioning, to the extent that such access is safe.
- 6.3 The Proponent shall only conduct blasting activities between 10:00 am and 4:00 pm and shall not conduct blasting on statutory holidays and on days of cultural importance that the Proponent shall identify in consultation with Indigenous groups, unless required for safety reasons or unless the Proponent has advised Indigenous groups pursuant to condition 6.4.2 of any update to the blasting schedule.
- 6.4 The Proponent shall develop, prior to construction and in consultation with Indigenous groups and relevant authorities, a communication plan to share information related to Designated Project activities and about the adverse environmental effects of the Designated Project with Indigenous groups. The Proponent shall implement and maintain the communication plan up-to-date during all phases of the Designated Project. The communication plan shall include procedures, including timing and methods, for sharing information on the following:
- 6.4.1 the location and timing of Designated Project activities that may permanently or temporarily affect navigation within the project development area and in the Southwest

Arm of Kenogamisis Lake, including the locations of the effluent discharge location and the freshwater intakes in Kenogamisis Lake; and

- 6.4.2 the dates and times of all regularly-scheduled blasting events to be conducted by the Proponent and how the Proponent will notify Indigenous groups of any update to the blasting schedule on a daily basis if the Proponent must conduct blasting activities before 10:00 am or after 4:00 pm or on a statutory holiday or day of cultural importance for Indigenous groups.
- 6.5 The Proponent shall develop, as part of the communication plan referred to in condition in 6.4 and in consultation with Indigenous groups, procedures for Indigenous groups to communicate to the Proponent their concerns about adverse environmental effects caused by the Designated Project related to access to and use of lands for traditional purposes, including navigation and consumption of country foods, and procedures for the Proponent to document and respond in a timely manner to the concerns received and demonstrate how issues have been addressed, including through the implementation of additional or modified mitigation measures. The Proponent shall implement these procedures during all phases of the Designated Project.
- 6.6 As part of the progressive reclamation referred to in condition 4.2, the Proponent shall:
- 6.6.1 identify, prior to the start of progressive reclamation and in consultation with Indigenous groups and relevant authorities, species of importance to Indigenous Peoples (including medicinal, edible and ceremonial plants) to use for revegetation as part of the progressive reclamation to create harvesting opportunities; and
  - 6.6.2 develop, prior to the start of progressive reclamation and in consultation with Indigenous groups and relevant authorities, and implement, during all phases of the Designated Project, measures to manage the spread of invasive species. The Proponent shall submit these measures to the Agency before implementing them.
- 6.7 The Proponent shall develop, prior to construction and in consultation with Indigenous groups, a protocol for receiving complaints related to the exposure to noise from the Designated Project. The Proponent shall submit the protocol to the Agency prior to construction and shall implement it during all phases of the Designated Project. The Proponent shall respond to any noise complaint(s) within 48 hours of the complaint being received and shall implement corrective actions, if required to reduce exposure to noise, in a timely manner.
- 6.8 The Proponent shall provide access to the project development area to Indigenous groups prior to construction, to the extent that such access is safe, to harvest traditional plants. In doing so, the Proponent shall:
- 6.8.1 notify Indigenous groups at least 120 days in advance of vegetation clearing to allow Indigenous groups to harvest traditional plants within the project development area; and
  - 6.8.2 notify Indigenous groups and the Agency if the Proponent must prohibit access to the project development area to harvest traditional plants for safety reasons. The Proponent shall notify Indigenous groups at least 48 hours before access must be prohibited, unless access must be prohibited for emergency purposes.

- 6.9 The Proponent shall develop, prior to construction and in consultation with Indigenous groups, a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures as it pertains to the adverse environmental effects of the Designated Project on the current use of lands and resources for traditional purposes, including access to the Southwest Arm of Kenogamisis Lake referred to in condition 6.1 and access along Goldfield Road and to the Goldfield Creek diversion channel referred to in condition 6.2. The Proponent shall implement the follow-up program during all phases of the Designated Project.

## **7 Physical and cultural heritage and structures, sites or things of historical, archaeological, paleontological or architectural significance**

- 7.1 The Proponent shall develop, prior to construction and in consultation with Indigenous groups and relevant authorities, a bald eagle (*Haliaeetus leucocephalus*) protection plan that takes into account Ontario's *Management Plan for the Bald Eagle (Haliaeetus leucocephalus) in Ontario* and Ontario's *Bald Eagle Habitat Management Guidelines*. The Proponent shall implement the protection plan during construction and operation. As part of the implementation of the protection plan, the Proponent shall:

7.1.1 conduct, once prior to construction and annually until vegetation clearing is completed within the project development area, surveys of active bald eagle (*Haliaeetus leucocephalus*) nests within the project development area and within 800 meters of the project development area, and provide the results of the surveys to Indigenous groups, relevant authorities and the Agency no later than 60 days after the end of each survey; and

7.1.2 develop, in consultation with Indigenous groups and relevant authorities, and implement measures to protect active nest(s) found pursuant to the surveys referred to in condition 7.1.1. At a minimum, these measures shall include restrictions on access and on Designated Project activities, including site preparation and vegetation clearing, that the Proponent may undertake from March 1 to August 31 within 400 metres of any active nest. The Proponent shall submit these measures to the Agency prior to implementing them, including the period(s) of time during which these measures will apply.

## **8 Listed species at risk**

- 8.1 The Proponent shall close mine shaft openings prior to any drawdown works to reduce the likelihood of little brown myotis (*Myotis lucifugus*) and northern myotis (*Myotis septentrionalis*) establishing bat hibernacula in underground workings.

## **9 Accidents and malfunctions**

- 9.1 The Proponent shall take all reasonable measures to prevent accidents and malfunctions that may result in adverse environmental effects.
- 9.2 The Proponent shall, prior to construction, consult with Indigenous groups and relevant authorities on the measures to be implemented to prevent accidents and malfunctions.

- 9.3 The Proponent shall, prior to construction and in consultation with Indigenous groups and relevant authorities, develop an accident and malfunction response plan in relation to the Designated Project. The accident and malfunction plan shall include:
- 9.3.1 the types of accident and malfunction that may cause adverse environmental effects; and
  - 9.3.2 the measures to be implemented in response to each type of accident and malfunction referred to in condition 9.3.1 to mitigate any adverse environmental effect(s) caused by the accident or malfunction.
- 9.4 In the event of an accident or malfunction with the potential to cause adverse environmental effects, the Proponent shall immediately implement the measures appropriate to the accident or malfunction referred to in condition 9.3.2 and shall:
- 9.4.1 notify, as soon as possible, Indigenous groups and relevant authorities of the accident or malfunction, and notify the Agency in writing no later than 24 hours following the accident or malfunction. For the notification to Indigenous groups and the Agency, the Proponent shall specify:
    - 9.4.1.1 the date the accident or malfunction occurred;
    - 9.4.1.2 a summary description of the accident or malfunction;
    - 9.4.1.3 a list of any substances potentially released into the environment as a result of the accident or malfunction.
  - 9.4.2 submit a written report to the Agency no later than 30 days after the day on which the accident or malfunction occurred. The written report shall include:
    - 9.4.2.1 a detailed description of the accident or malfunction and of its adverse environmental effects and any associated potential health risks;
    - 9.4.2.2 a description of the measures that were taken by the Proponent to mitigate the adverse environmental effects caused by the accident or malfunction;
    - 9.4.2.3 any view(s) from Indigenous groups and advice from relevant authorities received with respect to the accident or malfunction, its adverse environmental effects, the associated potential health risks and the measures taken by the Proponent to mitigate these adverse environmental effects;
    - 9.4.2.4 a description of any residual adverse environmental effects and any modified or additional measures required by the Proponent to mitigate residual adverse environmental effects; and
    - 9.4.2.5 details concerning the implementation of the accident or malfunction response plan referred to in condition 9.3.
  - 9.4.3 submit a written report to the Agency no later than 90 days after the day on which the accident or malfunction occurred that includes a description of changes made to avoid a subsequent occurrence of the accident or malfunction and of the modified or additional measure(s) implemented by the Proponent to mitigate and monitor residual adverse environmental effects and to carry out any required progressive reclamation, taking into account the information submitted in the written report pursuant to condition 9.4.2. The report shall include all additional views from Indigenous groups and advice from relevant

authorities received by the Proponent since the views and advice referred to in condition 9.4.2.3 were received by the Proponent.

- 9.5 The Proponent shall develop a communication plan in consultation with Indigenous groups. The Proponent shall develop the communication plan prior to construction and shall implement and keep it up to date during all phases of the Designated Project. The plan shall include:
- 9.5.1 the types of accident and malfunction requiring the Proponent to notify the respective Indigenous groups;
  - 9.5.2 the manner by which Indigenous groups shall be notified by the Proponent of an accident or malfunction and of any opportunities for the Indigenous groups to assist in the response to the accident or malfunction; and
  - 9.5.3 the contact information of the representatives of the Proponent that the Indigenous groups may contact and of the representatives of the respective Indigenous groups to which the Proponent provides notification.

## **10 Schedules**

- 10.1 The Proponent shall submit to the Agency a schedule for all conditions set out in this Decision Statement no later than 60 days prior to the start of construction. This schedule shall detail all activities planned to fulfill each condition set out in this Decision Statement and the commencement and estimated completion month(s) and year(s) for each of these activities.
- 10.2 The Proponent shall submit to the Agency a schedule outlining all activities required to carry out all phases of the Designated Project no later than 60 days prior to the start of construction. The schedule shall indicate the commencement and estimated completion month(s) and year(s) and duration of each of these activities.
- 10.3 The Proponent shall submit to the Agency in writing an update to schedules referred to in conditions 10.1 and 10.2 every year no later than December 31, until completion of all activities referred to in each schedule.
- 10.4 The Proponent shall provide to the Agency revised schedules if any change is made to the initial schedules referred to in conditions 10.1 and 10.2 or to any subsequent update(s) referred to in condition 10.3, upon revision of the schedules.
- 10.5 The Proponent shall provide Indigenous groups with the schedules referred to in conditions 10.1 and 10.2 and the updates or revisions to the initial schedules pursuant to condition 10.3 and 10.4 at the same time the Proponent provides these documents to the Agency.

## **11 Record keeping**

- 11.1 The Proponent shall maintain all records required to demonstrate compliance with the conditions set out in this Decision Statement. The Proponent shall retain the records and make them available to the Agency throughout construction and operation and for 25 years following the end of operation or until the end of decommissioning of the Designated Project, whichever comes

first. The Proponent shall provide the aforementioned records to the Agency upon demand within a timeframe specified by the Agency.

11.2 The Proponent shall retain all records referred to in condition 11.1 at a facility in Canada and shall provide the address of the facility to the Agency. The Proponent shall notify the Agency at least 30 days prior to any change to the physical location of the facility where the records are retained, and shall provide to the Agency the address of the new location.

11.3 The Proponent shall notify the Agency of any change to the contact information of the Proponent included in this Decision Statement.

### **Issuance**

This Decision Statement is issued in Ottawa, Ontario by:

< Original signed by >  
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Date December 10, 2018

**The Honourable Catherine McKenna**  
Minister of the Environment