

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 Lake Manitoba and Lake St. Martin Outlet Channels 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 *Class 2 wetlands* means class 2 wetlands as defined in Schedule C of the *Water Rights Regulation* under the province of Manitoba's *Water Rights Act*.
- 1.4 *Closed-gate periods* means the periods during operation when the outlet channels are not being used for flood mitigation operations and the water control structures are closed.
- 1.5 *Commissioning* means the period during construction when all the water control structure gates are opened for the first time and water is conveyed through the entire length of the outlet channels, until the gates are closed.
- 1.6 *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.
- 1.7 *Contact water* means water that has come into contact with any Designated Project components.
- 1.8 *Days* means calendar days.
- 1.9 *Designated Project* means the Lake Manitoba and Lake St. Martin Outlet Channels Project as described in section 2 of the Environmental Assessment Report prepared by the Impact Assessment Agency of Canada (Canadian Impact Assessment Registry Reference Number 80148).

- 1.10 *Designated Project area* means the geographic area occupied by the Designated Project and the area of direct physical disturbance associated with the construction and operation of the Designated Project, and includes any associated work camps, quarries and laydown areas.
- 1.11 *Distribution line* means the power line that carries low voltage electricity to facilitate construction and operation of the Lake St. Martin Outlet Channel water control structure.
- 1.12 *Environment and Climate Change Canada* means the Department of the Environment as established under subsection 2(1) of the *Department of the Environment Act*.
- 1.13 *Environmental assessment* means “environmental assessment” as defined in subsection 2(1) of the *Canadian Environmental Assessment Act, 2012*.
- 1.14 *Environmental Assessment Report* means the 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 80148).
- 1.15 *Environmental effects* means “environmental effects” as described in section 5 of the *Canadian Environmental Assessment Act, 2012*.
- 1.16 *Environmental Impact Statement* means the March 2020 document entitled Lake Manitoba and Lake St. Martin Outlet Channels Project — Environmental Impact Statement (Canadian Impact Assessment Registry Reference Number 80148, Document Number 100).
- 1.17 *Fish* means “fish” as defined in subsection 2(1) of the *Fisheries Act*.
- 1.18 *Fish habitat* means “fish habitat” as defined in subsection 2(1) of the *Fisheries Act*.
- 1.19 *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.
- 1.20 *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*.
- 1.21 *Follow-up program* means “follow-up program” as defined in subsection 2(1) of the *Canadian Environmental Assessment Act, 2012*.
- 1.22 *Health Canada* means the Department of Health as established under subsection 2(1) of the *Department of Health Act*.
- 1.23 *Heritage value* means the aesthetic, historic, scientific, cultural, social or spiritual importance or significance for past, present or future generations.
- 1.24 *Indigenous groups* means the following Aboriginal Peoples: Berens River First Nation, Black River First Nation, Bloodvein First Nation, Brokenhead Ojibway Nation, Dakota Tipi First Nation, Dauphin River First Nation, Ebb and Flow First Nation, Fisher River Cree Nation, Fox Lake Cree Nation, Hollow Water First Nation, Keeseekoowenin Ojibway First Nation, Kinonjeoshtegon First Nation, Lake Manitoba First Nation, Lake St. Martin First Nation, Little Saskatchewan First Nation,

the Manitoba Métis Federation, Misipawistik Cree Nation, Norway House Cree Nation, O-Chi-Chak-Ko-Sipi First Nation, Peguis First Nation, Pimicikamak Okimawin, Pinaymootang First Nation, Poplar River First Nation, Sagkeeng First Nation, Sandy Bay Ojibway First Nation, Skownan First Nation, Tataskweyak Cree Nation, and York Factory First Nation.

- 1.25 *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*.
- 1.26 *Manitoba Ministry of Sport, Culture, Heritage and Tourism* means Manitoba's Department of Sport, Culture, Heritage and Tourism as established by Order in Council No. 1/2022, and that is responsible for the administration of the Statutes as set out in Schedule P of Order in Council No. 4/2022.
- 1.27 *Migratory bird* means "migratory bird" as defined in subsection 2(1) of the *Migratory Birds Convention Act, 1994*.
- 1.28 *Mitigation measures* means "mitigation measures" as defined in subsection 2(1) of the *Canadian Environmental Assessment Act, 2012*.
- 1.29 *Monitoring* means collecting, analyzing, and using information to measure the environmental effects of the Designated Project and/or to verify the accuracy of the environmental assessment and/or to determine the effectiveness of any mitigation measure.
- 1.30 *Offsetting plan* means "offsetting plan" as described in Schedule 1 of the *Authorizations Concerning Fish and Fish Habitat Protection Regulations*.
- 1.31 *Open-gate periods* means the periods during operation when the outlet channels are being used for flood mitigation operations and the water controls structures are fully open.
- 1.32 *Operation* means the phase of the Designated Project during which the flood mitigation infrastructures are functional, beginning once commissioning is complete.
- 1.33 *Outlet channels* means the Lake Manitoba and Lake St. Martin outlet channels as identified in Figure 1 of the Environmental Assessment Report.
- 1.34 *Progressive revegetation* means revegetation which is carried out by the Proponent concurrently with all phases of the Designated Project to revegetate physically disturbed areas, as soon after the disturbance as technically feasible.
- 1.35 *Proponent* means Manitoba Transportation and Infrastructure and its successors or assigns.
- 1.36 *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.
- 1.37 *Record* means "record" as defined in subsection 2(1) of the *Canadian Environmental Assessment Act, 2012*.

- 1.38 *Relevant authorities* means federal and 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.
- 1.39 *Reporting year* means January 1 to December 31 of the same calendar year.
- 1.40 *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 Aboriginal peoples.
- 1.41 *Water control structure* means the gated control structure used to regulate water flow through the outlet channels.
- 1.42 *Water frequented by fish* means “water frequented by fish” as defined in subsection 34(1) and “Canadian fisheries waters” as defined in subsection 2(1) of the *Fisheries Act*.
- 1.43 *Wetland* 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 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 shall 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 technically and economically 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 management plan, recovery strategy and action plan for listed species at risk that is prepared or established pursuant to the *Species at Risk Act*.

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 at least 15 days prior to the implementation of condition 2.3.2;
 - 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 30 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 in writing 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, including a rationale for why the views have, or have not, been integrated.
- 2.4 The Proponent shall, where consultation with Indigenous groups is a requirement of a condition set out in this document, communicate 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;
 - 2.4.2 the type of information and the period of time to be provided when seeking input;
 - 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 of each follow-up program, the following information, unless otherwise specified in the condition:
- 2.5.1 a description of the effects predictions and/or mitigation measures that will be evaluated through the follow-up program;
 - 2.5.2 the methodology, location, frequency, timing and duration of monitoring associated with the follow-up program;
 - 2.5.3 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;
 - 2.5.4 the minimum frequency at which the follow-up program must be reviewed and, if necessary, updated;

- 2.5.5 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;
 - 2.5.6 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 2.5.5 have been reached or exceeded; and
 - 2.5.7 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 2.5.4 and in consultation with the parties being consulted during the development of each follow-up program.
- 2.7 The Proponent shall provide the information determined for each of the follow-up programs referred to in conditions 3.17, 3.18, 3.19, 4.8, 5.4, 6.3, 6.4, 6.5, 7.20, 7.21, 7.22, 8.9 and 8.10, 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 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 predictions 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) are required based on the monitoring and analysis undertaken pursuant to condition 2.8.2;
 - 2.8.4 if modified or additional mitigation 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 measure being implemented. If the Proponent implements any additional or modified mitigation 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 2.5.3, 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 training, the conduct of monitoring, the analysis and reporting of follow-up results and whether modified or additional mitigation measure(s) are required, as set out in condition 2.8.

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, including;
 - 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 for each follow-up program and any update to that information made pursuant to condition 2.6;
 - 2.10.5 the summary of available results of the follow-up program requirements identified in conditions 2.8.5;
 - 2.10.6 maps displaying the most up-to-date locations of Designated Project components and activities, including work camps, quarries and laydown areas;
 - 2.10.7 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
 - 2.10.8 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 the annual report referred to in condition 2.10 to the Agency, 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 2.10 shall start on the day the Minister of the Environment issues the Decision Statement 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 2.10 and 2.11, the reports related to accidents and malfunctions referred to in conditions 12.5.3 and 12.5.4, the communication

plan for accident and malfunction referred to in condition 12.6, the schedules referred to in conditions 13.1 and 13.2, and any update or revision to the above documents, upon submission of these documents to the parties consulted for the respective conditions. The Proponent shall keep these documents publicly available for 25 years following their publication. The Proponent shall notify Indigenous groups and the Agency in writing of the availability of these documents within 48 hours of their publication.

- 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 Indigenous groups and the Agency 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 1.9 the Proponent shall notify the Agency in writing in advance of carrying out the proposed activities. 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 proposed change(s);
 - 2.16.2 any modified or additional measure to mitigate any environmental effect that may result from the proposed 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 in condition 2.16.2, the environmental effects that may result from the proposed change(s) may differ from the environmental effects of the Designated Project identified during the environmental assessment.
- 2.17 The Proponent shall provide 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, to the satisfaction of Fisheries and Oceans Canada and in consultation with Indigenous groups, and implement any offsetting plan related to the harmful alteration, disruption, or destruction of fish habitat, and death of fish associated with the carrying out of the Designated Project. The Proponent shall provide the approved offsetting plan(s) 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 and relevant authorities, measures to mitigate those effects. The Proponent shall provide these measures to the Agency before implementing them.
- 3.3 The Proponent shall, when discharging contact water from Designated Project components into the receiving environment and during all phases of the Designated Project, collect and treat water as required in accordance with the pollution prevention provisions of the *Fisheries Act* prior to depositing it into the receiving environment. When treating contact water, the Proponent shall take into account *Manitoba Water Quality Guideline (MWQG) Tier III Guideline* for fish and other aquatic life and the Canadian Council of Ministers of the Environment's *Canadian Water Quality Guidelines for the Protection of Aquatic Life*.
- 3.4 The Proponent shall develop, prior to construction and in consultation with Indigenous groups and relevant authorities, and implement measures during all phases of the Designated Project to avoid the contamination of water frequented by fish, including contamination due to erosion and sedimentation, within the Designated Project area. The Proponent shall submit these measures to the Agency before implementing them. In doing so, the Proponent shall:
- 3.4.1 isolate in-water excavation activities from the receiving environment at the inlets and outlets of the outlet channels by conducting these activities within turbidity curtains or dewatering cofferdams and applying Fisheries and Oceans Canada's *Interim standard: in-water site isolation*;
 - 3.4.2 reinforce the base and lower side slopes of the outlet channels in areas where riprap is not installed;
 - 3.4.3 install and maintain riprap on the bottom and side slopes of the outlet channels upstream and downstream of water control structures, the shorelines near outlet channel inlets and outlets, the inlets and outlets of the outside drains, and at the base of any bridges;
 - 3.4.4 place materials that could potentially contaminate water frequented by fish, including stockpiles, windrows of material, fuel and hazardous materials, a minimum of 100 metres from the high-water mark; and
 - 3.4.5 conduct fueling activities and equipment maintenance, repair and washing a minimum of 100 metres from the high-water mark.
- 3.5 The Proponent shall maintain at a minimum, a continuous baseflow within the outlet channels during closed-gate periods such that dissolved oxygen concentrations within the outlet channels remain above the applicable thresholds for the protection of aquatic life stated in the Canadian Council of Ministers of the Environment's *Canadian Water Quality Guidelines for the Protection of Aquatic Life*.
- 3.6 The Proponent shall, during all phases of the Designated Project, implement measures to avoid the introduction and propagation of terrestrial and aquatic invasive species, including aquatic pathogens, within the regional assessment area identified in Figure 9 of the Environmental Assessment Report. In doing so, the Proponent shall:
- 3.6.1 apply Fisheries and Oceans Canada's *Aquatic Invasive Species Regulations*;

- 3.6.2 inspect all equipment and machinery systems before entering and leaving the Designated Project area, including those that have been in contact with other aquatic systems;
 - 3.6.3 if invasive species are discovered during inspection pursuant to condition 3.6.2, clean and disinfect contaminated equipment and machinery in a location isolated from any aquatic systems;
 - 3.6.4 prevent upstream passage of fish within the Lake St. Martin Outlet Channel; and
 - 3.6.5 when applying herbicides to control terrestrial invasive species, do so a minimum of 30 metres from the Lake St. Martin Outlet Channel and a minimum of 35 metres from all other water frequented by fish.
- 3.7 The Proponent shall maintain fish passage when designing and installing clear span bridges and culverts in water frequented by fish.
- 3.8 The Proponent shall develop prior to construction and in consultation with Indigenous groups, Fisheries and Oceans Canada, Environment and Climate Change Canada, and other relevant authorities, and implement throughout operation, procedures for the operation of the water control structures that mitigate the adverse effects on fish and fish habitat within the outlet channels and in the local assessment area identified in Figure 9 of the Environmental Assessment Report, including the Dauphin and Fairford Rivers. As part of these procedures, the Proponent shall:
- 3.8.1 open and close water control structures gradually to avoid fish strandings;
 - 3.8.2 operate the water control structures to maintain fish passage, spawning and egg incubation in the Dauphin and Fairford Rivers during spring and fall spawning periods for Manitoba's southern region as outlined in *Manitoba Restricted Activity Timing Windows for the Protection of Fish and Fish Habitat*;
 - 3.8.3 maintain a minimum water depth of one metre above the outlet channel invert in the pools between the Lake St. Martin Outlet Channel drop structures during closed-gate periods for the Lake St. Martin Outlet Channel;
 - 3.8.4 communicate and coordinate with relevant authorities responsible for the operation of local and regional water infrastructure; and
 - 3.8.5 develop and implement a decision-making matrix related to the operation of the water control structures during open-gate periods that meets flood mitigation requirements while minimizing increases in total suspended sediment pursuant to condition 3.16.3 within the outlet channels, and changes to surface flows in the Dauphin River.
- 3.9 The Proponent shall develop, prior to commissioning and in consultation with Indigenous groups, Fisheries and Oceans Canada and other relevant authorities, a fish rescue and release plan. The Proponent shall implement the plan during operation in a manner consistent with any authorization issued under the *Fisheries Act* and its regulations. As part of the plan, the Proponent shall:
- 3.9.1 monitor for fish strandings downstream of the water control structures for both outlet channels, including at the drop structures for the Lake St. Martin outlet channel, immediately following the closure of water control structures during operation;

- 3.9.2 rescue and release stranded fish; and
 - 3.9.3 identify opportunities for Indigenous groups to take part in the rescue and relocation of fish in condition 3.9.2 and develop procedures to communicate these opportunities to Indigenous groups in a manner that facilitates their participation.
- 3.10 The Proponent shall install and operate the temporary water intake system used during construction in water frequented by fish in a manner which mitigates the incidental capture of fish by entrainment and impingement. In doing so, the Proponent shall use an appropriately sized fish screen and take into account Fisheries and Oceans Canada's *Interim Code of Practice for End-of-Pipe Fish Protection Screens for Small Water Intakes in Freshwater*.
- 3.11 The Proponent shall develop, prior to the start of blasting activities in or near water and in consultation with Fisheries and Oceans Canada and any other relevant authorities, mitigation measures to mitigate adverse effects to fish and fish habitat from the use of explosives, and in doing so apply Fisheries and Oceans Canada's *Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters* and implement the measures. The Proponent shall provide these measures to the Agency before implementing them.
- 3.12 The Proponent shall develop, prior to construction and in consultation with relevant authorities, measures to mitigate the occurrence of basal heave in the Designated Project area caused by the Designated Project. The Proponent shall implement these measures during all phases of the Designated Project. In doing so, the Proponent shall:
- 3.12.1 install, prior to construction, and maintain throughout construction and operation an active and passive depressurization system in the Designated Project area, including depressurization wells, sump pumps, and reverse drains; and
 - 3.12.2 maintain groundwater levels:
 - 3.12.2.1 above the top of the bedrock aquifer and in an upward pressure gradient where baseline groundwater levels are above the top of the bedrock aquifer; and
 - 3.12.2.2 within baseline conditions where baseline groundwater levels are below the top of the bedrock aquifer.
- 3.13 The Proponent shall, in consultation with relevant authorities, identify and implement measures to mitigate adverse impacts to the underlying bedrock aquifer from the Designated Project. In doing so, the Proponent shall:
- 3.13.1 identify measures specific to building Designated Project components directly on the bedrock; and
 - 3.13.2 install filters at passive pressure relief wells, reverse drains, sediment trenches and any other sites of potential connection between the bedrock aquifer and surface water environments.
- 3.14 The Proponent shall, when developing and operating quarry sites for the Designated Project, do so in such a way that the water table is not intersected when extracting quarry materials in locations where depressurization drawdown overlaps with the depressurization zone for the Lake Manitoba Outlet Channel and Lake St. Martin Outlet Channel as shown in Figure 6.4-1 of the Environmental Impact Statement.

- 3.15 The Proponent shall establish and maintain during construction and operation a minimum 30 metre buffer zone along water frequented by fish, and shall avoid conducting any work that disturbs vegetation within this buffer zone unless required for safety reasons. If the Proponent must conduct any such work in that buffer zone, the Proponent shall submit justification for why it is necessary to the Agency, and shall:
- 3.15.1 use vegetation removal methods that do not involve the use of heavy machinery;
 - 3.15.2 leave root masses undisturbed within the banks of water frequented by fish; and
 - 3.15.3 retain one third of the total woody vegetation.
- 3.16 The Proponent shall mitigate the adverse effects on fish and fish habitat related to the transport of sediment from the outlet channels into the receiving environment during commissioning and operation. In doing so, the Proponent shall:
- 3.16.1 remove construction-related sediment, including fine sediment, from the outlet channels prior to commissioning. The Proponent shall, once construction of the outlet channels is completed and prior to beginning sediment removal within the outlet channels, provide to the Agency and Fisheries and Oceans Canada:
 - 3.16.1.1 an updated estimate of the amount of construction-related sediment present in the outlet channels;
 - 3.16.1.2 the sediment removal methodology; and
 - 3.16.1.3 expected amount of construction-related sediment to be removed;
 - 3.16.2 conduct commissioning outside the restricted activity timing windows for Manitoba southern region for species present in the local study area, as identified in Fisheries and Oceans Canada's *Manitoba Restricted Activity Timing Windows for the Protection of Fish and Fish Habitat*; and
 - 3.16.3 ensure that levels of total suspended solids at the outlets of both outlet channels do not exceed 25 mg/l above background levels for more than a 24-hour period during commissioning and operation. In doing so, the Proponent shall:
 - 3.16.3.1 determine the background levels through a methodology developed prior to construction and in consultation with relevant authorities; and
 - 3.16.3.2 monitor total suspended solids at the outlets of both outlet channels in real time throughout commissioning and operation, and if results demonstrate that levels of total suspended solids are likely to exceed 25 mg/l above background levels determined pursuant to condition 3.16.3.1, the Proponent shall implement additional or modified mitigation measures to avoid exceedance of this threshold, including by adjusting the degree to which the water control structures are open.
- 3.17 The Proponent shall develop, prior to construction and in consultation with Indigenous groups, Fisheries and Oceans Canada, and other relevant authorities, a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of the mitigation measures as it pertains to adverse environmental effects of the Designated Project on fish and fish habitat. 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 monitor:

- 3.17.1 sediment quality of the aquatic environment, including particle size distribution, total organic carbon, metals, nutrients, hydrocarbons, at a minimum in Sturgeon Bay and Birch Bay;
 - 3.17.2 substrate composition, distribution of aquatic macrophytes and benthic invertebrate community species composition and abundance at the inlets and outlets of the outlet channels, shoals in the south and north basins of Lake St. Martin, Sturgeon Bay, near McBeth Point, at the southeast shore of Reindeer Island in Lake Winnipeg, and along a transect in the Lake St. Martin Narrows;
 - 3.17.3 fish community composition and population metrics in Lake St. Martin and Sturgeon Bay;
 - 3.17.4 fish utilization of Birch Creek and Buffalo Creek habitat for fish species, including lake whitefish (*Coregonus clupeaformis*), walleye (*Sander vitreus*), and sucker species;
 - 3.17.5 spawning and larval drift of walleye (*Sander vitreus*), white sucker (*Catostomus commersonii*) and Shorthead Redhorse (*Moxostoma macrolepidotum*) in Dauphin River and Fairford River and spawning of lake whitefish (*Coregonus clupeaformis*) in Lake St. Martin and Sturgeon Bay;
 - 3.17.6 adult and larval fish distribution and habitat use within the outlet channels; and
 - 3.17.7 for fish eggs and incubation directly below the Lake Manitoba Outlet Channel water control structure and the most downstream drop structure on the Lake St. Martin Outlet Channel.
- 3.18 The Proponent shall develop, prior to construction and in consultation with Indigenous groups and other relevant authorities, a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of the mitigation measures as it pertains to adverse environmental effects of the Designated Project on fish and fish habitat from changes to groundwater 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:
- 3.18.1 install, prior to construction, a network of monitoring wells equipped with continuous data loggers, at a minimum in the following locations:
 - 3.18.1.1 for the Lake Manitoba Outlet Channel, wells around the water control structures, well pairs near surface water features along the outlet channel, and wells in the recharge area northeast of the outlet channel;
 - 3.18.1.2 for the Lake St. Martin Outlet Channel, wells around the water control structures, Big Buffalo Lake Complex, artesian springs along Big Buffalo Creek, and Lake Winnipeg; and
 - 3.18.1.3 for each monitoring location referenced in condition 3.18.1.1 and 3.18.1.2, install monitoring wells in the bedrock aquifer, the deep till, the shallow till, and the upper peat layer;
 - 3.18.2 monitor groundwater quantity continuously at the locations referred to in condition 3.18.1;
 - 3.18.3 monitor for incidents of basal heave; and
 - 3.18.4 identify the levels of change to groundwater quantity monitoring pursuant to condition 3.18.2 that would require the Proponent to update the groundwater modelling as

presented in Appendix IAAC-R2-03-1 of the Final Round 2 Information Request Responses (Canadian Impact Assessment Registry Reference Number 80148, Document reference number 188) and implement any modified or additional mitigation measures.

- 3.19 The Proponent shall develop, prior to construction and in consultation with Indigenous groups, Fisheries and Oceans Canada, Environment and Climate Change Canada and other relevant authorities, a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of the mitigation measures as it pertains to adverse environmental effects of the Designated Project on fish and fish habitat due to changes in surface water quality and 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:
- 3.19.1 monitor, at a minimum, the parameters outlined in Table 2 of the Surface Water Management Plan within Attachment 4.1 of the Proponent's Response to Information Requests Round 1 (Canadian Impact Assessment Registry Reference Number 80148, Document reference number 147) including field parameters, general chemistry, substrates, sediment, carbon parameters, total and dissolved metals (including mercury and methylmercury), hydrocarbons, pesticides, and total and dissolved nutrients at a minimum two years post-commissioning and to capture seasonal variability and effects after a minimum number of outlet channel operations and a range of magnitudes of floods, including any new record floods;
 - 3.19.2 monitor, at a minimum, the parameters outlined in Section 3.3.4 of the draft Aquatic Effects Monitoring Plan contained within Attachment 4.1 of the Proponent's Response to Information Requests Round 1 (Canadian Impact Assessment Registry Reference Number 80148, Document reference number 147) during commissioning and every water control structure gate opening or at a revised frequency that takes into account a range of magnitudes of floods, including any new record floods, as determined as part of the development of the follow-up program pursuant to condition 2.5.3;
 - 3.19.3 conduct the monitoring referred to in condition 3.19.1 and 3.19.2 at the following locations: Watchorn Bay, Birch Creek, Birch Bay, Fairford River, Lake Manitoba Outlet Channel, Goodison Lake, Pineimuta Lake, Lake St. Martin, Lake St. Martin Narrows, Lake St. Martin north basin, Dauphin River, Big Buffalo Lake, Buffalo Creek, Lake St. Martin Outlet Channel, Sturgeon Bay near the Lake St. Martin Outlet Channel outlet, at the mouth of Sturgeon Bay, along the east shore of Sturgeon Bay, Berens Island, Berens River inlet, Pigeon Bay, Sandy Bar, Black Island, Hecla Island, Goldeye Creek, Fisher Bay, McBeth Point, Reindeer Island, Cross Lake, Split Lake, Fairford River, Dauphin River, and near field, mid field, and far field monitoring locations to capture the extent of the sediment plume in Birch Bay and Sturgeon Bay taking into account different wind scenarios;
 - 3.19.4 conduct substrate and bathymetric surveys to refine elevation and roughness estimates for key features such as the Dauphin River inlet and the Lake St. Martin Narrows, and repeat the surveys when the reported flow at hydrometric station WSC 05LM006 in the Dauphin River diverges more than 5% from the flow calculated from the rating curves used in the hydraulic model;
 - 3.19.5 update the hydraulic model referred to in the System Hydraulic Design Criteria of the Proponent's Response to Information Requests Round 1 (Canadian Impact Assessment Registry Reference Number 80148, Document reference number 147), including the

hydraulic behavior of the Lake St. Martin Narrows, with water level data from the first conveyance of flows post-commissioning, north-basin water level gauge with real-time capability, and the results of the substrate and bathymetric surveys referred to in condition 3.19.4; and

- 3.19.6 develop and implement additional mitigation measures if the monitoring referred to in conditions 3.19.1 and 3.19.2 indicates unanticipated effects to surface water quality and quantity attributable to the Designated Project, and in doing so apply the *Manitoba Water Quality Guideline (MWQG) Tier III Guideline* for fish and other aquatic life and the Canadian Council of Ministers of the Environment's *Canadian Water Quality Guidelines for the Protection of Aquatic Life*, the water quality data referred to in the Fall 2020 and Fall 2021 Aquatic Environmental Monitoring of Water Quality, and the water quantity data referred to in the System Hydraulic Design Criteria, all contained within the Proponent's Response to Information Requests Round 1 (Canadian Impact Assessment Registry Reference Number 80148, Document reference number 147).

4 Migratory birds

- 4.1 The Proponent shall carry out the Designated Project 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, while applying Environment and Climate Change Canada's *Guidelines to avoid harm to migratory birds*.
- 4.2 The Proponent shall conduct the vegetation clearing required for the Designated Project outside of the migratory bird nesting periods for the Designated Project area as identified in Environment and Climate Change Canada's *General nesting periods for migratory birds*, unless not technically feasible. In the event that it is not technically feasible, the Proponent shall develop and implement, additional measures, including non-intrusive monitoring, to mitigate adverse effects on migratory birds, their eggs and nests. The Proponent shall submit these mitigation measures to the Agency prior to their implementation.
- 4.3 The Proponent shall conduct pre-construction surveys, in consultation with Indigenous groups and relevant authorities within the Designated Project area to identify red-headed woodpecker (*Melanerpes erythrocephalus*), eastern whip-poor-will (*Antrostomus vociferus*), least bittern (*Ixobrychus exilis*) and piping plover (*Charadrius melodus*) critical habitat as defined in Environment and Climate Change Canada's recovery strategy for each species.
- 4.4 If the pre-construction surveys pursuant to condition 4.3 identify critical habitat for the red-headed woodpecker (*Melanerpes erythrocephalus*), the eastern whip-poor-will (*Antrostomus vociferus*), least bittern (*Ixobrychus exilis*) and piping plover (*Charadrius melodus*) the Proponent shall develop, in consultation with relevant authorities, additional measures to mitigate effects on critical habitat that are consistent with Environment and Climate Change Canada's recovery strategies for the applicable species.
- 4.5 The Proponent shall implement measures to mitigate the adverse effects of the Designated Project on bank swallow (*Riparia riparia*) during construction and operation. In doing so, the Proponent shall:

- 4.5.1 maintain, during migratory bird nesting periods, the slopes of all sediment piles, including stockpiles and spoil piles, within active quarries associated with the Designated Project in a manner that deters nesting within these piles; and
- 4.5.2 survey all existing inactive quarry sites for the presence of bank swallow (*Riparia riparia*) nests immediately prior to reactivating these sites during the nesting periods described in condition 4.2.
- 4.6 The Proponent shall control lighting required for the construction and operation of the Designated Project, including the direction, timing, intensity and glare of light fixtures, in a manner to mitigate adverse effects on migratory birds and species of importance to Indigenous groups including those identified in Appendix D of the Environmental Assessment Report, while meeting operational health and safety requirements. In doing so, the Proponent shall use directional lighting, including downlighting that targets only the areas where lighting is required.
- 4.7 The Proponent shall mitigate distribution line strikes by migratory birds, including migratory birds that are listed species at risk within the Designated Project area. In doing so, the Proponent shall:
 - 4.7.1 identify high-risk locations for avian distribution line strikes prior to construction in consultation with a qualified individual; and
 - 4.7.2 increase distribution line visibility to migratory birds at high-risk locations identified pursuant to condition 4.7.1, from the beginning of construction throughout operation, and in doing so apply the Avian Power Line Interaction Committee's *Suggested Practices for Avian Protection on Power Lines*.
- 4.8 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 measures used to comply with conditions 4.1 to 4.7. The Proponent shall implement the follow-up program during all phases of the Designated Project.

5 Species at Risk

- 5.1 The Proponent shall, in consultation with Indigenous groups, conduct pre-construction surveys to identify active nests for short-eared owl (*Asio flammeus*), and active roosts for little brown myotis (*Myotis lucifugus*) and northern myotis (*Myotis septentrionalis*) within the Designated Project area. Surveys for roosts shall include searches of any existing anthropogenic infrastructure that will be removed as part of the Designated Project. In doing so, the Proponent shall:
 - 5.1.1 develop and conduct surveys to identify active nests for short-eared owl (*Asio flammeus*) that consider the recommendations in Manitoba Conservation Data Center's document titled *Recommended Development Setback Distances and Restricted Activity Periods for Birds by Wildlife Feature Type*.
- 5.2 If active nests or roosts are identified pursuant to condition 5.1, the Proponent shall:

- 5.2.1 establish 500 metre buffer zones around little brown myotis (*Myotis lucifugus*) and northern myotis (*Myotis septentrionalis*) active roosts until the roosts are no longer active; and
 - 5.2.2 establish buffer zones for short-eared owl active nests, and in doing so apply the Manitoba Conservation Data Center's *Recommended Development Setback Distances* until the nests are no longer active.
- 5.3 The Proponent shall develop and implement measures, in consultation with relevant authorities, to reduce mortality risks to the northern leopard frog (*Lithobates pipiens*) and snapping turtle (*Chelydra serpentina*) caused by the Designated Project in terrestrial and aquatic habitats. As part of these measures, the Proponent shall:
- 5.3.1 install and maintain exclusion fences to prevent northern leopard frog (*Lithobates pipiens*) and snapping turtle (*Chelydra serpentina*) from accessing work areas that are likely to result in mortality of frogs and turtles. For work occurring within overwintering habitat, exclusion fencing shall be installed prior to the onset of hibernation;
 - 5.3.2 rescue and relocate northern leopard frog (*Lithobates pipiens*) and snapping turtle (*Chelydra serpentina*) prior to commencing activities in work areas that are likely to result in mortality of these species. For work occurring within overwintering habitat, the Proponent shall conduct salvage and relocation in these areas once the exclusion fencing has been installed pursuant to condition 5.3.1; and
 - 5.3.3 if the Proponent observes snapping turtles (*Chelydra serpentina*) or their eggs within Designated Project work areas, implement, in consultation with Indigenous groups and relevant authorities, modified or additional mitigation measures to protect the observed individuals and nests.
- 5.4 The Proponent shall develop, in consultation with Indigenous groups and relevant authorities, and implement a follow-up program to monitor the effectiveness of buffer zones established pursuant to condition 5.2 for little brown myotis (*Myotis lucifugus*), northern myotis (*Myotis septentrionalis*) and short-eared owl (*Asio flammeus*). The Proponent shall implement the follow-up program during construction.

6 Health and socio-economic conditions of Indigenous peoples

- 6.1 The Proponent shall implement measures, during all phases of the Designated Project, to mitigate the adverse environmental effects caused by noise and vibration from Designated Project activities on the health of Indigenous Peoples. In doing so, the Proponent shall:
- 6.1.1 identify, prior to construction and in consultation with Indigenous groups:
 - 6.1.1.1 receptor locations for noise monitoring; and
 - 6.1.1.2 days of cultural importance during which blasting shall not occur;
 - 6.1.2 maintain noise and vibration levels below the thresholds for noise and vibration, identified in Health Canada's *Guidance for Evaluating Human Health Impacts in Impact Assessment: Noise* at receptor locations identified in condition 6.1.1.1;

- 6.1.3 conduct blasting activities between 10:00 am and 4:00 pm and outside of statutory holidays and days of cultural importance identified in condition 6.1.1.2, unless required for safety reasons; and
- 6.1.4 develop, prior to construction and in consultation with Indigenous groups, a protocol for receiving and addressing feedback from Indigenous groups related to exposure to noise and vibration generated by the Designated Project. The Proponent shall provide the protocol to Indigenous groups and the Agency prior to construction, and make the protocol publicly available online. As part of the protocol, the Proponent shall:
 - 6.1.4.1 identify how a person may provide feedback;
 - 6.1.4.2 respond to any feedback received as soon as feasible, no later than 48 hours after receiving the feedback; and
 - 6.1.4.3 implement, as soon as technically feasible, any modified or additional mitigation measures in response to the feedback received.
- 6.2 The Proponent shall manage water discharges into the outside drain identified in Figure 3C-22 of the May 2023 Update to the Project Description (Canadian Impact Assessment Registry Reference Number 80148, Document reference number 186) in accordance with the requirements of the *Fisheries Act* and any *Fisheries Act* authorization(s) for the project, and in doing so apply Manitoba's *Water Quality Guidelines for the Protection of Aquatic Life*, and the Canadian Council of Ministers of the Environment's *Canadian Water Quality Guidelines for the Protection of Aquatic Life* before that water is discharged into the outside drain during all phases of the Designated Project.
- 6.3 The Proponent shall develop, prior to construction and in consultation with Indigenous groups, 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 from the Designated Project on the health of Indigenous Peoples resulting from changes in air quality due to construction activities. The Proponent shall implement the follow-up program during construction. As part of the implementation of the follow-up program, the Proponent shall:
 - 6.3.1 identify, in consultation with Indigenous groups, monitoring locations within areas used by Indigenous groups for traditional purposes;
 - 6.3.2 monitor nitrogen dioxide, total suspended particulate (TSP), coarse particulate matter (PM10) and fine particulate matter (PM2.5) continuously during construction at receptor locations identified in condition 6.3.1; and
 - 6.3.3 apply the Canadian Council of Ministers of the Environment's *Canadian Ambient Air Quality Standards* management levels for nitrogen dioxide and fine particulate matter (PM2.5) when establishing the thresholds pursuant to condition 2.5.5 that would require the implementation of modified or additional mitigation measures based on the results of monitoring conducted in accordance with condition 6.3.2.
- 6.4 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 contamination of country food as it relates to real and perceived effects from the Designated Project on the health of Indigenous peoples. As part of the

development of the follow-up program, the Proponent shall determine in consultation with Indigenous groups, the vegetation, fungi, and wildlife species, including fish, and their components, that shall be monitored, the locations where the monitoring shall be conducted, the contaminants to be monitored and the timing and frequency of the monitoring. In doing so, the Proponent shall:

- 6.4.1 monitor methylmercury in fish species and other contaminants of potential concern in country food other than fish;
 - 6.4.2 implement modified or additional measures if monitoring identifies an increase in a contaminant of concern beyond what was predicted during the environmental assessment; and
 - 6.4.3 notify Indigenous groups pursuant to the communication and engagement plan referred to in condition 7.1.
- 6.5 The Proponent shall develop, prior to construction and in consultation with Indigenous groups and other relevant authorities, a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of the mitigation measures as it pertains to adverse environmental effects of the Designated Project on the health of Indigenous peoples from changes in the quality and quantity of water used by Indigenous groups, including drinking water. 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:
- 6.5.1 monitor field parameters listed in Table 2 of the Groundwater Management Plan in Attachment 4.1 of the response to Information Requests Round 1 (Canadian Impact Assessment Registry Reference Number 80148, Document reference number 147), including potable water parameters (including conductivity, hardness, pH, turbidity), total and dissolved metals sediment, petroleum hydrocarbons, and microbiological parameters (*Escherichia coli* [E. coli], total and fecal coliforms) at the monitoring locations identified in condition 3.18.1 and at locations near Emergency Outlet Channel Reach 3, near Pinaymootang First Nation, and near Dauphin River First Nation;
 - 6.5.2 monitor for groundwater quantity near Emergency Outlet Channel Reach 3, near Pinaymootang First Nation and Dauphin River First Nation; and
 - 6.5.3 monitor water discharges into the outside drain as identified in Figure 3C-22 of the May 2023 Update to the Project Description (Canadian Impact Assessment Registry Reference Number 80148, Document reference number 186).

7 Current use of lands and resources for traditional purposes

- 7.1 The Proponent shall develop, prior to construction and in consultation with Indigenous groups and relevant authorities, a communication and engagement plan for each Indigenous group to share information on the adverse environmental effects of Designated Project activities as they relate to the current use of lands and resources for traditional purposes. The Proponent shall implement and maintain the communication plans during all phases of the Designated Project and shall review the plans every two years and update them as needed. As part of the communication plans, the Proponent shall:

- 7.1.1 identify and describe the following:
 - 7.1.1.1 harvesting areas and other sites of importance for Indigenous groups;
 - 7.1.1.2 a schedule of key periods of use of areas in 7.1.1.1 for Indigenous groups, including harvesting periods;
 - 7.1.1.3 the details of the progressive revegetation plan determined pursuant to condition 7.13;
 - 7.1.1.4 a schedule of construction activities including blasting, their dates and times, and their locations, that may impact land use activities, including through increased noise and restrictions on access;
 - 7.1.1.5 maps displaying the most up-to-date locations of Designated Project components and activities, including work camps, quarries and laydown areas;
 - 7.1.1.6 any updates to floodplain maps following a major change in hydraulic modelling or outlet channel operating rules. The Proponent shall ensure these maps are readily available online; and
 - 7.1.1.7 a description of the safety and notification protocols for water control structure opening during frozen conditions;
 - 7.1.2 develop and implement communication procedures for the Proponent to:
 - 7.1.2.1 communicate to Indigenous groups the information referred to in condition 7.1.1, including any updates to this information;
 - 7.1.2.2 communicate training and monitoring opportunities including those identified for follow-up programs pursuant to condition 2.9 and Indigenous monitoring pursuant to condition 9.1;
 - 7.1.2.3 receive complaints pertaining to the adverse environmental effects of the Designated Project on the current use of lands and resources for traditional purposes, including through impacts to access and noise, and document and respond to complaints in a timely manner on how issues have been addressed; and
 - 7.1.2.4 provide notice to potentially affected Indigenous groups of imminent flooding scenarios attributable to the Designated Project as soon as the Proponent is aware of such flooding scenarios; and
 - 7.1.3 provide in-community training sessions, at the request of Indigenous groups, on how to deal with flooding scenarios, including how to use flood mitigation supplies and tools.
- 7.2 The Proponent shall maintain, throughout all phases of the Designated Project, the existing Environmental Advisory Committee (EAC) to support dialogue and issue resolution between the Proponent and Indigenous groups. The Proponent shall invite Indigenous groups to participate in all EAC activities. The Proponent shall revise the Terms of Reference of the EAC every 5 years and shall consult participating Indigenous groups on revisions to the Terms of Reference. The Proponent shall confirm at minimum annually, each Indigenous group's interest in participating in the EAC. The Proponent shall submit the final Terms of Reference to the Agency prior to construction and shall submit any revisions to the Terms of Reference to the Agency. As part of the Terms of Reference, the Proponent shall include:
- 7.2.1 the means by which the Proponent shall support the participation of Indigenous groups in monitoring;

- 7.2.2 the development and publication of a quarterly report of recommendations from the EAC;
 - 7.2.3 a plan for the implementation of the recommendations determined pursuant to condition 7.2.2;
 - 7.2.4 the requirement for the Proponent to provide a rationale for each recommendation that is not retained or implemented pursuant to condition 7.2.2 and include this rationale in the quarterly report;
 - 7.2.5 the means by which the Proponent shall document any unresolved issue, including a rationale for the lack of a resolution, and any solutions for finding a resolution proposed by the committee, and include this information in the report referred to in condition 7.2.2;
 - 7.2.6 the means by which the Proponent shall enable Indigenous groups to lead sessions for the EAC; and
 - 7.2.7 the means by which the Proponent shall engage Indigenous groups on the activities of the EAC, including the information identified in conditions 7.2.2 through 7.2.5, as determined in consultation with Indigenous groups.
- 7.3 The Proponent shall provide, prior to construction, access for Indigenous groups to hold ceremonies at each outlet channel site. The proponent shall provide opportunities to lead, direct, and participate in these ceremonies to all Indigenous groups.
 - 7.4 The Proponent shall develop, prior to construction and in consultation with Indigenous groups, cultural awareness training for all employees and contractors associated with the Designated Project. The Proponent shall implement the training prior to the start of construction and during all phases of the Designated Project.
 - 7.5 The Proponent shall provide opportunities for Indigenous groups to receive training to support their participation in follow-up and monitoring programs.
 - 7.6 The Proponent shall ensure access to harvesting areas and other sites of importance during key periods of use identified in condition 7.1.1.2 unless not feasible for safety reasons. If the Proponent must restrict access for safety reasons, the Proponent shall communicate the length of time access will be restricted to Indigenous groups as determined pursuant to condition 7.1.1.4.
 - 7.7 The Proponent shall develop, prior to construction and in consultation with Indigenous groups, measures to limit public access through the Designated Project area in order to maintain Indigenous groups' quality of experience during all phases of the Designated Project. The Proponent shall implement these measures during construction and operation and submit these measures to the Agency prior to implementing them.
 - 7.8 The Proponent shall implement, in consultation with Indigenous groups and relevant authorities and during all phases of the designated project, measures to ensure the safe navigation and use of areas surrounding outlet channel inlets and outlets. In doing so, the Proponent shall:
 - 7.8.1 install and maintain visible warning signage in areas surrounding the water inlet and outlets to identify unsafe ice conditions during frozen conditions; and
 - 7.8.2 remove, during maintenance activities, debris collected in the navigation safety boom surrounding the outlet channel inlets.

- 7.9 The Proponent shall design and build crossing structures over the outlet channels to facilitate safe access through the Designated Project area by Indigenous groups so they are able to cross. In doing so, the Proponent shall:
- 7.9.1 install and maintain signage along both sides of each outlet channel, at a maximum interval distance to be determined in consultation with Indigenous groups, to direct Indigenous peoples to the outlet channel crossing locations; and
 - 7.9.2 identify, in consultation with Indigenous groups, trails and preferred areas for hunting, trapping, gathering, or fishing that will be intersected by the outlet channels or that will no longer be accessible to Indigenous groups to inform the placement of crossing structures.
- 7.10 The Proponent shall prohibit, during all phases of the Designated Project, employees and contractors associated with the Designated Project from fishing, hunting, trapping, gathering and using recreational vehicles for any purposes not associated with the Designated Project, within the Designated Project area, or using the Designated Project area to access lands outside the Designated Project area for fishing, hunting, trapping, gathering and using recreational vehicles, unless an employee or contractor is provided access by the Proponent as a member of an Indigenous group for traditional purposes or for exercising Aboriginal rights, to the extent that such access is safe.
- 7.11 The Proponent shall identify, in consultation with Indigenous groups, areas within the Designated Project area that contain plant species of cultural importance and shall provide access to Indigenous groups to harvest these plants during culturally relevant harvesting periods and prior to construction.
- 7.12 The Proponent shall develop, prior to construction and in consultation with Indigenous groups and relevant authorities, a wetland compensation plan to offset the residual effects of the Designated Project on wetlands, including class 2 wetlands, resulting from project-related changes in surface and groundwater levels that could not be avoided or minimized. When developing the plan, the Proponent shall take into account Environment and Climate Change Canada's Operational Framework for Conservation Allowances and the habitat needs for listed species at risk, including yellow rail (*Coturnicops noveboracensis*), and other wetland vegetation and wildlife species of importance to Indigenous groups. The Proponent shall implement the plan during all phases of the Designated Project. In doing so, the Proponent shall:
- 7.12.1 establish performance standards for compensated wetlands, including criteria by which these standards will be measured; and
 - 7.12.2 ensure that the wetland compensation area is larger than the area of the wetland area being compensated.
- 7.13 The Proponent shall develop, prior to construction and in consultation with Indigenous groups and relevant authorities, and implement a progressive revegetation plan for areas disturbed by the Designated Project for the purpose of controlling erosion and invasive species and encouraging the establishment of native species assemblages, including trees. The Proponent shall provide opportunities for Indigenous groups to participate in revegetation activities. As part of progressive revegetation, the Proponent shall identify:

- 7.13.1 native plant species, including species of cultural importance identified by Indigenous groups, to be used for revegetation;
 - 7.13.2 areas for revegetation of species of cultural importance for harvesting purposes. The Proponent shall provide maps of these areas to Indigenous groups; and
 - 7.13.3 periods when the areas referred to in condition 7.13.2 should be suitable for harvesting by Indigenous groups.
- 7.14 The Proponent shall develop, prior to construction, and implement during construction and operation, a tree planting program to replace the trees lost during the construction of the designated project. The Proponent shall develop and implement the program in consultation with Indigenous groups. In doing so, the Proponent shall:
- 7.14.1 determine the species and size of trees to be planted, with preference given to larger trees; and
 - 7.14.2 identify the locations of trees, including any areas within the Designated Project area described in the revegetation plan pursuant to condition 7.13.2.
- 7.15 The Proponent shall conduct, in consultation with Indigenous groups and relevant authorities, pre-construction surveys within the Designated Project area to identify active denning sites for furbearers of importance to Indigenous groups, including those identified in Appendix D of the Environmental Assessment Report. If active denning sites are discovered, the Proponent shall:
- 7.15.1 establish no work buffer zones around the denning sites that correspond to the setback distance under high disturbance for the applicable species as described in Appendix D of the Environmental Assessment Report, until the den is no longer active.
- 7.16 The Proponent shall facilitate, during all phases of the Designated Project, the safe movement of ungulates and furbearers through the Designated Project area. In doing so, the Proponent shall:
- 7.16.1 install and maintain, at locations determined in consultation with Indigenous groups and relevant authorities:
 - 7.16.1.1 wildlife crossing structures over the outlet channels; and
 - 7.16.1.2 breaks or sloped areas at spoil piles;
 - 7.16.2 design and construct the outlet channels in a manner that allows ungulates and furbearers of importance to Indigenous groups to cross safely when not using the wildlife crossing structures pursuant to condition 7.16.1.1.
- 7.17 The Proponent shall, during all phases of the Designated Project, use and maintain noise-dampening technologies on all vehicles and heavy equipment used in the Designated Project area to mitigate adverse environmental effects of the Designated Project on ungulates and furbearers. In doing so, the Proponent shall keep the technologies in good working order through regular inspections.
- 7.18 The Proponent shall develop, in consultation with Indigenous groups and relevant authorities, and implement during all phases of the Designated Project, measures to mitigate the risks of collisions between vehicles and ungulates and furbearers. In doing so, the Proponent shall:

- 7.18.1 determine speed limits on Designated Project roads that take into account the potential for collisions with wildlife. The Proponent shall post these speed limits on Designated Project roads and require all persons to abide by these speed limits; and
 - 7.18.2 install warning signs along Designated Project access roads to warn drivers of the risk of wildlife vehicle collisions.
- 7.19 The Proponent shall implement measures to mitigate adverse effects on wildlife from increased noise levels due to blasting. In doing so, the Proponent shall conduct blasting activities a minimum of 1 km away from active denning sites for denning furbearers and 500 metres from ungulates.
- 7.20 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 determine the effectiveness of the progressive revegetation of areas disturbed by the Designated Project. 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:
- 7.20.1 develop performance objectives, including function as wildlife habitat, taking into account those identified in the draft Revegetation Management Plan contained within Attachment 4.1 of the Proponent's Response to Information Requests Round 1 (Canadian Impact Assessment Registry Reference Number 80148, Document reference number 147);
 - 7.20.2 monitor, during all phases of the Designated Project, the revegetated areas referred to in condition 7.13.2. If the performance objectives identified in condition 7.20.1 are unlikely to be met within three years of planting, the Proponent shall implement additional mitigation measures in consultation with Indigenous groups and relevant authorities; and
 - 7.20.3 monitor revegetated areas during the first six years of operation or until objectives are met, whichever comes first.
- 7.21 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 determine the effectiveness of the mitigation measures as they pertain to adverse effects from the Designated Project on ungulates and furbearers. The Proponent shall implement the follow-up program during the first six years of operation. As part of the follow-up program, the Proponent shall monitor:
- 7.21.1 access and use of the linear corridors created by the outlet channels by predators of ungulates and furbearers, including grey wolf (*Canis lupus*) and coyote (*Canis latrans*); and
 - 7.21.2 ungulate crossings of both outlet channels to verify that ungulates can cross safely.
- 7.22 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 relates to effects to current use of lands and resources for traditional purposes, including wetlands and reserve lands, through changes in surface water and groundwater levels and determine the effectiveness of the mitigation measures identified in condition 7.12. 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 monitor:

- 7.22.1 surface and groundwater levels in wetlands that are upgradient and downgradient from the outlet channels, including Birch Creek illustrated in Figure 2 of Chapter 2 of the Environmental Assessment Report and the Big Buffalo Lake Complex illustrated in Figure 3 of Chapter 2 of the Environmental Assessment Report;
- 7.22.2 surface water levels near reserve lands around the Fairford River, Lake St. Martin, and Dauphin River;
- 7.22.3 changes in the population and distribution of wetland vegetation and wildlife species, including moose, beaver and muskrat; and
- 7.22.4 the compensation wetland area from the start of compensation annually for a minimum of five years until performance standards established pursuant to condition 7.12.1 have been met or exceeded.

8 Physical and cultural heritage and structures, sites or things of historical, archaeological, paleontological or architectural significance

- 8.1 The Proponent shall have a qualified individual develop, prior to construction and in consultation with Indigenous groups and relevant authorities, and implement, during construction and operation, an archaeological and heritage management plan for any structures, sites, or things of historical, archaeological, paleontological, or architectural significance or physical or cultural heritage resources within the Designated Project area including those described in the section *Question IAAC-R3-06* of the Round 3 Information Request Responses (Canadian Impact Assessment Registry Reference Number 80148, Document reference number 213). The archaeological resources and heritage management plan shall include:
 - 8.1.1 avoidance measures for any structures, sites, or things of historical, archaeological, paleontological, or architectural significance or physical or cultural heritage resources;
 - 8.1.2 procedures to record, analyze, and mitigate the effects on any structures, sites, or things of historical, archaeological, paleontological, or architectural significance or physical or cultural heritage resources that could not be avoided pursuant to condition 8.1.1;
 - 8.1.3 a process for reporting information about any structures, sites, or things of historical, archaeological, paleontological, or architectural significance or physical or cultural heritage resources to Indigenous groups;
 - 8.1.4 procedures for returning artifacts of Indigenous origin excavated during construction to communities for preservation and interpretation;
 - 8.1.5 a description of opportunities for Indigenous groups to participate in the implementation of the plan to support and protect culture and heritage resources;
 - 8.1.6 the chance find protocol described in condition 8.2; and
 - 8.1.7 procedures for reviewing the plan in consultation with Indigenous groups, including the frequency at which the plan shall be updated.
- 8.2 The Proponent shall develop, prior to construction and in consultation with Indigenous groups and relevant authorities, a chance find protocol that the Proponent shall apply in the event that any previously unidentified structures, sites or things of historical, archaeological, paleontological or architectural significance or non-forensic human remains are discovered within the Designated

Project area by the Proponent, or brought to the attention of the Proponent by another party during any phase of the Designated Project. As part of the chance find protocol the Proponent shall:

- 8.2.1 immediately halt work at the location of the discovery, except for actions required to be undertaken to protect the integrity of the discovery;
 - 8.2.2 delineate an area of 50 metres around the discovery as a no-work zone;
 - 8.2.3 inform Indigenous groups, the Agency, and the Manitoba Ministry of Sport, Culture, Heritage and Tourism and any other relevant authority within 24 hours of the discovery;
 - 8.2.4 allow Indigenous groups and Indigenous monitors in condition 9.1 to monitor works related to recording, analyzing, and mitigating effects on the discovery and to conduct ceremonies at the location of the discovery;
 - 8.2.5 have a qualified individual, who is a registered archeologist under Manitoba's *Heritage Resources Act*, and selected in consultation with Indigenous groups, conduct an assessment at the location of the discovery; and
 - 8.2.6 consult with Indigenous groups, the Manitoba Ministry of Sport, Culture, Heritage and Tourism and any other relevant authorities on the manner by which the Proponent shall comply with all applicable legislative or legal requirements and associated regulations and protocols respecting the discovery, recording, transferring and safekeeping of previously unidentified structures, sites or things of historical, archaeological, paleontological or architectural significance, or non-forensic human remains.
- 8.3 The Proponent shall require all employees and contractors involved in or overseeing Designated Project construction activities that involve physical disturbance of previously undisturbed ground to undergo training on archaeological and heritage resource management prior to engaging in these construction activities. In doing so the Proponent shall have a qualified individual develop, prior to construction and in consultation with Indigenous groups, and administer training on:
- 8.3.1 archaeological and heritage resource identification; and
 - 8.3.2 the procedures and protocols for mitigating impacts to these resources as described in condition 8.1 and 8.2.
- 8.4 The Proponent shall have a qualified individual conduct, prior to construction and in consultation with Indigenous groups, an archaeological assessment in accordance with Manitoba's *Heritage Resources Act* at Snake Island, Lake St. Martin Narrows, burial sites on Indigenous lands along Lake St. Martin and at the Lake St. Martin Outlet Channel distribution line, work camps, quarries and laydown areas.
- 8.5 The Proponent shall have a qualified individual conduct, during construction and in consultation with Indigenous groups and relevant authorities, archaeological monitoring of heritage sites EkLm-001, EkLn-001, EiLp-002, EiLp-004, EhLp-004 and EhLp-006 identified in the Heritage Resource Impact Assessment of the Proponent's Response to Information Requests Round 1 (Canadian Impact Assessment Registry Reference Number 80148, Document reference number 147), to ensure that construction activities do not cause adverse effects to these heritage resources.

- 8.6 The Proponent shall select, in consultation with Indigenous groups and relevant authorities, the final locations for work camps, quarries and laydown areas. In doing so, the Proponent shall:
- 8.6.1 consider the preferred sites identified in Appendix IAAC-R2-12-1 and Appendix IAAC-R2-12-2 of the Final Round 2 Information Request Responses (Canadian Impact Assessment Registry Reference Number 80148, Document reference number 188); and
 - 8.6.2 select quarry sites that are located at least:
 - 8.6.2.1 30 metres from any previously identified heritage resources or cultural sites; and
 - 8.6.2.2 100 metres from water frequented by fish, unless not technically or economically feasible. If not technically or economically feasible, implement modified or additional mitigation measures for the protection of fish and fish habitat.
- 8.7 The Proponent shall develop, prior to construction and in consultation with Indigenous groups and relevant authorities, a cultural heritage management plan to mitigate effects on tangible and intangible physical and cultural heritage caused by the construction and operation of the Project. The plan shall be implemented during all phases of the Project. As part of the plan, the Proponent shall:
- 8.7.1 identify and describe the tangible and intangible aspects of Indigenous cultural heritage and sites of significance within the Designated Project area, and local and regional assessment area identified in Figure 10 of the Environmental Assessment Report, including intangible aspects related to knowledge transmission, language and cultural continuity as articulated by Indigenous groups. In doing so, the Proponent shall describe the locations, including through the use of maps, of culturally important resources, including sites and harvesting areas identified in condition 7.1.1.1;
 - 8.7.2 identify and describe how the Designated Project will impact tangible and intangible cultural heritage described in condition 8.7.1 both directly and indirectly, including through ground disturbance, sedimentation and erosion, and altered lake levels;
 - 8.7.3 describe any studies the Proponent shall undertake to determine the extent of impacts on culturally important sites and resources identified in the local assessment area and regional assessment area from Project-related changes in erosion and sedimentation, and water levels;
 - 8.7.4 develop and describe nation-specific measures to mitigate Project-related effects on tangible and intangible aspects of physical and cultural heritage described in condition 8.7.1, or resulting from any studies produced pursuant to condition 8.7.3. In doing so, the Proponent will invite each Indigenous group to co-lead the development of the mitigation measures specific to their nation and shall implement these measures during construction and operation. The Proponent shall consider:
 - 8.7.4.1 supporting continued access for cultural practices on a nation-specific basis; and
 - 8.7.4.2 developing or contributing to Indigenous-led programs to preserve and enhance cultural heritage;
 - 8.7.5 summarize the Proponent's efforts to mitigate Project related effects on tangible and intangible cultural heritage;

- 8.7.6 provide Indigenous groups with the opportunity to include a summary of their views in relation to the Proponent's efforts to mitigate effects attributable to the Designated Project on tangible and intangible cultural heritage. If an Indigenous group does not provide their views, the Proponent shall provide a description of the actions and steps they have taken to seek these views; and
- 8.7.7 determine the frequency with which the plan will be reviewed.
- 8.8 The Proponent shall review, at a minimum once every five years *the Lake Manitoba and Lake St. Martin Water Control Structures Operating Guidelines* in consultation with Indigenous groups and relevant authorities to assess the need for updates to these guidelines to support Indigenous groups' current use activities and cultural practices within the local and regional assessment area identified in Figure 10 of the Environmental Assessment Report, taking into account the results of follow-up programs related to current use and cultural heritage pursuant to conditions 7.20, 7.21, 7.22, 8.9 and 8.10 and recommendations of the EAC pursuant to condition 7.2. The Proponent shall update the guidelines based on this review.
- 8.9 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 identified to mitigate effects to any structures, sites, or things of historical, archaeological, paleontological, or architectural significance or physical or cultural heritage resources. 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:
 - 8.9.1 monitor the known heritage sites identified in condition 8.1 and the areas within the local assessment area identified pursuant to condition 8.7.1 if the results of the follow-up program referred to in 3.19 indicate changes to water quantity or quality attributable to the Designated Project;
 - 8.9.2 identify heritage resources that may be adversely impacted by the Designated Project in ways other than through changes to surface water quantity and quality, and monitor these heritage resources during construction and the first 10 years of operation; and
 - 8.9.3 develop and implement additional mitigation measures if the results of the monitoring referred to in conditions 8.9.1 and 8.9.2 shows adverse effects to physical and cultural heritage attributable to the Designated Project.
- 8.10 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 for effects to any structures, sites, or things of historical, archaeological, paleontological, or architectural significance or physical or cultural heritage resources due to erosion along the Lake St. Martin Narrows and the islands within Lake St. Martin. 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:
 - 8.10.1 identify shoreline locations along the Lake St. Martin Narrows and islands within Lake St. Martin at risk for shoreline erosion;

- 8.10.2 identify cultural heritage resources of importance to Indigenous groups in these areas at risk for erosion;
- 8.10.3 monitor the locations identified in condition 8.10.1 and the resources identified in condition 8.10.2 for increased erosion attributable to the Designated Project, including through bathymetry. If the results of the surface water follow-up program referred to in 3.20 indicate changes to water quantity or quality attributable to the Designated Project, the Proponent shall develop and implement additional monitoring; and
- 8.10.4 develop and implement modified or additional mitigation measures to protect these resources if the results of the monitoring referred to in condition 8.10.3 shows adverse effects to physical and cultural heritage attributable to the Designated Project.

9 Indigenous monitors

- 9.1 The Proponent shall retain, prior to construction and in consultation with Indigenous groups, the services of Indigenous monitors from the Indigenous groups referenced in condition 1.24 to participate in follow-up monitoring and any ongoing archaeological and culturally significant work. Prior to retaining the services of Indigenous monitors, the Proponent shall undertake a collaborative process to determine, in consultation with Indigenous groups, the scope, purpose, objectives, details of the participation of Indigenous monitors, and procedures for the Proponent to receive and respond to feedback related to Indigenous monitors. The Proponent shall provide this information to the Agency prior to construction. In doing so, the Proponent shall determine:
 - 9.1.1 how each Indigenous monitor shall be involved in follow-up monitoring or ongoing archaeological and culturally significant work related to their area of interest, including the location, frequency, timing and duration of their participation. If opportunities for Indigenous monitor participation in specific monitoring activities do not exist, provide justification for why; and
 - 9.1.2 how the Proponent shall support the participation of Indigenous monitors, including through the provision of training, including safety or skills certifications and the training on identifying and managing archaeological or heritage resources pursuant to condition 8.3, equipment (including personal protective equipment) and access to the Designated Project area.

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 as it pertains to environmental monitoring in Manitoba, to independently observe and record on the implementation of the conditions set out in this document during construction and to report findings to the Proponent and the Agency.
- 10.2 The Proponent shall require the independent environmental monitor to report to Indigenous groups and the Agency in writing, prior to or concurrent with reporting to the Proponent, about the implementation of conditions set out in this document during construction. 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.

11 Environmental Monitoring Committee

- 11.1 The Proponent shall participate, during all phases of the Designated Project and at the request of relevant federal authorities, in any Environmental Monitoring Committee (EMC), should one be established in relation to the Designated Project.
- 11.2 The Proponent shall provide to the EMC, upon request, information relating to the mitigation measures and follow-up programs set out in this document. If requested by the EMC, the Proponent shall also provide non-proprietary data files of the results of the follow-up programs.
- 11.3 The Proponent shall, when provided with a written recommendation by the EMC that pertains to the Designated Project, provide a response in writing to the EMC, which set out whether the Proponent accepts the recommendation, and if it does not, the reasons for not accepting the recommendation.
- 11.4 The Proponent shall report to the Agency as part of the annual report referred to in condition 2.10, or more frequently if required by the Agency, on the Proponent's actions with respect to the EMC and the associated outcomes of the Proponent's actions.
- 11.5 The Proponent shall allow access to the Designated Project area, to the extent that such access is safe, to any monitor(s) established as part of the EMC. The Proponent shall communicate with monitor(s) regarding coordination of monitoring activities.

12 Accidents and malfunctions

- 12.1 The Proponent shall take all reasonable measures to prevent accidents and malfunctions that may result in adverse environmental effects, and mitigate any adverse environmental effect from accidents and malfunctions that do occur.
- 12.2 The Proponent shall identify, prior to construction and in consultation with Indigenous groups and relevant authorities, measures to be implemented to prevent accidents and malfunctions and shall implement these measures during construction and operations. These measures shall include:
 - 12.2.1 applying the Canadian Dam Association's *Dam Safety Guidelines* when designing, constructing and operating the outlet channels;
 - 12.2.2 implementing standard operating procedures and conducting regular maintenance of project components and equipment, including the passive depressurization system;
 - 12.2.3 storing bulk petroleum products using both perimeter dykes and tanks designed with proper primary and secondary containment; and
 - 12.2.4 developing, prior to construction, and implementing during operation an ice management plan related to the management of ice formations, including ice dams, hanging ice dams, and ice accumulation on drop structure crests, within the outlet channels and channel inlets and outlets. As part of the plan, the Proponent shall:
 - 12.2.4.1 describe the types of ice formations within the outlet channels and channel inlets and outlets that may cause adverse environmental effects;

- 12.2.4.2 monitor ice conditions and containment dyke freeboard within the outlet channels and channel inlets and outlets throughout the seasonal period when meteorological conditions are conducive to ice formation; and
 - 12.2.4.3 identify mitigation measures for each type of ice formation, including the removal of ice dams and the opening of water control structure gates, and the threshold for ice formation that require the implementation of these mitigation measures.
- 12.3 The Proponent shall develop, prior to construction and in consultation with Indigenous groups and relevant authorities, and implement an accidents and malfunctions response plan in relation to each phase of the Designated Project. The accidents and malfunctions response plan shall include:
- 12.3.1 a description of the types of accidents and malfunctions that may cause adverse environmental effects during the phase to which it pertains;
 - 12.3.2 the measures to be implemented in response to each type of accident and malfunction referred to in condition 12.3.1 to mitigate any adverse environmental effect caused by the accident or malfunction; and
 - 12.3.3 for each type of accident and malfunction referred to in condition 12.3.1, the roles and responsibilities of those involved in the implementation of the measures referred to in condition 12.3.2, including the Proponent, each relevant authority, and any other party that may be called upon to respond to an accident or malfunction.
- 12.4 The Proponent shall maintain the accidents and malfunctions response plan referred to in condition 12.3 up-to-date during the phase to which it pertains. The Proponent shall submit any updated accidents and malfunctions response plan to the Agency and to parties consulted for the development of the plan within 30 days of the plan being updated.
- 12.5 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 12.3.1, the Proponent shall immediately implement the measures appropriate to remedy the accident or malfunction, including any measure referred to in condition 12.3.2, and shall:
- 12.5.1 notify relevant authorities with responsibilities related to emergency response (including environmental emergencies) in accordance with applicable legislative and regulatory requirements;
 - 12.5.2 notify, as soon as feasible and pursuant to the communication plan referred to in condition 12.6, 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:
 - 12.5.2.1 the date and time when and location where the accident or malfunction occurred;
 - 12.5.2.2 a summary description of the accident or malfunction;
 - 12.5.2.3 a list of any substance potentially released into the environment as a result of the accident or malfunction; and
 - 12.5.2.4 a description of the relevant authorities notified pursuant to condition 12.5.1 and of the relevant authorities engaged in response to the accident or malfunction;

- 12.5.3 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:
 - 12.5.3.1 a detailed description of the accident or malfunction and of its adverse environmental effects;
 - 12.5.3.2 a description of the measures that were taken by the Proponent to mitigate the adverse environmental effects caused by the accident or malfunction;
 - 12.5.3.3 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;
 - 12.5.3.4 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
 - 12.5.3.5 details concerning the implementation of the accidents and malfunctions response plan referred to in condition 12.3;
- 12.5.4 submit a written report to the Agency no later than 90 days after the day on which the accident or malfunction occurred that takes into account the information submitted in the written report referred to in condition 12.5.3. The written report shall include:
 - 12.5.4.1 a description of the changes made to avoid a subsequent occurrence of the accident or malfunction;
 - 12.5.4.2 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
 - 12.5.4.3 all additional views from Indigenous groups and advice from relevant authorities received by the Proponent since the views and advice referred to in condition 12.5.3.3 were received by the Proponent.
- 12.6 The Proponent shall develop, in consultation with Indigenous groups, a communication plan for accidents and malfunctions related 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:
 - 12.6.1 the types of accidents and malfunctions requiring the Proponent to notify the Indigenous groups;
 - 12.6.2 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
 - 12.6.3 the names and contact information of the Proponent and Indigenous group representatives for the purposes of notifying pursuant to condition 12.6.2 and communicating about accidents and malfunctions as part of the plan referred to in condition 12.3.

13 Schedules

- 13.1 The Proponent shall submit to the Indigenous groups and Agency 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) and duration for each of these activities.
- 13.2 The Proponent shall submit to Indigenous groups and 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.
- 13.3 The Proponent shall submit to Indigenous groups and the Agency in writing an update to schedules referred to in conditions 13.1 and 13.2 every year no later than March 31, until completion of all activities referred to in each schedule.

14 Record keeping

- 14.1 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 during construction and operation. The Proponent shall provide the aforementioned records to the Agency upon demand within a timeframe specified by the Agency.
- 14.2 The Proponent shall retain all records referred to in condition 14.1 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.
- 14.3 The Proponent shall notify the Agency in writing of any change to the contact information of the Proponent.