

Potential conditions under the Canadian Environmental Assessment Act, 2012

The Impact Assessment Agency of Canada is contemplating the following potential conditions in relation to the Lynn Lake Gold Project (the Designated Project) located in Manitoba for recommendation to the Minister of the Environment (the Minister) for inclusion in a Decision Statement issued under the Canadian Environmental Assessment Act, 2012. If the Minister decides that the carrying out of the Designated Project is unlikely to cause significant adverse environmental effects as defined under subsections 5(1) and 5(2), or if the Minister decides that the Designated Project is likely to cause significant adverse environmental effects and the Governor in Council decides such effects are justified in the circumstances, the Designated Project would be allowed to proceed, and any conditions established by the Minister under the Canadian Environmental Assessment Act, 2012 would become legally binding.

Pursuant to section 184 of the Impact Assessment Act, a Decision Statement issued by the Minister under subsection 54(1) of the Canadian Environmental Assessment Act, 2012 is deemed to be a Decision Statement issued under subsection 65(1) of the Impact Assessment Act, other than for the purposes of section 70.

1 Definitions

- 1.1 Agency means the Impact Assessment Agency of Canada.
- 1.2 Baseline means the environmental conditions prior to initiating construction of the Designated Project.
- 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 that has come into contact with any mine site components.
- 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.
- 1.7 Designated Project means the Lynn Lake Gold Project as described in Chapter 2 of the Draft Environmental Assessment Report prepared by the Impact Assessment Agency of Canada (Canadian Environmental Assessment Registry Reference Number 80140).
- 1.8 Distribution lines means power lines that carry low voltage electricity from substations to end user buildings.

- 1.9 Effluent means “effluent” as defined in section 1(1) of the Metal and Diamond Mining Effluent Regulations.
- 1.10 Environment and Climate Change Canada means the Department of the Environment as established under subsection 2(1) of the Department of the Environment Act.
- 1.11 Environmental assessment means “environmental assessment” as defined in subsection 2(1) of the Canadian Environmental Assessment Act, 2012.
- 1.12 Environmental Assessment Report means the draft report prepared by the Impact Assessment Agency of Canada pursuant to subsection 25(2) of the Canadian Environmental Assessment Act, 2012 (Canadian Impact Assessment Registry Reference Number 80140).
- 1.13 Environmental effects means “environmental effects” as described in section 5 of the Canadian Environmental Assessment Act, 2012.
- 1.14 Environmental Impact Statement means the May 2020 document entitled Lynn Lake Gold Project Environmental Impact Statement (Canadian Impact Assessment Registry Reference Number 80140, document #19).
- 1.15 Fish means “fish” as defined in subsection 2(1) of the Fisheries Act.
- 1.16 Fish habitat means “fish habitat” as defined in subsection 2(1) of the Fisheries Act.
- 1.17 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.
- 1.18 Fish passage means the free transit of fish, upstream and downstream, associated with migration or localized movements that are necessary to complete their life cycle. Depending on the context, fish passage is also a route for fish to move between habitat types.
- 1.19 Follow-up program means “follow-up program” as defined in subsection 2(1) of the Canadian Environmental Assessment Act, 2012.
- 1.20 Health Canada means the Department of Health as established under subsection 2(1) of the Department of Health Act
- 1.21 Heritage value means the aesthetic, historic, scientific, cultural, social or spiritual importance or significance for past, present or future generations.
- 1.22 Indigenous groups means the following Aboriginal Peoples: Barren Lands First Nation, Chemawawin Cree Nation, Hatchet Lake First Nation, Manitoba Métis Federation, Marcel Colomb First Nation, Mathias Colomb Cree Nation, Pickerel Narrows Cree Nation, Métis Nation – Saskatchewan Northern Region 1, Métis Nation – Saskatchewan Eastern Region

1, Northlands Denesuline First Nation, Peter Ballantyne Cree Nation, Sayisi Dene First Nation, Nisichawayasihk Cree Nation and O-Pipon-Na-Piwin Cree Nation.

- 1.23 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.
- 1.24 Local assessment areas means the geographic area in which project-related environmental effects (direct or indirect) can be predicted or measured for assessment, including for the Gordon Site and the MacLellan Site, as described in Figures 2 and 3 of the Environmental Assessment Report (Canadian Impact Assessment Registry Reference Number 80140).
- 1.25 Migratory bird means “migratory bird” as defined in subsection 2(1) of the Migratory Birds Convention Act, 1994.
- 1.26 Mitigation measures means “mitigation measures” as defined in subsection 2(1) of the Canadian Environmental Assessment Act, 2012.
- 1.27 Monitoring means observation of the environmental effects of the Designated Project, performed in the context of a follow-up program set out in these conditions in order to verify the accuracy of the environmental assessment and/or determine the effectiveness of any mitigation measure.
- 1.28 Offsetting plan means “offsetting plan” as described in Schedule 1 of the Authorizations Concerning Fish and Fish Habitat Protection Regulations and “compensation plan” as described in subsection 27.1 of the Metal and Diamond Mining Effluent Regulations.
- 1.29 Operation means the phase of the Designated Project starting when commercial production begins and continuing until the start of decommissioning. This phase includes periods when commercial production may temporarily cease.
- 1.30 Participate means to directly or indirectly assist or support initiatives through the provision of resources, including knowledge, time, data, access and other means that are economically and technically feasible and within the care and control of the Proponent.
- 1.31 Post-closure means the phase that begins when the Proponent has completed reclamation related to any components of the Designated Project not required to maintain active water treatment, and continues until water treatment is no longer required to meet the pollution prevention provisions of the Fisheries Act pursuant to condition 3.7.
- 1.32 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.

- 1.33 Project development areas means the geographic area occupied by the Designated Project, including the Gordon Site and the MacLellan Site, as described in Figures 2 and 3 of the Environmental Assessment Report (Canadian Impact Assessment Registry Reference Number 80140).
- 1.34 Proponent means Alamos Gold Inc. and its successors or assigns.
- 1.35 Qualified individual means someone who, through education, experience and knowledge relevant to a particular matter, provides the Proponent with advice within their area of expertise. Knowledge relevant to a particular matter may include community and Indigenous knowledge.
- 1.36 Record means “record” as defined in subsection 2(1) of the Canadian Environmental Assessment Act, 2012.
- 1.37 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 document.
- 1.38 Reporting year means January 1 to December 31 of the same calendar year.
- 1.39 Structure, site or thing of historical, archaeological, 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.
- 1.40 Water frequented by fish means “water frequented by fish” as defined in subsection 34(1) of the Fisheries Act.
- 1.41 Weed means “noxious weed” as defined in section 1 of Manitoba’s Noxious Weeds Act.
- 1.42 Wetlands means land that is saturated with water long enough to promote wetland or aquatic processes as indicated by poorly drained soils, hydrophytic vegetation and various kinds of biological activity which are adapted to a wet environment and as further defined in the Canadian Wetland Classification System.

Potential Conditions

These conditions may be 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 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. In this document, a reference to a statute will include every

amendment to it, every regulation made under it, every amendment made to a regulation made under it and any law enacted in substitution for, or in replacement of, it.

2 General conditions

- 2.1 The Proponent shall ensure that its actions in meeting the conditions set out in this document 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 policies, guidelines and directives and community and Indigenous 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.
- 2.2 The Proponent shall ensure that its actions in meeting the conditions set out in this document are taken in a way that is consistent with any applicable recovery strategy and action plans for listed species at risk.

Consultation

2.3 The Proponent shall, where consultation is a requirement of a condition set out in this document:

- 2.3.1 provide a written notice of the opportunity for the parties being consulted to present their views and information on the subject matter of the consultation;
- 2.3.2 provide all information available and relevant to the scope and the subject matter of the consultation and a reasonable period of time agreed upon with the parties being consulted, not to be less than 15 days, to prepare their views and information;
- 2.3.3 undertake an impartial consideration of all views and information presented by the parties being consulted on the subject matter of the consultation; and
- 2.3.4 advise as soon as feasible the parties being consulted on how the views and information received have, or have not, been integrated into the subject matter of the consultation by the Proponent and provide a justification.

2.4 The Proponent shall, where consultation with Indigenous groups is a requirement of a condition set out in this document, discuss with each Indigenous group with respect to the manner to satisfy the consultation requirements referred to in condition 2.3, including:

- 2.4.1 methods of notification, **including advance notification of construction work that has the potential to increase local noise and disturbance to help manage awareness and acceptance**;
- 2.4.2 the type of information and the period of time to be provided when seeking input;

Commented [A1]: In doing so, the Proponent shall give due consideration to the proximity of the parties to the project and the related potential for direct and indirect impacts associated with the project

Commented [A2]: The Proponent shall commit to fostering an ongoing understanding of cultural practices, protocols and related considerations in order to appropriately inform the consultation process.

Commented [A3]: Additional MCFN requirements: Proponent to commit to a specific, formalized and ongoing community feedback process to help give voice to the concerns, observations, and experiences of MCFN members. Proponent to commit to a regular meeting schedule (to be defined and agreed upon by both Proponent and MCFN) to adaptively manage any negative effects on current use as a result of construction or operation of the Project. Proponent to commit to develop, in collaboration with MCFN, communication protocols to potentially affected communities/members regarding pre-construction and construction-phase activities including periods of access restrictions.

- 2.4.3 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
- 2.4.4 the period of time and the means to advise Indigenous groups of how their views and information were considered by the Proponent.

Follow-up programs

- 2.5 The Proponent shall, where a follow-up program is a requirement of a condition set out in this document, determine, as part of the development of each follow-up program and in consultation with the parties being consulted during the development, the following information, unless otherwise specified in the condition:
 - 2.5.1 the methodology, location, frequency, timing and duration of monitoring associated with the follow-up program;
 - 2.5.2 the scope, content and frequency of reporting of the results of the follow-up program to the parties consulted for the development of the follow-up program;
 - 2.5.3 the minimum frequency at which the follow-up program must be reviewed and, if necessary, updated;
 - 2.5.4 the levels of environmental change relative to baseline that would require the Proponent to implement modified or additional mitigation measure(s), including instances where the Proponent may require Designated Project activities causing the environmental change to be stopped;
 - 2.5.5 the technically and economically feasible **additional mitigation or offset** 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 2.5.4 have been reached or exceeded;
and
 - 2.5.6 the specific and measurable end points that must be achieved before the follow-up program can end. Those end points should indicate that the accuracy of the environmental assessment has been verified and/or that the mitigation measures are effective.
- 2.6 The Proponent shall update the information determined for each follow-up program pursuant to condition 2.5 during the implementation of each follow-up program, at the minimum frequency determined pursuant to condition 2.5.3 and in consultation with the parties being consulted during the development of each follow-up program.
- 2.7 The Proponent shall provide details of the follow-up programs referred to in conditions 3.12, 3.13, 3.14, 3.15, 4.6, 6.4, 6.5, 6.6, 8.2, 9.8 and 11.2, including the information determined for each follow-up program pursuant to condition 2.5, to the Agency and to the 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 made pursuant to

Commented [A4]: In some cases end-points may not be achieved or realized for a considerable period of time. It is therefore reasonable that there would be an annual review of monitoring programs to review and assess effectiveness in meeting the monitoring objectives. This is of critical importance to MCFN.

condition 2.6 to the Agency and to the parties being consulted during the development of each follow-up program within 30 days of the follow-up program being updated.

- 2.8 The Proponent shall, where a follow-up program is a requirement of a condition set out in this document:
- 2.8.1 implement the follow-up program according to the information determined pursuant to condition 2.5;
 - 2.8.2 conduct 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;
 - 2.8.3 determine whether modified or additional mitigation measure(s) or potential offset measures are required based on the monitoring and analysis undertaken pursuant to condition 2.8.2;
 - 2.8.4 if modified or additional mitigation or offset measure(s) are required pursuant to condition 2.8.3, develop and implement these ~~mitigation~~ measure(s) as soon as feasible and monitor them pursuant to condition 2.8.2. The Proponent shall notify the Agency in writing within 24 hours of any modified or additional mitigation or offset measure being implemented. If the Proponent implements any additional or modified mitigation or offset measure not previously submitted to the Agency pursuant to condition 2.5, the Proponent shall submit a detailed description of the measure(s) to the Agency within 7 days of their implementation; and
 - 2.8.5 report all results of the follow-up program to the Agency no later than March 31 following each reporting year during which the follow-up program is implemented and, subject to information determined pursuant to 2.5.2, to the parties being consulted during the development of the follow-up program.
- 2.9 Where consultation with Indigenous groups is a requirement of a follow-up program, the Proponent shall discuss the follow-up program with each group and shall determine, in consultation with each group, opportunities for their participation in the implementation of the follow-up program, including the conduct of monitoring, the analysis and reporting of follow-up results and the determination of whether modified or additional mitigation measure(s) are required, as set out in condition 2.8, and opportunities for training to support participation in monitoring. The Proponent shall permit the participation of any interested Indigenous group in the identified follow-up program and training with priority consideration given to the most proximal Indigenous Nation(s).

Annual reporting

- 2.10 The Proponent shall prepare an annual report for each reporting year that sets out:
- 2.10.1 the activities undertaken by the Proponent to comply with each of the conditions set out in this document;
 - 2.10.2 how the Proponent complied with condition 2.1;

- 2.10.3 for conditions set out in this document 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;
 - 2.10.4 the information referred to in conditions 2.5 and 2.8 for each follow-up program;
 - 2.10.5 a summary of the available results of the follow-up program requirements identified in conditions 3.12, 3.13, 3.14, 3.15, 4.6, 6.4, 6.5, 6.6, 8.2, 9.8 and 11.2;
 - 2.10.6 for any plan that is a requirement of a condition set out in this document, any update(s) to the plan that have been made during the reporting year; and
 - 2.10.7 any modified or additional mitigation measure implemented or proposed to be implemented by the Proponent, as determined pursuant to condition 2.8.
- 2.11 The Proponent shall submit to the Agency the annual report referred to in condition 2.9, including a plain language executive summary in both official languages, no later than March 31 following the reporting year to which the annual report applies.
- 2.12 The first reporting year for which the Proponent shall prepare an annual report pursuant to condition 2.9 shall start on the day the Minister of the Environment issues the Decision Statement to the Proponent pursuant to subsection 54 (1) of the Canadian Environmental Assessment Act, 2012.

Information sharing

- 2.13 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 reports related to accidents and malfunctions referred to in conditions 11.6.4 and 11.6.5, the accident and malfunction communication plan referred to in condition 11.7, the schedules referred to in conditions 12.1 and 12.2, and any update or revision to the above documents, upon submission of these documents to the parties consulted 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 in writing of the availability of these documents within 48 hours of their publication.

Commented [A5]: Indigenous ownership of information that may be considered Indigenous knowledge should be identified and included in this section.

2.14 When the development of any plan is a requirement of a condition set out in this document, the Proponent shall submit the plan to the Agency prior to construction, unless otherwise required through the condition.

Change of Proponent

2.15 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

2.16 If the Proponent is proposing to carry out the Designated Project in a manner other than described in condition 1.7, the Proponent shall notify the Agency in writing in advance. As part of the notification, the Proponent shall provide:

- 2.16.1 a description of the proposed change(s) to the Designated Project and the environmental effects that may result from the change(s);
- 2.16.2 any modified or additional measure to mitigate any environmental effect(s) that may result from the change(s) and any modified or additional follow-up requirement; and
- 2.16.3 an explanation of how, taking into account any modified or additional mitigation measure referred to condition 2.15.2, the environmental effects that may result from the change(s) may differ from the environmental effects of the Designated Project identified during the environmental assessment.

2.17 The Proponent shall submit to the Agency any additional information required by the Agency about the proposed change(s) referred to in condition 2.16, which may include the results of consultation with Indigenous groups and relevant authorities on the proposed change(s) and environmental effects referred to in condition 2.16.1 and the modified or additional mitigation measures and follow-up requirements referred to in condition 2.16.2.

3 Fish and fish habitat

3.1 The Proponent shall develop, prior to construction and to the satisfaction of Fisheries and Oceans Canada and in consultation with Indigenous groups, **in particular proximal groups such as MCFN**, and implement an offsetting plan to mitigate residual effects to fish and fish habitat associated with the carrying out of the Designated Project. The Proponent shall share the proposed plan with Indigenous groups and the Indigenous Environmental Advisory Committee, as identified in condition 6.3, at least 30 days prior to formal submission to Fisheries and Oceans Canada, and submit the approved offsetting plan to the Agency prior to implementation.

- 3.2 The Proponent shall, for any fish habitat offsetting measure proposed in any offsetting plan referred to in condition 3.1 that may cause adverse environmental effects not considered in the environmental assessment, develop and implement, following consultation with Indigenous groups, **in particular proximal groups such as MCFN**, and relevant authorities, measures to mitigate those effects. The Proponent shall submit these measures to the Agency prior to construction and implement them through decommissioning.
- 3.3 The Proponent shall install exclusion screens on intake and effluent discharge pipes prior to their operation, while 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 develop, prior to construction, and implement and maintain during all phases of the Designated Project, measures to mitigate any potential effects to water levels in Gordon Lake and Farley Lake due to groundwater drawdown as a result of Designated Project activities. These measures shall include intercepting and redirecting groundwater flowing towards the open pit with wells or installing a grout curtain or cut-off wall, before intercepted groundwater enters the open pits and returning it into Gordon Lake and Farley Lake during construction and operation. The Proponent shall submit these measures to the Agency before implementing them.
- 3.5 The Proponent shall, when releasing into Gordon Lake and Farley Lake any collected water, including groundwater pursuant to condition 3.4 and water from dewatering the East and Wendy open pits:
- 3.5.1 aerate water collected from the East and Wendy open pits, prior to release into Gordon Lake and Farley Lake to prevent chemical stratification and precipitation of oxides; and
- 3.5.2 release collected water only when the collected water is within 2 degrees Celsius of background lake water temperatures, and outside of burbot (lota lota) winter spawning periods as determined by Fisheries and Oceans Canada.
- 3.6 The Proponent shall, during construction, adjust the rate of discharge of water to Gordon Lake and Farley Lake from dewatering the existing East and Wendy pit lakes and the interceptor wells in order to match background flow rates in Farley Creek as identified in Volume 2 Chapter 10 of the Environmental Impact Statement and Appendix A Attachment IAAC-48 of the Proponent's IR Responses Round 1, Package 1 (Canadian Impact Assessment Registry Reference Number 80140, document #54).
- 3.7 The Proponent shall collect all contact water, effluent and seepage from the Project development areas, including seepage and recharge from the tailings management facility, mine rock storage areas, overburden and ore stockpiles, and seepage input to groundwater that flows into the open pits, and treat it, as necessary, before depositing it into the

receiving environment during all phases of the Designated Project. When treating contact water, effluent and seepage, the Proponent shall take into account Manitoba's Water Quality Standards, Objectives, and Guidelines, Canadian Council of Ministers of the Environment's Canadian Water Quality Guidelines for the Protection of Aquatic Life, Health Canada's Guidelines for Canadian Drinking Water Quality, and Environment and Climate Change Canada's Federal Environmental Quality Guidelines.

3.8

The Proponent shall develop, prior to construction and in consultation with Indigenous groups, **in particular proximal groups such as MCFN**, and relevant authorities, measures to protect fish and fish habitat when undertaking activities in or near water, and in a manner that complies with any authorization issued under the Fisheries Act for the Designated Project. The Proponent shall implement these measures during all phases of the Designated Project. In doing so, the Proponent shall:

- 3.8.1 salvage and relocate fish prior to conducting any Designated Project activity requiring the removal of fish habitat, including dewatering, in a manner that complies with any authorization issued under the Fisheries Act;
 - 3.8.2 conduct activities in or near fish-bearing water bodies, including blasting, outside of restricted activity timing windows for fish species in accordance with Fisheries and Oceans Canada's Manitoba Restricted Activity Timing Windows for the Protection of Fish and Fish Habitat and within blasting thresholds recommended by Fisheries and Oceans Canada;
and
 - 3.8.3 maintain during all phases a buffer of undisturbed vegetation of at least 30 meters from the water line along water frequented by fish, including wetlands.
- 3.9 The Proponent shall consult with Indigenous groups, **in particular proximal groups such as MCFN**, prior to the salvage and relocation of fish conducted pursuant to condition 3.8.1, to identify opportunities and determine their interest in participating in the salvage and relocation of fish.
- 3.10 The Proponent shall manage acid-generating and metal-leaching and potentially acid-generating and metal-leaching tailings and waste, including from the tailings management facility, mine rock storage areas and ore stockpiles, during all phases of the Designated Project in consultation with Environment and Climate Change Canada and any other relevant authorities. In doing so, the Proponent shall:

- 3.10.1 characterize, prior to construction, the acid rock drainage and metal-leaching potential of overburden and other mine rock to be used for construction;
- 3.10.2 conduct geochemical testing of generated waste rock and tailings during operation to identify potentially acid-generating and metal-leaching waste material and verify the magnitude and onset of potential acid rock drainage in waste rock and tailings;
- 3.10.3 taking into account results of geochemical testing in condition 3.10.2, implement measures to delay onset and magnitude of acid rock drainage in waste rock, including blending potentially acid generating with non-potentially acid generating during operation;
- 3.10.4 cover all acid-generating, potentially acid-generating, and potentially metal-leaching tailings and waste, including waste in the tailings management facility and mine rock storage areas, during operations, and decommissioning with an oxygen-limiting barrier in manner determined by a qualified individual; and
- 3.10.5 only use materials that are not acid-generating, potentially acid-generating or metal-leaching during construction, including for earthworks and grading.

3.11 The Proponent shall develop, prior to construction and in consultation with Indigenous groups, **in particular proximal groups such as MCFN**, and relevant authorities, and implement and maintain during all phases of the Designated Project, measures to control erosion and sedimentation within the Project development areas in a manner consistent with the Fisheries Act and its regulations, and taking into account Environment and Climate Change Canada's Environmental Code of Practice for Metal Mines, and Fisheries and Oceans Canada's Measures to Protect Fish and Fish Habitat. The Proponent shall submit these measures to the Agency before implementing them. Measures shall include the use of:

- 3.11.1 intake pipes that point upwards and away from sediment; and

3.11.2 effluent discharge pipes that are equipped with diffusers.

3.12 The Proponent shall develop, prior to construction and in consultation with Indigenous groups, **in particular proximal groups such as MCFN**, Fisheries and Oceans Canada, Environment and Climate Change Canada and any other relevant authorities, a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of the mitigation measures as they pertain to adverse environmental effects of the Designated Project on water quality, taking into account Environment and Climate Change Canada's Metal Mine Technical Guidance for Environmental Effects Monitoring. The Proponent shall implement the follow-up program during all phases of the Designated Project. As part of the follow-up program, the Proponent shall:

Commented [A6]: Proponent shall work collaboratively with MCFN to ensure an ongoing opportunity to provide input to aquatic, benthic and invertebrate monitoring plans and controls – sites, reporting, management for an on-going aquatic effects monitoring and management plan for streams and lakes of specific interest to MCFN.

3.12.1 determine in consultation with Indigenous groups, **in particular proximal groups such as MCFN**, Environment and Climate Change Canada, and any other relevant authorities, the location and extent of mixing zones in waterbodies that may be affected by the Designated Project;

3.12.2 identify, prior to construction, fish-bearing wetlands that are anticipated to be impacted by groundwater drawdown at the Gordon and MacLellan sites;

3.12.3 monitor, beginning during construction, water quality in the East and Wendy pit lakes, tailings management facility sediment pond, and receiving waterbodies and watercourses upstream and downstream of the Project development areas, including downstream of the edge of mixing zones identified pursuant to condition 3.12.1, Arbor Lake, Burger Lake, Cockeram Lake, Ellystan Lake, Farley Creek, Farley Lake, Gordon Lake, the Hughes River, the Keewatin River, the unnamed tributary of the Keewatin River, Minton Lake and Swede Lake, and fish-bearing wetlands identified pursuant to condition 3.12.2, for all parameters that may have adverse effects on fish and fish habitat, including aluminum, antimony, arsenic, copper, cyanide, fluoride, hexavalent chromium, iron, methylmercury, phosphorus, **selenium** and total and dissolved cadmium, calcium and magnesium. Monitoring of the East and Wendy pit lakes shall continue through post-closure until water quality meets the Canadian Council of Minister of the Environment's Canadian Water Quality Guidelines for Protection for Aquatic Life pursuant to condition 3.7, and is stable or improving;

Commented [A7]: Proponent to develop a mercury and selenium diagnosis program that will include lakes of importance to MCFN and connected lakes as well as other water bodies that would sustain the MCFN fisheries. This is to be determined in collaboration with MCFN and will include lakes fished by the community within the local and regional study areas. Program will include samples of fish tissue, sediments and water taken from at least 3 stations within each lake.

3.12.4 monitor, beginning during construction, water quality in groundwater near the open pits, Farley Lake, Gordon Lake, the Keewatin River, the unnamed tributary of the Keewatin River, Minton Lake, the unnamed lakes northeast of Minton Lake, Payne Lake, Susan Lake, and fish-bearing wetlands identified pursuant to condition 3.12.2 within the Project development areas, up and down gradient from the tailings management facility, mine rock storage areas, ore and overburden stockpiles, and seepage collection systems for all parameters that may have adverse effects on fish and fish habitat, including antimony, arsenic, iron, sodium, sulphate, and uranium at the Gordon site and aluminum, antimony, arsenic, cobalt, total cyanide, iron, lead, nitrate, nitrite, sodium, sulphate at the MacLellan site;

- 3.12.5 monitor, during construction and operation, total suspended solids and turbidity in fish-bearing waterbodies upstream and downstream of the Project development areas to be determined with proximal Indigenous groups such as MCFN where Designated Project activities are undertaken in or near water frequented by fish; and
 - 3.12.6 develop, in consultation with relevant authorities, and proximal Indigenous groups such as MCFN and implement modified or additional mitigation or offset measures, if results of monitoring pursuant to condition 3.12.3, 3.12.4 and 3.12.5 demonstrate any exceedances of the Canadian Council of Minister of the Environment's Canadian Water Quality Guidelines for Protection for Aquatic Life attributable to the Designated Project as identified in Volume 1 Chapter 9 of the Environmental Impact Statement.
- 3.13 The Proponent shall develop, prior to construction and in consultation with Indigenous groups, in particular proximal groups such as MCFN, Fisheries and Oceans Canada, Environment and Climate Change Canada and any other relevant authorities, a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of the mitigation measures as they pertain to adverse environmental effects of the Designated Project on water quantity. The Proponent shall implement the follow-up program during all phases of the Designated Project. As part of the follow-up program, the Proponent shall:
- 3.13.1 monitor, during all phases, surface water instantaneous flows, lake levels and pH levels within Arbor Lake, Burger Lake, Cockeram Lake, Ellystan Lake, Farley Creek, Farley Lake, Gordon Lake, the Keewatin River, the unnamed tributary of the Keewatin River, Minton Lake, Swede Lake, fish-bearing wetlands within the local assessment areas, the East and Wendy pit lakes and the tailings management facility collection pond to verify the environmental assessment predictions identified in Volume 2 Chapter 10 of the Environmental Impact Statement and Appendix A Attachment IAAC-48 of the Proponent's IR Responses Round 1, Package 1 (Canadian Impact Assessment Registry Reference Number 80140, document #54);
 - 3.13.2 monitor groundwater levels, gradients and hydraulic conductivity of all hydrogeological units, as identified in the groundwater model in Volume 5 Appendix F and G of the Environmental Impact Statement, from near surface to a minimum of 115 metres below ground near the open pits, the tailings management facility, mine rock storage areas, ore and overburden stockpiles, and fish-bearing wetlands within the local assessment areas; and
 - 3.13.3 develop, in consultation with relevant authorities, and proximal Indigenous groups such as MCFN and implement modified or additional mitigation or offset measures, if the results of monitoring conducted pursuant to condition 3.13.1 and 3.13.2 demonstrate unanticipated effects attributable to the Designated Project.

3.14 The Proponent shall develop, prior to construction and in consultation with Indigenous groups, **in particular proximal groups such as MCFN**, Fisheries and Oceans Canada, Environment and Climate Change Canada and any other relevant authorities, a follow-up program to determine the effectiveness of the mitigation measures and verify the accuracy of the environmental assessment predictions identified in Volume 2 Chapter 10 of the Environmental Impact Statement as they pertain to adverse environmental effects of the Designated Project on fish and fish habitat, taking into account Environment and Climate Change Canada's Metal Mine Technical Guidance for Environmental Effects Monitoring. The Proponent shall implement the follow-up program during all phases of the Designated Project. **As part of the follow-up program**, the Proponent shall:

Commented [A8]: Proponent shall work with MCFN, prior to construction, to provide them with an ongoing opportunity to provide input to aquatic, benthic and invertebrate monitoring plans and controls – sites, reporting, management for an on-going aquatic effects monitoring and management plan for streams and lakes of specific interest to MCFN.

3.14.1 monitor, during all phases of the Designated Project, water temperature in Farley Creek, Farley Lake, Gordon Lake, the Hughes River, the Keewatin River, Minton Lake, the new diversion channel, and any additional locations identified in consultation with relevant authorities, **in particular proximal groups such as MCFN**, taking into account predictions in Volume 2 Chapter 10 of the Environmental Impact Statement;

Commented [A9]: Proponent shall develop, in collaboration with MCFN, a mercury and selenium diagnosis program that will include lakes of importance to MCFN and connected lakes as well as other water bodies that would sustain the MCFN fisheries. This is to be determined in collaboration with MCFN and will include lakes fished by the community within the local and regional study areas. Program will include samples of fish tissue, sediments and water taken from at least 3 stations within each lake.

3.14.2 monitor benthic invertebrate, plankton and periphyton populations in Farley Lake, Gordon Lake, the Hughes River, the Keewatin River, Minton Lake, the new diversion channel, and any additional locations identified in consultation with relevant authorities, **in particular proximal groups such as MCFN**, for the detection of project-related changes in nutrient and contaminant levels and food web dynamics as identified in Volume 2 Chapter 10 of the Environmental Impact Statement. Benthic invertebrate parameters to be monitored shall include total invertebrate density, taxon richness, Simpson's Evenness Index, and Bray-Curtis Index;

3.14.3 identify, in consultation with Indigenous groups, **in particular proximal groups such as MCFN**, Fisheries and Oceans Canada and any other relevant authorities, fish species to monitor, including **but not limited to** species of cultural importance to Indigenous groups, and highly sensitive fish species. Species shall include lake sturgeon (*Acipenser fulvescens*), burbot (*Lota lota*), northern pike (*Esox lucius*), lake whitefish (*Coregonus clupeaformis*), and white sucker (*Catostomus commersonii*); and

3.14.4 monitor, during all phases of the Designated Project, including prior to construction, for all species identified in condition 3.14.3, habitat availability, quality and utilization, growth, survival and reproduction, spawning success, juvenile recruitment, and genetic composition in Farley Lake, Gordon Lake, Farley Creek, Minton Lake, the Hughes River, the Keewatin River, the new diversion channel, fish-bearing wetlands within the Project development areas identified pursuant to condition 3.12.2, and any additional locations identified in consultation with relevant authorities, **in particular proximal groups such as MCFN**.

3.15 The Proponent shall develop, prior to construction and in consultation with Indigenous groups, **in particular proximal groups such as MCFN**, and relevant authorities, a follow-up program to verify the accuracy of the environmental assessment and the effectiveness of the mitigation measures as they pertain to acid rock drainage and metal leaching into the receiving environment from the Project development areas, including from the mine rock storage areas, ore stockpiles, and the tailings management facility, as described in Volume 1 Chapter 5 of the Environmental Impact Statement. The Proponent shall implement the follow-up program through all phases of the Designated Project. In doing so, the Proponent shall:

3.15.1 verify that the covers installed at the mine rock storage areas and tailings management facility are performing and will continue to perform as predicted in the Environmental Assessment Report through all phases of the Designated Project, including post-closure.

4 Migratory birds

4.1 The Proponent shall carry out the Designated Project, including vegetation clearing and blasting, in a manner that protects migratory birds and avoids injuring, killing or harassing migratory birds or destroying, taking or disturbing their eggs, or damaging, destroying, removing or disturbing their nests. In this regard, the Proponent shall take into account Environment and Climate Change Canada's Guidelines to avoid harm to migratory birds.

4.2 The Proponent shall conduct vegetation clearing and site preparation activities outside of the applicable regional nesting periods for the Project development areas, as described in Environment and Climate Change Canada's General nesting periods for migratory birds, unless not technically or economically feasible. In the event that vegetation clearing outside regional nesting periods is not technically or economically feasible, the Proponent shall ensure it continues to

carry out vegetation clearing in a manner described in conditions 4.1 by developing and implementing additional mitigation measures, including:

4.2.1 conducting non-intrusive surveys within the Project development areas prior to construction, to identify nests for migratory birds and birds that are listed species at risk, including for bank swallow (*Riparia riparia*), barn swallow (*Hirundo rustica*), common nighthawk (*Chordeiles minor*), evening grosbeak (*Coccothraustes vespertinus*), horned grebe (*Podiceps auritus*), olive-side flycatcher (*Contopus cooperi*), rusty blackbird (*Euphagus carolinus*), short-eared owl (*Asio flammeus*) and yellow rail (*Coturnicops noveboracensis*); and

4.2.2 establishing, prior to construction and in consultation with Indigenous groups, **in particular proximal groups such as MCFN**, and relevant authorities, and maintaining, during vegetation clearing and site preparation activities, buffer zones around nests identified pursuant to condition 4.2.1. for migratory birds and birds that are listed species at risk, including for bank swallow (*Riparia riparia*), barn swallow (*Hirundo rustica*), common nighthawk (*Chordeiles minor*), evening grosbeak

Commented [A10]: The Proponent shall commit to restrictions, established in collaboration with MCFN, on certain activities in the LAA (e.g., blasting and exploratory helicopter flights) during traditional harvesting seasons such as moose and goose hunting seasons.

Commented [A11]: The Proponent shall commit to undertaking an active sampling, study and monitoring program (e.g., of harvested wildlife) with MCFN playing a lead role in the program design and implementation.

(*Coccythraustes vespertinus*), horned grebe (*Podiceps auritus*), olive-side flycatcher (*Contopus cooperi*), rusty blackbird (*Euphagus carolinus*), short-eared owl (*Asio flammeus*) and yellow rail (*Coturnicops noveboracensis*), unless not technically or economically feasible. The Proponent shall take into account Manitoba Conservation Data Centre's Recommended Development Setback Distances and Restricted Activity Periods for Birds by Wildlife Feature Type when establishing buffer zones. If not technically feasible, the Proponent shall develop and implement additional mitigation measures, including nest sweeps, in consultation with Indigenous groups, Environment and Climate Change Canada, and any other relevant authorities. The Proponent shall submit these measures to the Agency prior to their implementation.

- 4.3 The Proponent shall mitigate distribution line strikes of migratory birds and birds that are listed species at risk within the Project development areas. In doing so, the Proponent shall:
- 4.3.1 identify locations of high-risk for avian distribution line strikes prior to construction in consultation with a qualified individual;
 - 4.3.2 route new distribution lines away from locations of high-risk identified in condition 4.5.1;
 - and
 - 4.3.3 increase distribution line visibility to migratory birds and birds that are listed species at risk, taking into account the Avian Power Line Interaction Committee's Suggested Practices for Avian Protection on Power Lines at the identified locations identified in condition 4.5.1, from the beginning of construction until distribution lines are decommissioned.
- 4.4 The Proponent shall control lighting during all phases of the Designated Project, including aiming lighting downwards at nighttime, to avoid adverse effects on migratory birds and birds that are listed species at risk, while meeting health and safety requirements for Designated Project employees and contractors.
- 4.5 The Proponent shall develop, in consultation with the relevant authorities and taking into account Environment and Climate Change Canada's Guide for Developing Beneficial Management Practices for Migratory Bird Conservation, and implement, from the beginning of operation, measures to prevent migratory birds, birds that are listed species at risk, and northern leopard frog (*Lithobates pipiens*), little brown myotis (*Myotis lucifugus*) and northern myotis (*Myotis septentrionalis*) from using Designated Project infrastructure where contact water is stored or conveyed, including the tailings management facility and contact water collection management ponds. In doing so, the Proponent shall:

- 4.5.1 install deterrents near Designated Project infrastructure where contact water is stored or conveyed, including the tailings management facility and contact water collection ponds; and
- 4.5.2 maintain deterrents installed pursuant to condition 4.5.1 until such time that water quality in these structures meet legislative requirements and authorized limits of deleterious substances specified in the Metal and Diamond Mining Effluent Regulations, and the tailings management facility is reclaimed pursuant to conditions 3.15.1 and 5.7.

4.6 The Proponent shall develop, prior to construction and in consultation with Indigenous groups, **in particular proximal groups such as MCFN**, Environment and Climate Change Canada 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 and birds that are listed species at risk, including bank swallow (*Riparia riparia*), barn swallow (*Hirundo rustica*), common nighthawk (*Chordeiles minor*), evening grosbeak (*Coccothraustes vespertinus*), horned grebe (*Podiceps auritus*), olive-side flycatcher (*Contopus cooperi*), rusty blackbird (*Euphagus carolinus*), short-eared owl (*Asio flammeus*) and yellow rail (*Coturnicops noveboracensis*), their eggs and nests. The Proponent shall implement the follow-up program during all phases of the Designated Project.

5 Current use of lands and resources for traditional purposes

- 5.1 The Proponent shall provide access to Indigenous groups to or through the Project development areas, during all phases of the Designated Project, for harvesting and cultural purposes or for exercising Aboriginal rights, to the extent that such access and exercise of rights are safe. **The proponent shall develop with MCFN an access management plan for specific sites of importance to MCFN within the LAA and project footprint.**

5.2 The Proponent shall avoid disturbing sites of traditional or cultural importance within or near the Project development areas, except for the construction of Designated Project components. In doing so, the Proponent shall:

5.2.1 identify, in consultation with Indigenous groups, **in particular proximal groups such as MCFN**, the location of sites of traditional or cultural importance within or near the Project development areas;

5.2.2 provide opportunities to Indigenous groups, prior to construction and at times determined in consultation with each Indigenous group, to:

5.2.2.1 harvest and transplant plant species of traditional importance from areas that will be cleared of vegetation during seasons where plants can be identified and harvested; and

Commented [A12]: The Proponent shall establish a fund which would enable MCFN members to exercise aboriginal rights and traditional practices in new areas, with attendant opportunities for cultural continuity, given the impacts of the project on their ability to undertake such practices in the PDA and LAA. Specific measures to be further refined through discussions with the Proponent prior to construction. Fund to be replenished based on agreed-upon thresholds and principles.

Commented [A13R12]:

Commented [A14]: The Proponent shall commit to restrictions, established in collaboration with MCFN, on certain activities in the LAA (e.g., blasting and exploratory helicopter flights) during traditional harvesting seasons such as moose and goose hunting seasons

Commented [A15]: The Proponent shall develop an access management plan for specific sites of importance to MCFN within the LAA and project footprint

Commented [A16]: The Proponent shall adhere to all applicable restoration and reclamation requirements. The Proponent shall commit to additional efforts being undertaken to utilizing local/original species of vegetation that are traditionally used by MCFN. These measures to be developed and implemented in collaboration with MCFN for areas in both the PDA and the LAA that are impacted by Project activities.

5.2.2.2 conduct ceremonies for any sites of significance that will be disturbed by any Designated Project activities.

Commented [A17]: These measures are insensitive and insulting to MCFN, particularly given the proximity of these areas to our present day community and our historical use of the area.

5.3 The Proponent shall, during all phases of the Designated Project, prohibit Designated Project employees and contractors, from fishing and hunting within the Project development areas or using the Project development areas to access surrounding areas with the intent to fish or hunt, unless an employee or contractor is provided access by the Proponent for exercising Aboriginal rights.

5.4 The Proponent shall develop and implement during all phases of the Designated Project, a protocol for inspecting and cleaning vehicles, machinery and equipment associated with the Designated Project that have come from other worksites in order to limit the introduction and spread of weed species within the Project development areas.

5.5 The Proponent shall identify statutory holidays and days of cultural importance in consultation with Indigenous groups. The proponent shall conduct blasting activities outside of the identified statutory holidays and days of cultural importance in order to mitigate the adverse effects of blasting on the current use of lands and resources for traditional purposes by Indigenous groups, unless required for safety reasons. **The proponent is to commit to establishing, through collaboration with MCFN, adherence to a blast clearance radius that addresses related community concerns.**

Commented [A18]: The 500M buffer discussed to date is not acceptable to MCFN. Proponent to work with MCFN to describe an appropriate buffer and enhanced communication protocols.

5.6 The Proponent shall use measures other than broadcast spraying when applying herbicides within the Project development areas to mitigate effects to plant species used for traditional purposes by Indigenous groups, unless not technically or economically feasible.

5.7 The Proponent shall undertake, in consultation with Indigenous groups, **in particular proximal groups such as MCFN**, and relevant authorities, progressive reclamation of areas disturbed by the Designated Project. In doing so the Proponent shall:

5.7.1 Identify, in consultation with Indigenous groups, plant species native to the local assessment area and species of cultural importance to use for revegetation;

5.7.2 establish performance standards for reclaimed areas, including that the areas be self-sustaining, reduce establishment of weed species, restore native species assemblages, and reduce erosion of exposed soils; and

5.7.3 monitor reclaimed areas for a minimum of five years during post-closure or until performance standards established in condition 5.7.2 are met.

6 Health and socio-economic conditions of Indigenous peoples

6.1 The Proponent shall develop, prior to construction and in consultation with Indigenous groups, **in particular proximal groups such as MCFN**, and relevant authorities,

measures to mitigate emissions of dust and fugitive particulate within the Project development areas, taking into account the standards and criteria set out in the Canadian Council of Ministers of the Environment's Canadian Ambient Air Quality Standards and Manitoba's Ambient Air Quality Criteria. The Proponent shall implement these measures from construction through decommissioning. In doing so, the Proponent shall:

- 6.1.1 apply dust suppressants with the least potential for adverse environmental effects, including water, and that do not contain chemicals, on haul and access roads during periods when dust generation is expected or occurring, including periods of drought and high winds;
 - 6.1.2 locate all stationary machinery and equipment used for processing ore indoors, where technically feasible, including the crushing plant and conveyors feeding into the ore milling and processing plant;
 - 6.1.3 ensure all equipment and vehicles used during all phases of the Designated Project, including those equipment and vehicles operated by third-party contractors, are serviced and maintained in accordance with the manufacturer's maintenance guidelines to meet or exceed applicable emission standards, including Tier 4 emission standards for off-road equipment with off-road diesel engines, pursuant to the Off-Road Compression-Ignition (Mobile and Stationary) and Large Spark-Ignition Engine Emission Regulations and Off-Road Compression-Ignition Engine Emission Regulations;
 - 6.1.4 develop and implement policies to reduce the fuel consumption of equipment and vehicles operating in the Project development areas, including no-idling and limited cold start policies; and
 - 6.1.5 establish speed limits on the road traffic routes located in the Project development areas taking into account the recommended speed limits in Environment and Climate Change Canada's Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities and by requiring and ensuring that speed limits are respected during all phases of the Designated Project, including by installing signs indicating speed limits.
- 6.2 The Proponent shall implement measures, during all phases of the Designated Project, to ensure the thresholds for noise, including hearing loss, speech comprehension, sleep disturbance, identified in Health Canada's Guidance for Evaluating Human Health Impacts in Environmental Assessment: Noise are not exceeded at sensitive receptors identified in the Human Health Risk Assessment in Volume 5 Appendix H of the Environmental Impact Statement. In doing so the Proponent shall:
- 6.2.1 develop, prior to construction, a protocol for receiving complaints related to the exposure to noise generated by the Designated Project. The Proponent shall respond to any noise complaint(s) received within 48 hours of the complaint being received during all phases of the Designated Project, and shall implement corrective actions to reduce exposure to noise in a timely manner.

Commented [A19]: The Proponent shall commit to working collaboratively with MCFN to develop and implement a wildlife study to better understand the impact of noise pollution and vibration on the populations of species of concern. This study is to be initiated prior to the beginning of project construction.

- 6.3 The Proponent shall establish, prior to construction and in consultation with Indigenous groups, and maintain during all phases of the Designated Project, an Indigenous Environmental Advisory Committee (IEAC) related to ongoing designated project activities, including land use planning, and the development and implementation of follow-up programs, and mitigation measures. The Proponent shall invite Indigenous groups to engage in all IEAC activities, and shall consult participating Indigenous groups on the development of Terms of Reference for the IEAC. The Proponent shall strive to reach consensus on the Terms of Reference with participating Indigenous groups. The Proponent shall submit the final Terms of Reference to the Agency. As part of the Terms of Reference, the Proponent shall include:
- 6.3.1 the means by which the Proponent and Indigenous groups shall jointly identify topics to be discussed by the IEAC and the means by which the Proponent shall document these topics and discussions;
 - 6.3.2 the frequency, timing and location of IEAC meetings during each phase of the Designated Project and the means by which the Proponent shall document meeting minutes and shall seek approval of the meeting minutes by Indigenous groups;
 - 6.3.3 the means by which the Proponent shall share with the IEAC the following information, including when and how this information will be shared:
 - 6.3.3.1 opportunities for participating in ongoing designated project activities, including land use planning, and the development and implementation of follow-up programs;
 - 6.3.3.2 the results of the follow-up programs, including any modified or additional mitigation measure implemented or proposed to be implemented by the Proponent as a result of each follow-up requirement;
 - 6.3.3.3 other information as determined by the IEAC; and
 - 6.3.4 the means by which the Proponent shall evaluate, in consultation with Indigenous groups, the Terms of Reference throughout construction and operation to determine whether administrative or management improvements are required to increase the efficiency and effectiveness of the IEAC.
- 6.4 The Proponent shall develop, prior to construction and in consultation with Indigenous groups, **in particular proximal groups such as MCFN**, Health Canada, Environment and Climate Change Canada and any other relevant authorities, a follow-up program to verify the accuracy of the environmental assessment as it pertains to adverse environmental effects of changes to the quality of air and country foods on the health of Indigenous Peoples, taking into account available traditional knowledge provided by Indigenous groups related to current use of lands and resources for traditional purposes. 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:

Commented [A20]: MCFN would like to see specific measures included to ensure that an adaptive management approach is developed and implemented as a core component of the applicable monitoring framework for the Project.

Commented [A21]: The Proponent shall proceed with testing of the mercury and selenium content within its sources of fugitive dust (low-grade stockpiles, waste rock, roads). Proponent to include all potential contaminants sampled in the sediment, soil and dust fall containers.

The Proponent shall commit to a soil and vegetation study with the objective of assessing the cumulative effects of fugitive dust on soil and/or culturally important plants of interest to MCFN. Soil locations to be sampled and vegetation specimens will be determined in collaboration with MCFN, within the local and regional study areas to reflect areas important to harvesting.

- 6.4.1 identify, in consultation with Indigenous groups, the species of fish, vegetation and wildlife used as country foods and determine the locations where these species shall be monitored;
 - 6.4.2 monitor, beginning prior to construction and continuing through post-closure, contaminants of potential concern, including mercury, methylmercury, arsenic and copper, **selenium** in species at locations identified in condition 6.4.1;
 - 6.4.3 monitor ambient air concentrations of TSP, PM10, PM2.5, NO2 and dustfall taking into account 24-hour and 1-hour thresholds of the Canadian Council of Ministers of the Environment's Canadian Ambient Air Quality Standards during all project phases on Marcel Colomb First Nation's Black Sturgeon Reserve, and upwind and downwind from the Project development areas;
 - 6.4.4 monitor meteorological conditions (including wind speed, wind direction, temperature and relative humidity) upwind and downwind of the Project development areas, during construction and operation; and
 - 6.4.5 if the monitoring results referred to in conditions 6.4.2 and 6.4.3 exceed predicted levels in the Human Health Risk Assessment in Volume 5 Appendix H of the Environmental Impact Statement, and thresholds of the Canadian Council of Ministers of the Environment's Canadian Ambient Air Quality Standards, respectively, **develop and implement with proximal Indigenous groups such as MCFN modified or additional mitigation or offset measures** pursuant to condition 2.8 based on the results of the follow-up program and update the Human Health Risk Assessment in Volume 5 Appendix H of the Environmental Impact Statement.
- 6.5 The Proponent shall develop, in consultation with Indigenous groups, **in particular proximal groups such as MCFN**, and implement a follow-up program related to the adverse environmental effects on the current use of lands and resources and socio-economic conditions caused by the Designated Project, including the quantity and quality of resources obtained through harvesting, fishing, hunting or trapping activities and the socio-economic impacts of those changes to verify the accuracy of the environmental assessment and to determine the effectiveness of the mitigation measures implemented to address those effects. The Proponent shall implement the follow-up program during all phases of the Designated Project.
- 6.6 The Proponent shall develop, prior to construction and in consultation with Indigenous groups, **in particular proximal groups such as MCFN**, and relevant authorities, a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures as it pertains to Designated Project effects on Indigenous groups relating to noise and vibration. The Proponent shall implement the follow-up program during all phases of the Designated Project. As part of the follow-up program, the Proponent shall:

Commented [A22]: The Proponent shall commit to working collaboratively with MCFN to develop and implement a wildlife study to better understand the impact of noise pollution and vibration on the populations of species of concern. This study shall be initiated prior to the beginning of project construction.

6.6.1 monitor noise, including low frequency noise, and vibration levels at receptor locations within the Project development areas where effects to the health of Indigenous groups may occur as identified in Volume 1 Chapter 7 Tables 7-7, 7-8, 7-9 and 7-10 of the Environmental Impact Statement, including the permanent work camp, and permanent and seasonal residences.

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, **in particular proximal groups such as MCFN**, and relevant authorities, and implement, during all phases of the Designated Project, an archaeological and heritage resource management plan for any structures, sites or things of historical, archaeological, paleontological or architectural significance discovered within the Project development areas. As part of the archaeological and heritage resource management plan the Proponent shall:

- 7.1.1 immediately halt work at the location of the discovery, except for actions required to be undertaken to protect the integrity of the discovery;
- 7.1.2 delineate an area of at least 50 metres around the discovery as a no-work zone;
- 7.1.3 inform the Agency and Indigenous groups within 24 hours of the discovery, and allow Indigenous groups to monitor and participate in archaeological works;
- 7.1.4 have a qualified individual, whose expertise pertains to the requirements of Manitoba's Heritage Resources Act, conduct an assessment at the location of the discovery, including sampling and construction monitoring on landforms of similar historic potential to the discovery site(s) within the Project development areas that are planned for development, prior to development in these areas; and
- 7.1.5 consult with Indigenous groups and relevant authorities on the manner by which to comply with all applicable legislative or legal requirements and protocols respecting the discovery, recording, transferring and safekeeping of previously unidentified structures, sites or things of historical, archaeological, paleontological or architectural significance.

8 Greenhouse gas emissions 8.1 The Proponent shall develop, prior to construction, in consultation with Environment and Climate Change Canada and any other relevant authorities, and implement, during all phases of the Designated Project, a greenhouse gas management plan to reduce the Designated Project's greenhouse gas emissions during each phase of the Designated Project. The Proponent shall take into account applicable provincial and federal greenhouse gas reduction strategies when developing and implementing the plan. As part of the development of the plan, the Proponent shall:

- 8.1.1 identify the sources of greenhouse gas emissions, including emissions from land use change, applicable to each phase of the Designated Project;

- 8.1.2 for each source of emissions identified pursuant to condition 8.1.1, identify the best available technologies and best environmental practices (BAT/BEP) , including emerging technologies and practices at a sufficiently advanced stage of technological development to become technically and economically feasible over the life of the Designated Project, taking into account the BAT/BEP determination process as described in the Government of Canada's Strategic Assessment of Climate Change and its relevant technical guide;
 - 8.1.3 determine when and how each BAT/BEP identified pursuant to condition 8.1.2 will be implemented by the Proponent over the life of the Designated Project, including consideration of when any equipment associated with the Designated Project that contributes to the emission of greenhouse gases will need to be replaced with equipment of lower greenhouse gas intensity, regardless of whether project greenhouse gas emissions are greater than the output-based standard established in the Output Based Pricing System Regulations for the production of gold; and
 - 8.1.4 establish declining greenhouse gas emission targets at specific intervals that aim to reduce the Designated Project's overall emissions and that take into account how the Proponent plans to implement the BAT/BET in the manner referred to in condition 8.1.3.
- 8.2 The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada, and implement, during all phases of the Designated Project, a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures with respect to greenhouse gas emissions from the Designated Project. As part of the follow-up program, the Proponent shall:
- 8.2.1 provide a justification for any discrepancy between the Designated Project's actual greenhouse gas emissions and the predicted emissions estimated during the environmental assessment;
 - 8.2.2 update the greenhouse gas management plan developed pursuant to condition 8.1, in consultation with Environment and Climate Change Canada, at a minimum frequency of every five years from the commencement of operations and during all phases of the Designated Project. In doing so, the Proponent shall:
 - 8.2.2.1 review the technologies and practices referred to in condition 8.1.2 and update the plan if it identifies other emerging technologies and practices that are at a sufficiently advanced stage of technological development to become technically and economically feasible during all phases of the Designated Project;
 - 8.2.2.2 determine whether the greenhouse gas emission targets referred to in condition
 - 8.2.2.3 provide any update(s) to the plan to the Agency within 30 days of the revision.

9 Species at Risk

- 9.1 The Proponent shall conduct, prior to construction and in consultation with Indigenous groups, **in particular proximal groups such as MCFN**, and relevant authorities, pre-construction surveys within the Project development areas to identify northern leopard frog (*Lithobates pipiens*) breeding timing and habitat, little brown myotis (*Myotis lucifugus*) and northern myotis (*Myotis septentrionalis*) maternal roosting sites and hibernacula sites, wolverine (*Gulo gulo*) denning habitat, and woodland caribou (*Rangifer tarandus caribou*) calving habitat and calf-rearing periods.
- 9.2 The Proponent shall, based on the results of pre-construction surveys for northern leopard frog (*Lithobates pipiens*) conducted pursuant to condition 9.1, implement additional measures to mitigate Designated Project-related impacts to northern leopard frog (*Lithobates pipiens*) during all phases of the Designated Project. In doing so, the Proponent shall:
- 9.2.1 conduct site clearing activities outside of the breeding period for northern leopard frog (*Lithobates pipiens*), unless not technically or economically feasible; and
- 9.2.2 if site clearing cannot be conducted outside of the breeding period, have a qualified individual rescue and translocate northern leopard frog (*Lithobates pipiens*) from identified breeding habitat that must be removed for Designated Project activities during construction, including dewatering, and taking into account the Centre for Conservation Research's Guidelines for Mitigation Translocations of Amphibians for the Prairie Provinces.
- 9.3 The Proponent shall install exclusion screens on intake pipes to mitigate effects to northern leopard frog (*Lithobates pipiens*).
- 9.4 The Proponent shall, based on the results of pre-construction surveys for little brown myotis (*Myotis lucifugus*) and northern myotis (*Myotis septentrionalis*) conducted pursuant to condition 9.1, implement measures to mitigate Designated Project-related impacts to little brown myotis (*Myotis lucifugus*) and northern myotis (*Myotis septentrionalis*) during all phases of the Designated Project. In doing so, the Proponent shall:
- 9.4.1 conduct site clearing activities outside of the breeding period for little brown myotis (*Myotis lucifugus*) and northern myotis (*Myotis septentrionalis*) taking into account the Saskatchewan Prairie Conservation Action Plan's Guide to Managing for Optimal Habitat Attributes: Little Brown Bat (*Myotis lucifugus*), unless not technically or economically feasible; and
- 9.4.2 establish prior to construction and maintain, during construction and operation, buffer zones around active maternity roosts and hibernacula, taking into account British Columbia's Compendium of Wildlife Guidelines for Industrial Development Projects in the North Area, British Columbia.

- 9.5 The Proponent shall, during all phases of the Designated Project in consultation with Indigenous groups, Environment and Climate Change Canada and any other relevant authorities, develop and implement measures to mitigate adverse effects from the Designated Project on woodland caribou (*Rangifer tarandus caribou*) and its habitat. These measures shall be submitted to the Agency prior to implementation, and shall include:
- 9.5.1 conducting site clearing activities outside of the woodland caribou (*Rangifer tarandus caribou*) calving and calf-rearing period identified pursuant to condition 9.1;
 - 9.5.2 giving preference to avoiding the destruction or alteration of habitat over minimizing the destruction or alteration of habitat, to minimizing the destruction or alteration of habitat over restoring altered or destroyed habitat on-site, and to restoring altered or destroyed habitat on-site over offsetting for habitat that must be removed as a result of Designated Project activities; and
 - 9.5.3 as part of progressive reclamation in condition 5.7, removing and reclaiming all linear features, including the distribution line right of way and access roads, when they are no longer required for the Designated Project.
- 9.6 The Proponent shall participate in regional initiatives related to the management of adverse impacts on woodland caribou (*Rangifer tarandus caribou*), from construction through the end of operations, at the request of the relevant authorities responsible for these initiatives. In doing so, the Proponent shall determine, in consultation with Indigenous groups and relevant authorities, how the Proponent shall participate. Regional initiatives shall include:
- 9.6.1 habitat restoration initiatives, including the collaring program, as part of the Provincial Caribou Recovery Strategy led by Manitoba's Ministry of Environment, Climate and Parks, or any equivalent future initiative as determined by Manitoba's Ministry of Environment, Climate and Parks.
- 9.7 The Proponent shall monitor, during all phases of the Designated Project, woodland caribou (*Rangifer tarandus caribou*) and wolverine (*Gulo gulo*) usage of the Project development areas, and provide monitoring results to Indigenous groups, Environment and Climate Change Canada, Manitoba Environment, Climate and Parks and any other relevant authorities.
- 9.8 The Proponent shall develop, in consultation with Indigenous groups, **in particular proximal groups such as MCFN**, and relevant authorities, and implement during all phases of the Designated Project, a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of the mitigation measures as it pertains to Designated Project effects on habitat, health and mortality for northern leopard frog (*Lithobates pipiens*), little brown myotis (*Myotis lucifugus*), northern myotis (*Myotis septentrionalis*), wolverine (*Gulo gulo*) and woodland caribou (*Rangifer tarandus caribou*).

10 Independent Environmental Monitor

- 10.1 The Proponent shall retain, prior to construction, the services of a third-party independent environmental monitor, who is a qualified individual with a minimum of five years of experience as it pertains to environmental monitoring in Manitoba and who has a minimum of two years of experience working with Indigenous groups. The Proponent shall require the independent environmental monitor to independently observe and record on the implementation of the conditions set out in this document and to report findings to the Proponent and Agency. The Proponent shall retain the services of the independent environmental monitor during all phases of the Designated Project.
- 10.1.10.2 The Proponent shall require the independent environmental monitor to report to the Agency and Indigenous groups, in writing, prior to or concurrent with reporting to the Proponent about the implementation of any condition set out in this document during construction and operation. The Proponent shall require the independent environmental monitor to report the information to the Agency at a frequency and in a format determined in consultation with the Agency.
- 10.3 The Proponent shall require the independent environmental monitor to provide to the Agency, at a frequency to be determined in consultation with the Agency and any other relevant authorities, the information reported pursuant to condition 10.2.
- 10.4 The Proponent shall require the independent environmental monitor to retain the information reported to the Proponent pursuant to condition 10.2 for at least five years following submission to the Agency pursuant to condition 10.3.

11 Accidents and malfunctions

- 11.1 The Proponent shall take all reasonable measures to prevent accidents and malfunctions that may result in adverse environmental effects, including dam breaches, and mitigate them. In doing so the Proponent shall:
- 11.1.1 design, construct and operate the tailings management facility containment structures taking into account the Canadian Dam Association's Dam Safety Guidelines and the Mining Association of Canada's Guide to the Management of Tailings Facilities, and by restricting use of the emergency spillway to extreme precipitation events; and
- 11.1.2 design, prior to construction and in consultation with Indigenous groups, Environment and Climate Change Canada, and any other relevant authorities, the Designated Project taking into account projections of climate change-related changes in the frequency and severity of extreme precipitation events, and available Indigenous knowledge of historic flooding in the local assessment areas.
- 11.2 The Proponent shall develop, in consultation with Indigenous groups and relevant authorities, and implement, a follow-up program related to the effects of changing permafrost on the Designated Project for current use of lands by Indigenous groups. As part

of the follow-up program, the Proponent shall identify the type, degree and extent of residual permafrost remaining following construction within the Project development areas to be incorporated into project design.

- 11.3 The Proponent shall consult, prior to construction, Indigenous groups and relevant authorities on the measures to be implemented to prevent accidents and malfunctions, including the likelihood, modes of failure and consequences of a dam breach.
- 11.4 The Proponent shall develop, prior to construction and in consultation with Indigenous groups and relevant authorities, an accidents and malfunctions response plan in relation to each phase of the Designated Project. The accident and malfunction plan for each phase shall include:
- 11.4.1 a description of the types of accidents and malfunctions that may cause adverse environmental effects during any phase of the Designated Project
 - 11.4.2 the measures to be implemented in response to each type of accident and malfunction referred to in condition 11.4.1 to mitigate any adverse environmental effect caused by the accident or malfunction; and
 - 11.4.3 for each type of accident and malfunction referred to in condition 11.4.1, the roles and responsibilities of the Proponent and each relevant authority in implementing the measures referred to in condition 11.4.2 and for mobilizing emergency response equipment.
- 11.5 The Proponent shall ensure the accidents and malfunctions response plan referred to in condition 11.4 is kept up-to-date during all phases of the Designated Project. The Proponent shall submit any updated accident and malfunction response plan to the Agency, Indigenous groups and the relevant authorities involved in its implementation within 30 days of the plan being updated.
- 11.6 In the event of an accident or malfunction with the potential to cause adverse environmental effects, including an accident or a malfunction referred to in condition 11.4.1, the Proponent shall immediately implement the measures appropriate to remedy the accident or malfunction, including any measure referred to in condition 11.4.2, and shall:
- 11.6.1 implement the communication plan referred to in condition 11.7 as it relates to accidents and malfunctions;
 - 11.6.2 notify relevant authorities with responsibilities related to emergency response, including environmental emergencies, in accordance with applicable regulatory and legislative requirements;
 - 11.6.3 notify, as soon as possible and pursuant to the communication plan referred to in condition 11.7, Indigenous groups of the accident or malfunction, and notify the Agency in writing no later than 24 hours following the accident or malfunction. When notifying Indigenous groups and the Agency, the Proponent shall specify:

- 11.6.3.1 the date and time when and location where the accident or malfunction occurred;
 - 11.6.3.2 a summary description of the accident or malfunction;
 - 11.6.3.3 a list of any substance potentially released into the environment as a result of the accident or malfunction; and
 - 11.6.3.4 a description of the notified relevant authorities, as referred to in condition 11.6.2.
- 11.6.4 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:
- 11.6.4.1 a detailed description of the accident or malfunction and of its adverse environmental effects;
 - 11.6.4.2 a description of the measures that were taken by the Proponent to mitigate the adverse environmental effects caused by the accident or malfunction;
 - 11.6.4.3 any view from Indigenous groups and advice from relevant authorities received with respect to the accident or malfunction, its adverse environmental effects and the measures taken by the Proponent to mitigate these adverse environmental effects;
 - 11.6.4.4 a description of any residual adverse environmental effect and any modified or additional measure required by the Proponent to mitigate residual adverse environmental effects; and
 - 11.6.4.5 details concerning the implementation of the accidents or malfunctions response plan referred to in condition 11.4.
- 11.6.5 submit a written report to the Agency no later than 90 days after the day on which the accident or malfunction occurred, taking into account the information submitted in the written report pursuant to condition 11.6.4, that includes:
- 11.6.5.1 a description of the changes made to avoid a subsequent occurrence of the accident or malfunction;
 - 11.6.5.2 a description 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; and
 - 11.6.5.3 all additional views from Indigenous groups and advice from relevant authorities received by the Proponent since the views and advice referred to in condition 11.6.4.3 were received by the Proponent.
- 11.7 The Proponent shall develop, in consultation with Indigenous groups, a communication plan for accidents and malfunctions occurring in relation to the Designated Project. 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:
- 11.7.1 the types of accidents and malfunctions requiring the Proponent to notify the Indigenous groups;

11.7.2 the manner by which Indigenous groups shall be notified by the Proponent of an accident or malfunction and of any opportunity for the Indigenous groups to assist in the response to the accident or malfunction; and

11.7.3 the names and contact information of the Proponent and Indigenous group representatives for the purposes of notifying pursuant to condition 11.7.2 and communicating about accidents and malfunctions.

12 Schedules

12.1 The Proponent shall submit to the Agency and Indigenous groups a schedule for all conditions set out in this document 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 document and the commencement and estimated completion month(s) and year(s) for each of these activities.

12.2 The Proponent shall submit to the Agency and Indigenous groups a schedule outlining all activities required to carry out all phases of the Designated Project, including associated potential changes to air quality, noise, light and vibration, 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.

12.3 The Proponent shall submit to the Agency and Indigenous groups in writing an update to schedules referred to in conditions 12.1 and 12.2 every year no later than March 31, until completion of all activities referred to in each schedule.

13 Record keeping

13.1 The Proponent shall maintain all records relevant to the implementation of the conditions set out in this document. 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 post-closure 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.

13.2 The Proponent shall retain all records referred to in condition 13.1 at a facility in Canada and shall provide the address of the facility to the Agency. The Proponent shall notify the Agency in writing 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.

13.3 The Proponent shall notify the Agency in writing of any change to the contact information of the Proponent.