

PATH No.: 14-HCAA-00814

Other DFO File No.:

PARAGRAPH 35(2)(b) FISHERIES ACT AUTHORIZATION

Authorization issued to

Public Works and Government Services Canada (hereafter referred to as the "Proponent")

Attention to: Hernan Viscasillas, Project Manager

11 Laurier Street

Place du Portage - Phase III (10B3-36)

Gatineau, Quebec K1A 0S5

Location of Proposed Project

Nearest community (city, town, village): Thorne, Ontario Municipality, district, township, county: Township of Poitras

Province: Ontario

Name of watercourse, water body: Ottawa River

Longitude and latitude: Longitude 79°6'10.42"W, Latitude 46°42'29.85"N / UTM Coordinates: UTM NAD1983 Zone 17 North 645,010E 5,174,496N

Description of Proposed Project

The proposed project of which the work, undertaking or activity authorized is a part involves:

The replacement of the existing Timiskaming Ontario water control dam and bridge structure on the Ottawa River with a new dam and bridge structure constructed immediately downstream. The principle structure consists of a 16 bay concrete dam with stop log control gates, and a 2 lane bridge (Highway 63) and pedestrian walkway overtop.

The Project also involves the relocation of a gas pipeline from the existing structure to an underground location downstream of the dam, construction of a downstream cofferdam to isolate the site, and removal of the existing dam and bridge structure.



Description of Authorized work(s), undertaking(s) or activity(ies) likely to result in serious harm to fish

The work(s), undertaking(s), or activity(ies) associated with the proposed project described above, that are likely to result in serious harm to fish, are:

Construction of principal structures including:

- a 16 bay concrete dam with stop log control gates
- rock and/or concrete wing-walls upstream and downstream of the dam
- Concrete sill across the bottom of the river
- · Riverbed rock armouring downstream

Construction of supporting infrastructure, including:

• Cofferdam installation/removal and dewatering of the worksite

Operation of the:

Water Control Dam

The serious harm to fish likely to result from the proposed work(s), undertaking(s), or activity(ies), and covered by this authorization includes

Incidental death of fish due to:

- The construction and commissioning and removal of the cofferdam.
- Incidental stranding from the dewatering of wetted areas behind the cofferdam

Permanent alteration to fish habitat, including:

- 3200 m² of the riverbed dewatered during construction, and excavated and replaced with rip-rap armour to protect the new dam downstream
- 1655 m² of the riverbed dewatered during construction
- 3990 m² of riverbed buried from the footprint of the cofferdam during construction
- 8510 m² of riverbed made unsuitable for potential Lake Whitefish spawning due to changes in flows during construction

Destruction of fish habitat, including:

- 2060 m² of the riverbed dewatered during construction and covered by the footprint of the new water control dam and bridge resulting in the destruction of spawning, cover, and food-producing habitat
- 970 m² of the riverbed dewatered during construction and infilled from the construction of concrete wing walls along the banks downstream of the dam resulting in the destruction of spawning, cover, and food-producing habitat

Conditions of Authorization

The above described work, undertaking or activity that is likely to result in serious harm to fish must be carried on in accordance with the following conditions.

1. Conditions that relate to the period during which the work, undertaking or activity that will result in serious harm to fish can be carried on

The work, undertaking or activity that results in serious harm to fish is authorized to be carried on during the following period:

From the date of issuance to March 31, 2017.

If the Proponent cannot complete the work, undertaking or activity during this period, Fisheries and Oceans Canada (DFO) must be notified in advance of the expiration of the above time period. DFO may, where appropriate, provide written notice that the period to carry on the work, undertaking or activity has been extended.

The periods during which other conditions of this authorization must be complied with are provided in their respective sections below. DFO may, where appropriate, provide written notice that these periods have been extended, in order to correspond to the extension of the period to carry on a work, undertaking, or activity.

- 2. Conditions that relate to measures and standards to avoid and mitigate serious harm to fish
- 2.1 Sediment and erosion control: Sediment and erosion control measures must be in place and shall be upgraded and maintained, such that release of sediment is avoided at the location of the authorized work, undertaking, or activity.
 - 2.1.1 Sediment-laden water from dewatering activities shall be filtered or pumped to a settling basin, dense terrestrial vegetation, or otherwise managed to effectively mitigate the entry of sediment into water bodies.
 - 2.1.2 Effective measures shall be used to keep sediment from entering the Ottawa River during construction and removal of the cofferdam and during removal of the existing water control dam.
 - 2.1.3 All disturbed ground shall be permanently stabilized or re-vegetated as appropriate immediately upon completion of each construction activity.

- 2.2 List of measures and standards to avoid and mitigate serious harm to fish:
 - 2.2.1 A restricted activity timing window for instream works, undertakings and activities to protect fish and eggs during spawning activities from October 10 to July 15 shall be adhered to. All work, undertakings, and activities that may result in serious harm during this period shall be isolated from the Ottawa River with the following exceptions:
 - a) The Timiskaming Ontario Water Control Dam shall be closed no later than October 10 if coffer dam construction or removal is to occur between October 11 and March 31 to discourage Lake Whitefish from spawning in the construction area.
 - b) The coffer dam can be constructed or removed between July 15 and March 31 of any year as long as the Timiskaming Ontario Water Control Dam is closed during construction and removal.
 - c) The Timiskaming Ontario Water Control Dam shall be opened no later than April 1 and remain open until July 15 with sufficient flows to provide spawning opportunities for Walleye, Suckers and Lake Sturgeon in the spawning grounds downstream of the dam.
 - d) If the proponent cannot close the dam on or before October 10, or sufficiently re-open the dam by April 1, or requires any modification of these restricted activity timing windows, Fisheries and Oceans Canada (DFO) must be notified. DFO may, where it considers appropriate, provide in writing notice that the period to carry on the work, undertaking or activity has been extended. Additional monitoring of impacts from this timing change shall be provided by the proponent as requested by DFO and reported as outlined in condition 3 of this Authorization. Additional offsetting shall be provided by the proponent depending upon monitoring results and as requested by DFO and reported as outlined in condition 5 of this Authorization
 - 2.2.2 Works, undertakings, or activities in or near water that may result in serious harm to fish, other than those referred to above in condition 2.2.1, shall not be undertaken within restricted activity timing windows without written approval from DFO.
 - 2.2.3 All reasonable efforts shall be made by the Proponent to minimize the duration of instream works or construction activities when working within restricted activity timing windows.
 - 2.2.4 Instream works shall be isolated from the Ottawa River and undertaken such that water flow around the construction activities is maintained during construction.

- 2.2.5 Fish shall be rescued from isolated construction areas and shall be relocated immediately and unharmed into an area of sufficient flow and cover outside of the construction area. For each fish captured the species and length and weight and if they were released alive or if they died shall be recorded and reported to DFO within 72 hours after the fish rescue is complete, and reported as outlined in condition 3.1 of this authorization.
- 2.2.6 All water intakes used to dewater areas that may contain fish shall be screened according to the DFO's *Freshwater Intake End-of-Pipe Fish Screen Guideline* (1995).
- 2.2.7 Disturbance to the bed and banks of the watercourse shall be confined to the immediate work sites.
- 2.2.8 Rock riprap that will come in direct contact with flowing water shall be of sufficient size to resist displacement during high water level events. Riprap shall be placed such that it does not result in flow changes that may damage the bed and/or banks of the watercourse.
- 2.2.9 Materials used to construct temporary in-water structures shall be removed from the watercourse to the extent practical, once construction is complete, except where materials are being left in place to create fish habitat, or as agreed to by DFO.
- 2.2.10 The use of explosives in or near water shall follow the mitigation measures outlined in the DFO Measures to Avoid Causing Harm to Fish and Fish Habitat found on our website (http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html).
- 2.2.11 Upstream fish passage for American Eel to support fisheries management objectives for the Project area and to support ongoing fisheries productivity shall be provided by the Proponent as and when required by DFO.
 - a) Plans for design, construction (including methods and schedule), operation, mitigation and adaptive management monitoring (including methods and schedule) to ensure effective upstream American Eel passage is provided, shall be developed by the Proponent in cooperation with the Ontario Ministry of Natural Resources, and subject to approval by DFO.
 - b) The Proponent shall begin development of plans for effective upstream American Eel passage as soon as it is clear that the return of American Eel to the Ottawa River watershed above the Otto Holden Dam is imminent (e.g. is expected within 2 years) or as otherwise directed by DFO.

- 2.3 List of contingency measures to be put in place related to construction:
 - 2.3.1 Contingency measures outlined in the Application for Authorization (February 27, 2015) and/or as required shall be put in place if monitoring required in condition 3 below indicates that the measures and standards to avoid and mitigate serious harm to fish are not successful. Contingency measures shall be discussed with and are subject to DFO approval prior to implementation.
 - 2.3.2 Emergency Flooding Contingency measures shall be enacted should flood conditions occur that will imminently exceed the Timiskaming Quebec dam's capacity. The Timiskaming Ontario coffer dam shall be breached and the dam operated (flooding the worksite) as required. DFO shall be notified that Emergency Flooding Contingency measures are being enacted. Additional monitoring of impacts from this change shall be provided by the proponent as requested by DFO and reported as outlined in condition 3 of this Authorization. Additional offsetting shall be provided by the proponent depending upon monitoring results and as requested by DFO and reported as outlined in condition 5 of this Authorization.
- 2.4 Dates by which these measures and standards shall be implemented:
 - 2.4.1 Measures and standards to avoid and mitigate serious harm to fish shall be implemented by the dates outlined in condition 1 of this authorization with the exception of providing upstream fish passage for American Eel in condition 2.2.11 which shall apply for the life of the structure and be implemented once American Eel are returned to the Ottawa River above the Otto Holden dam.
- 3. Conditions that relate to monitoring and reporting of measures and standards to avoid and mitigate serious harm to fish
- 3.1 Monitoring of avoidance and mitigation measures during construction: The Proponent shall monitor the implementation of avoidance and mitigation measures referred to in condition 2 of this authorization. The proponent shall provide an annual mitigation monitoring report to DFO no later than January 31 each year following the year monitored, and indicate whether the measures and standards to avoid and mitigate serious harm to fish during construction were conducted according to the conditions of this authorization. This shall be done, by:

- 3.1.1 Demonstration of effective implementation and functioning: Where appropriate, monitoring shall be undertaken and reported as described in relevant sections of the Application for Authorization (February 27, 2015).
 - a) The annual mitigation monitoring report shall summarize the findings of all monitoring activities relevant to the protection of fish and fish habitat and preventing serious harm that occurred during construction in that calendar year being monitored regardless of if they were submitted to DFO as separate reports or updates earlier in that year.
 - b) Annual reports shall describe the implementation of measures and standards to avoid and mitigate impacts to fish and fish habitat according to the conditions of this Authorization, and the level of effectiveness of the measures at avoiding and mitigating serious harm to fish.
 - c) Annual reports shall include inspection reports and dated and labeled photographs where appropriate and to demonstrate effective implementation and functioning of mitigation measures and standards described above to limit the serious harm to what is covered by this authorization
- 3.1.2 Contingency measures monitoring: Annual reports shall also describe any contingency measures that were implemented or changes to mitigation measures that were required to avoid and mitigate impacts to fish and fish habitat in the event that mitigation measures as initially identified did not function as described or intended. Should Emergency Flooding Contingency measures be enacted the impacts of this action shall be monitored and reported to DFO as soon as possible after the emergency has subsided.
- 3.1.3 If the Proponent will be unable to report by the dates in condition 3.1.1, DFO must be notified, and DFO may, where it considers appropriate, provide in writing notice that the period to provide the monitoring reports has been extended.
- 3.2 Other monitoring and reporting conditions for construction
 - 3.2.1 With respect to condition 2.2.11 pertaining to American Eel upstream passage, adaptive management monitoring shall be undertaken in consultation with the Ontario Ministry of Natural Resources and as directed by DFO when American Eel are returned to the Ottawa River above the Otto Holden Dam.

- 4. Conditions that relate to the offsetting of the serious harm to fish likely to result from the authorized work, undertaking or activity
- 4.1 Letter of credit: Not Applicable (N/A)
- 4.2 Scale and description of offsetting measures: In accordance to the Proponent's offsetting plan found in the Application for Authorization (February 27, 2015) the following measures shall be undertaken:
 - 4.2.1 Construction of 3200 m² of boulder/cobble habitat and installation of a minimum of 75 large boulders (minimum diameter 1.5 m in all directions) on 5 m spacing downstream of instream piers to provide enhanced spawning habitat and cover for Lake Sturgeon and other fish species.
 - 4.2.2 Operating the Timiskaming Ontario Water Control Dam to enhance spawning opportunities for Lake Sturgeon, Lake Whitefish and other fish species.
 - a) An Operating Plan for the Timiskaming Ontario Dam shall be developed by the proponent in discussion with DFO to guide the opening and closing of select bays to provide water volumes and velocities that are to the benefit of spawning fish to the extent that natural inflows, water management requirements and safe operations of the dam allow. The plan shall provide a range of operating options from October 1 to July 15 of any given year to provide as much optimal spawning and egg development habitat as possible for fish species as outlined below. This plan shall be provided to DFO for review and approval by January 31, 2016. The Operating Plan shall be modified as agreed to in writing by DFO for the life of the structure if monitoring finds that certain open/closed bay patterns or flow velocities are more attractive and suitable for successful spawning and egg development, or at the request of DFO and in discussion with the proponent.
 - b) Lake Whitefish: Operate the dam to create even flows across the river channel and quiet areas next to moderate current to optimize suitable habitat for Lake Whitefish to spawn near the dam. This shall be achieved by alternating open and closed bays across the structure, and maintaining water velocities of 0.5-1 m/s in the open bays immediately adjacent to closed bays. This operation shall continue to the extent that natural inflows and operational requirements allow from October 1 until water levels upstream and downstream of the dam are approximately even in mid-February each year and all stop logs are removed.

- c) Lake Sturgeon: Operate the dam to create even flows across the river channel and quiet areas next to fast current to optimize suitable habitat for Lake Sturgeon to spawn near the dam. This shall be achieved by alternating open and closed bays across the structure, and maintaining water velocities of 1 to 2 m/s in the open bays immediately adjacent to closed bays. This operation shall continue to the extent that natural inflows and operational requirements allow when stop logs are replaced in the dam in early-April until July 15 each year.
- d) During normal operation, the Timiskaming Ontario Water Control Dam shall be operated as detailed in the operating plan from October 1 to July 15 of any given year, natural inflows permitting and for the life of the structure. During normal operations, flows in the Ottawa River shall continue to be split between the Timiskaming Ontario and Quebec Dams.
- e) Normal Operations: The Timiskaming Ontario Water Control Dam is considered to be under normal operations when the Ontario and Quebec dams of the Timiskaming Dam Complex are both fully operational and are not undergoing required maintenance or construction between October 1 and July 15 that might require alteration to normal operations.
- 4.3 Offsetting criteria to assess the implementation and effectiveness of the offsetting measures: All fish habitat offsetting measures shall be completed and functioning according to the criteria below:
 - 4.3.1 Boulder/cobble placements include large, medium and small boulders with D50 of 900 mm, 600 mm and 400 mm respectively. Boulder/cobble are placed downstream with large boulders for the first 16.4 m, medium boulders from approximately 16.4 to 21.4 m, and small boulders from approximately 21.4 to 26.6 m downstream of the concrete sill as outlined in Figure 8-1 in the Application for Authorization (February 27, 2015).
 - 4.3.2 Large boulders (minimum diameter 1.5 m in all directions) to provide cover are placed in lines downstream from the instream piers on 5 m centres starting approximately 4 to 5 m downstream of the pier and placed such that a minimum of 1.5 m of each boulder remains above the streambed. A total of 75 boulders are to be placed (5 rows of 15 boulders) as outlined in Figure 8-1 in the Application for Authorization (February 27, 2015). Large boulders can be natural, blasted or cut bedrock, or precast concrete structures.
 - 4.3.3 Offsetting measures shall be completed by October 9, 2016. If the proponent cannot complete offsetting measures by this date, Fisheries and Oceans Canada (DFO) must be notified. DFO may, where it considers appropriate, provide in writing notice that the period to carry on the work, undertaking or activity has been extended.

- 4.4 Contingency measures related to offsetting:
 - 4.4.1 If the results of monitoring as required in condition 5 indicate that the offsetting measures are not completed by the date specified and/or are not functioning according to the above criteria in 4.3, the Proponent shall give written notice to DFO and shall implement the contingency measures and associated monitoring measures, as contained within the approved offsetting plan in Section 8.6 of the Application for Authorization (February 27, 2015), to ensure the implementation of the offsetting measures is completed and/or functioning as required by this authorization.
 - 4.4.2 Additional Offsetting requirements: Should works occur within the spawning timing window (condition 2.2.1(d)) or should Emergency Flooding Contingency measures (condition 2.3.2) be employed and should monitoring indicate that impacts are greater than the planned offsetting measures, additional offsetting shall be constructed as directed by DFO and in discussion with the proponent.
 - 4.4.3 Monitoring additional offsetting requirements shall be conducted as directed by DFO and in discussion with the proponent.
- 4.5 The Proponent shall not carry on any work, undertaking or activity that will adversely disturb or impact the offsetting measures.
- 4.6 Other conditions related to offsetting: Not applicable (N/A)
- 5. Conditions that relate to monitoring and reporting of implementation of offsetting measures (described above in section 4):
- 5.1 Schedule(s) and criteria: The Proponent shall conduct monitoring and reporting of the implementation of offsetting measures according to the Application for Authorization (February 27, 2015) and the approved timeline and criteria below:
 - 5.1.1 List of timeline(s) and monitoring and reporting criteria:
 - a) Annual monitoring for Walleye, suckers, Lake Sturgeon and Lake Whitefish spawning: Monitoring as outlined in the Application for Authorization (February 27, 2015) shall occur in years 1 and 2 after construction is complete. Spawning activity on the enhanced habitats below the Timiskaming Ontario Water Control Dam is to be documented using one or more techniques including capture of eggs, and/or fry, and/or visual observation with underwater video and/or DIDSON sonar documentation of active spawning behaviour. If after two years of monitoring spawning is not clearly documented for any of these fish species then annual monitoring of spawning activity shall continue for those undocumented fish species until spawning is successfully

documented to the satisfaction of DFO and for up to three additional years. During the planned construction and replacement of the Timiskaming Quebec dam, monitoring of spawning activity shall be suspended for the Timiskaming Ontario dam until normal operations resume.

- b) Assessment of Juvenile Lake Sturgeon and Lake Whitefish recruitment downstream of the Timiskaming Dam complex: To assess the effectiveness of dam operations and habitat enhancements an assessment of Juvenile Lake Sturgeon recruitment shall be undertaken in year 3 post construction of the Timiskaming Ontario dam in the Ottawa River between the south tip of Sault Island and a point 9 km downstream as measured following the Quebec/Ontario border. The assessment shall follow the methods outlined in the 2014 paper by McDougall et al¹ or similar methods as agreed to by DFO and approved by the provinces of Ontario and Quebec. Lake Whitefish recruitment shall be assessed if more than ten Lake Whitefish are captured incidentally during this study. The assessment shall occur within Quebec and Ontario waters on the Ottawa River starting in September or October when water temperatures are 10-15°C and include shallow water (<10 m depth) and deep water (>10 m depth) sample sites in proportion to their presence in the river. A minimum of 4 sample sites per river kilometer (minimum 36 total sample sites) shall be selected. All Lake Sturgeon and Lake Whitefish captured during this study shall be aged using appropriate non-lethal techniques, and any incidental mortalities as a result of the study shall be aged using otoliths as well. A habitat survey of the 9 km study section shall be conducted and shall create a map(s) showing water depths and bottom substrate types (e.g. muck, wood chips/bark, sand/gravel, cobble/boulder, bedrock, logs).
 - 1 McDougall, C.A.; Barth, C. C.; Aiken, J. K.; Henderson, L. M.; Blanchard, M. A.; Ambrose, K. M.; Hrenchuk, C. L.; Gillespie, M.A.; Nelson P. A., 2014: How to sample juvenile Lake Sturgeon, (Acipenser fulvescens Rafinesque, 1817), in Boreal Shield rivers using gill nets, with an emphasis on assessing recruitment patterns. J. Appl. Ichthyol. 30 (6), 1402-1415.
- c) Annual monitoring of the operation of the Timiskaming Water Control Dam and flows to enhance spawning opportunities: A written report detailing daily open and closed bays, and daily estimates of mean flow velocity (m/s) and mean discharge (m³/s) from each bay and mean daily discharge (m³/s) for the Ontario dam and Quebec dam from October 1 to July 15 shall be provided to DFO annually from the start of construction until monitoring in 5.1.1a) and b) are complete.

- 5.2 List of reports to be provided to DFO: The Proponent shall report to DFO on whether the offsetting measures were conducted according to the conditions of this authorization by providing the following:
 - 5.2.1 An annual monitoring report on fish spawning activities shall be submitted to DFO no later than January 31 each year following the year monitored. Annual reports shall be provided as outlined in condition 5.1.1 a) for 2 to 5 years depending on findings.
 - a) The annual fish spawning monitoring report shall summarize the findings of spawning activities monitoring and provide analysis of the effectiveness of the measures relevant to offsetting serious harm (e.g. Dam operations, substrate modification, and boulder cover) given seasonal weather events (e.g. temperature and flood events) to fish spawning success that occurred during the calendar year being monitored regardless of if findings were submitted to DFO as separate reports or updates earlier in that year. The report shall be provided electronically and paper copies provided upon request by DFO. If video or DIDSON sonar are used then video clips shall be provided on a DVD or mass storage device in a format that is requested by DFO at the time the report is submitted. Any data tables provided in the report shall also be provided electronically in an Excel Spreadsheet. A map(s) shall be provided that document all sampling locations and observations of spawning fish and eggs and fry collected.
 - b) If the Proponent will be unable to report by the dates in condition 5.2.1, DFO must be notified, and DFO may, where it considers appropriate, provide in writing notice that the period to provide the monitoring reports has been extended.
 - c) Annual reports shall include inspection reports and dated and labeled photographs where appropriate and to demonstrate effective implementation and functioning of mitigation measures and standards described above to limit the serious harm to what is covered by this authorization.
 - 5.2.2 A monitoring report on juvenile Lake Sturgeon and Lake Whitefish recruitment shall be submitted to DFO no later than January 31 of the year following the year monitoring occurs. The report shall be provided as outlined in condition 5.1.1 b).
 - a) The Lake Sturgeon recruitment offsetting monitoring report shall summarize the findings of the study including for all fish captured their lengths and weights and the locations, bottom substrates, and depths where fish were captured, and if they were released alive or if they died. Ageing data and the recruitment pattern of Lake Sturgeon and Lake Whitefish shall be assessed using applicable methods in the 2014 paper by McDougall et al¹ and other methods as appropriate, and in light of all construction and monitoring

activities relevant to offsetting serious harm to fish provide an analysis of the effectiveness of the measures at offsetting serious harm to Lake Sturgeon and Lake Whitefish that occurred from the start of construction up to the calendar year being monitored. The report shall be provided electronically and paper copies provided upon request by DFO. Any data tables provided in the report shall also be provided electronically in an Excel Spreadsheet.

- b) If the Proponent will be unable to report by the dates in condition 5.2.2, DFO must be notified, and DFO may, where it considers appropriate, provide in writing notice that the period to provide the monitoring reports has been extended.
- 5.2.3 An annual monitoring report on operation of the Timiskaming water control dam shall be submitted to DFO no later than August 31 each year following the operation during the spawning season period from October 1 to July 15. Annual reports shall be provided as outlined in condition 5.1.1 c).
 - a) The annual dam operation monitoring report shall summarize the findings of all dam operation monitoring activities in the period from October 1 to July 15 and once the normal operations resume provide analysis of the ability of dam operators to follow the operating plan given flows that occurred during the period being monitored, regardless of if findings were submitted to DFO as separate reports or updates earlier in that period. The report shall be provided electronically and paper copies provided upon request by DFO. Any data tables provided in the report shall also be provided electronically in an Excel Spreadsheet.
 - b) The annual monitoring report shall highlight any deviations from the operating plan that had potential impacts to spawning success and explain how problems were resolved and recommend changes to the operating plan if necessary.
 - c) If the Proponent will be unable to report by the dates in condition 5.2.3, DFO must be notified, and DFO may, where it considers appropriate, provide in writing notice that the period to provide the monitoring reports has been extended.
 - d) Annual reports shall include inspection reports and dated and labeled photographs where appropriate

- 5.2.4 A Contingency Monitoring Report of additional offsetting shall be provided at a date and time to be determined as directed by DFO and in discussion with the proponent.
 - a) The additional offsetting monitoring report shall describe any adaptive management or contingency measures that were implemented to offset serious harm to fish, and their effectiveness as per conditions 2.2.1(d), 2.3.2, and 4.4.
 - b) Reports shall describe any additional offsetting that was required and any measures implemented to avoid adverse effects on fish and fish habitat resulting from implementing the offsetting plan.
 - c) If the Proponent will be unable to report by the dates in condition 5.2.4, DFO must be notified, and DFO may, where it considers appropriate, provide in writing notice that the period to provide the monitoring reports has been extended.
 - d) Annual reports shall include inspection reports and dated and labeled photographs where appropriate and to demonstrate effective implementation and functioning of mitigation measures and standards described above to limit the serious harm to what is covered by this authorization.
- 5.2.5 A Final Summary Report shall be provided to DFO within 90 days after monitoring reports in 3.1.1, 3.1.2, 5.2.1, 5.2.2 5.2.3 and 5.2.4 of this authorization are complete.
 - a) The report shall bind together all reports produced from 3.1.1, 3.1.2, 5.2.1, 5.2.2 5.2.3 and 5.2.4 of this authorization under one cover, and include a concise summary of all reports and a table of contents.
 - b) The report shall be provided electronically in a format that is requested by DFO at the time the report is submitted and paper copies provided upon request by DFO.
- 5.3 Other monitoring and reporting conditions for offsetting: Not Applicable (N/A)

Authorization Limitations and Application Conditions

The Proponent is solely responsible for plans and specifications relating to this authorization and for all design, safety and workmanship aspects of all the works associated with this authorization.

The holder of this authorization is hereby authorized under the authority of Paragraph 35(2)(b) of the Fisheries Act. R.S.C., 1985, c.F. 14 to carry on the work(s), undertaking(s) and/or activity(ies) that are likely to result in serious harm to fish as described herein. This authorization does not purport to release the applicant from any obligation to obtain permission from or to comply with the requirements of any other regulatory agencies.

This authorization does <u>not</u> permit the deposit of a deleterious substance in water frequented by fish. Subsection 36(3) of the *Fisheries Act* prohibits the deposit of any deleterious substances into waters frequented by fish unless authorized by regulations made by Governor in Council.

This authorization does not permit the killing, harming, harassment, capture or taking of individuals of any aquatic species listed under the *Species at Risk Act* (SARA) (s. 32 of the SARA), or the damage or destruction of residence of individuals of such species (s. 33 of the SARA) or the destruction of the critical habitat of any such species (s. 58 of the SARA).]

At the date of issuance of this authorization DFO has determined that impacts from the work, undertaking, or activity proposed, to aquatic species listed under the *Species at Risk Act* are not likely.

The failure to comply with any condition of this authorization constitutes an offence under Paragraph 40(3)(a) of the *Fisheries Act* and may result in charges being laid under the *Fisheries Act*.

This authorization must be held on site and work crews must be made familiar with the conditions attached.

This authorization cannot be transferred or assigned to another party. If the work(s), undertaking(s) or activity(ies) authorized to be conducted pursuant to this authorization are expected to be sold or transferred, or other circumstances arise that are expected to result in a new Proponent taking over the work(s), undertaking(s) or activity(ies), the Proponent named in this authorization shall advise DFO in advance.

JUN 0 5 2015

Date of Issuance:

Approved by:

David Burden

Regional Director General Central and Arctic Region Fisheries and Oceans Canada