Mitigation measures

Mitigation Measures:

Air quality

Operate heavy machinery and equipment that is well maintained and in good working order.

Inspect machinery regularly to ensure proper operation and maintain in accordance with recommended practices.

Where possible, turn off gasoline-powered vehicles and equipment when not in use.

Prohibit, at all times, the burning of waste in or near the work area.

Cover piles of fine materials or other materials with a cloth to avoid dispersion by the wind.

Use waterproof dump trucks covered with a retractable tarpaulin during transport, to limit the dispersion of particles, debris or sediment into the air and to prevent them from being exposed to rain or snow.

If materials are released during loading into trucks and transport, they must be recovered and the area cleaned.

Store and dispose of materials outside the upper high tide level (PMSGM). If necessary, confine or stabilize these materials (e.g.: waterproof canvas, sediment barrier) so as to prevent the introduction of sediment into the aquatic environment either by leaching or by transport by the wind.

Noises and vibrations

Schedule particularly noisy work during normal working hours and in accordance with municipal requirements, i.e. from 7:00 a.m. to 7:00 p.m.

Avoid engine idling as much as possible.

Use and maintain motorized equipment in good working order (mufflers and other noise reduction systems).

Water quality

Implement effective measures to limit the release of sediment from the work site into the aquatic environment and ensure their maintenance (e.g., sediment barriers, berms, sediment traps, sedimentation basins, temporary stabilization of slopes, detour of water to vegetated areas). Measures must remain effective during temporary closure of the work site and during periods of high water or heavy rainfall.

For interventions planned below the level of the HHWLT, prioritize their implementation in exposed areas at low tide at low tide when possible. Stabilize the site before the tide returns.

Dispose of excavated material outside of the HHWLT. If required, contain or stabilize these materials (e.g., impermeable cover, sediment barrier) in order to prevent sediment from entering the aquatic environment.

For machinery that will come into contact with surface water, use a biodegradable HF lubricating oil.

Avoid any sudden movement of machinery during work in the water in order to avoid clouds of suspended solids.

No debris from the demolition will be thrown into the water. Any floating debris from the work must be immediately collected and removed from the water. In addition, debris must be stored on a waterproof surface more than 30 meters from the water, if possible, and so that it cannot be transported by the wind.

Provide a means to contain floating debris in the work area during the demolition of the dock. Plan a complete cleaning of the aquatic environment to recover all debris.

Avoid unnecessarily suspending sediments in the bed of the aquatic environment during work by making sudden movements or by levelling the bottom by pivoting the bucket/machinery.

Do not allow machinery to circulate in the water.

Limit to a strict minimum the circulation of machinery in the event that it must pass below the level of the HHWLT when the area is exposed.

Mitigation measures

Mitigation Measures:

Interrupt work when difficult weather conditions (e.g.: strong winds, storm, etc.) are anticipated or occur in order to avoid dispersion of sediment outside the work area.

Depositing rocks and/or materials as close to the bottom as possible rather than dropping them from the surface in order to limit additional encroachments and the suspension of sediments.

Machinery shall not be stored within 30 m of the shoreline or a watercourse, nor shall it be operated on the beds of water bodies.

Vehicle maintenance, refueling and storage of fuel or other hazardous materials shall be done, as much as possible, at a minimum distance of 30 meters from the shore. If this distance cannot be respected, containment measures must be applied.

Ensure that machinery is clean and free of leaks.

Cleaning, maintenance and refueling of machinery, as well as storage of hydrocarbons and other products, must be done more than 30 m from the watercourse in order to prevent the introduction of deleterious substances into the water.

It is prohibited to discharge into Canadian waters any material that may be harmful to fish or fish habitat, including, but not limited to, plastic, rope, fishing gear, garbage bags, gasoline, oil, dishcloths, glass, bottles, metal, extruded polystyrene foam (Styrofoam) and tires.

Use clean materials free of contaminants to create the riprap.

Soil and sediment quality

Select the location for storage of materials, where appropriate, based on the characteristics of the surrounding environment (accessibility, size of the site, distance from sensitive areas, etc.).

Dispose of contaminated soils from the site according to the analysis results obtained and in accordance with the Intervention Guide – Soil Protection and Rehabilitation of Contaminated Land and the Regulation concerning the traceability of excavated contaminated soils (RCTSCE) for the transport of contaminated soils

Store any potentially contaminated materials (treated wood, sediments, excavation spoil, etc.) on a waterproof membrane located above the HHWLT and cover them with a protective canvas to protect them from bad weather and to avoid contamination. erosion by wind or surface runoff of particles. Favor surfaces with limited permeability, such as clay and compacted earth, asphalt or concrete away from surface water.

Benthic and ichthyological fauna and aquatic flora

Do not carry out work in waters from April 16 to August 10 in order to protect the reproduction periods of Atlantic herring, rainbow smelt and American lobster;

Do not carry out work at night (between 9 p.m. and 5 a.m.) from April 16 to August 31 in order to protect anadromous and catadromous species.

Return the bed and banks of aquatic environments affected by the work to their original state (grain size of the substrate, bed profile, vegetation, etc.) following the demobilization of the site on all affected areas (temporary works, access, etc.).

Avian fauna

Carry out the work outside the nesting period (May 1 and August 15).

Do not approach a colony of seabirds and waterfowl during the breeding and nesting period, stay at least 300 m from the colonies and avoid disturbing migratory birds during the breeding period, in order to avoid disturbance and minimize bycatch.

If the presence of migratory birds at risk was confirmed during the work near the site, the contractor must mention it to SCH who must contact the Canadian Wildlife Service in order to assess the risks and put in place mitigation measures. appropriate mitigation to avoid impacts

Mitigation measures

Mitigation Measures:

Marine Mammals and Species at Risk

If an endangered cetacean (blue whale, fin whale and right whale) or leatherback turtle is observed within 200 m of the aquatic work area, stop the work and wait for the animal to move more than 200 m away.

Invasive species

Ensure that work equipment and machinery are clean and free of invasive species upon arrival at the site and maintain this condition thereafter.

For equipment that has been cleaned and stored on land immediately prior to completion of the work, the contractor is only required to provide, in writing, to the department representative:

A list of such equipment

- 1. The location of storage
- 2. The proposed launch date.
- 3. The department representative must be able to verify that the equipment was clean and stored on land before the work was performed.

For equipment already in the water, the contractor shall demonstrate that the floating equipment is free of invasive species prior to mobilization to the work site. The contractor shall provide a written inspection report, immediately prior to mobilization to the work site, certifying that the equipment is free of invasive species.

Before work begins:

- Inspect and clean all equipment (machinery, barges) that will be used during the work far from bodies of water
- Remove any traces of mud, aquatic plants or other dirt and dispose of the residue in the garbage or landfill.

During the work:

• Dispose of spoil affected by invasive species in a location far from bodies of water, preferably in a landfill.

At the end of the work:

- Before leaving the body of water, empty any water that may be in your equipment.
- Clean and dry all your equipment that has been in contact with water during the work.

The release into the water of aquatic invasive species found on equipment, machinery or artificial structures is prohibited.

Navigation and port facilities

Comply with all conditions of the approval issued under the Canada Navigable Waters Act.

Ensure the safety of users by marking the work area and installing adequate navigation signs.

Land use and area residents

Plan the work to be done during normal working hours and in accordance with municipal requirements.

Use adequate signage and cooperate with the municipality, the Ministry Representative and other competent authorities to minimize the impact of transportation on the lives of residents in the vicinity of the truck route and usual activities at the commercial port.

Maintain the traffic lanes used in good condition at all times and take the necessary measures so that they can be used and crossed without problem by other users.

Following the work, return the traffic lanes to a condition at least equal to their initial condition, as soon as possible.

Residual materials management

Provide facilities to receive residual and recyclable materials.

Dispose of non-recyclable and recyclable waste separately.

Ensure that no waste is left on the site.

Mitigation measures

Mitigation Measures:

Dispose of all waste and residual materials in accordance with applicable regulations and ensure that no waste materials are burned, buried or dumped on site.

Accidents and failures

The discharge of hydrocarbons, solvents, thinners or any hazardous substances into waterways, storm and sanitary sewers is prohibited.

No discharge of hazardous materials (oils and wastewater, etc.) into water will be tolerated. Their disposal will be done in accordance with the regulations in force so as not to harm the environment.

The contractor shall ensure that all hazardous materials destined for disposal are managed in accordance with current regulations (wood preservatives, empty containers, sawdust and wood residues, soiled soils, etc.) The contractor shall ensure that the machinery is in good working order (trucks and any other machinery used) and well maintained, to avoid oil, grease and fuel leaks.

The contractor shall ensure that the machinery is in good working order (trucks and other machinery used) and well maintained to avoid oil, grease and fuel leaks.

The contractor shall identify the risks of spills of toxic substances that will be used or stored during the work. The contractor shall provide for prevention and safety measures, as well as an emergency plan in case of a spill.

Petroleum hydrocarbons will be handled with care, stored with caution (at least 30 meters from the shore) and disposed of according to current regulations to prevent accidental spills into the water or onto the ground.

Vehicle maintenance, refueling and storage of fuel or other hazardous materials shall be done, as much as possible, at a minimum distance of 30 meters from the shore. If this distance cannot be respected, containment measures shall be applied.

The contractor shall have a readily accessible emergency spill kit on site throughout the work.

When refueling machinery, all measures are taken to minimize the risk of accidental spills (stabilization of equipment and machinery before proceeding, presence of a complete petroleum product spill kit, etc.).

In the event of an equipment breakdown/accidental spill, the appropriate emergency measures will be applied to control the situation and, if necessary, the breakdown will be repaired immediately. The area affected and contaminated by toxic substances will be contained, cleaned and the contaminated material will be removed and transported to an authorized site via a specialized firm.

The incident should be reported immediately to the Environment Canada hotline at 1-866-283-2333, the Coast Guard alert network at 1-800-363-4735 and the site supervisor.

Oil shall be recovered and contaminated soil disposed of in accordance with applicable regulations. The numbers shall be provided to the contractor in charge of the work and posted on the site.

Accidental spills shall be reported to the DFO-SCH representative and as soon as possible.

Should an accidental spill occur, contaminated soil or fill material shall:

- be placed in piles on waterproof cloths and covered with waterproof cloths
- be sampled according to the methods recommended in the CEHQ's Guide d'échantillonnage à des fins d'analyses environnementales, Cahier 5 : Échantillonnage des sols
- be subjected to chemical analyses in the laboratory, i.e. C10 to C50 petroleum hydrocarbons, metals, polycyclic aromatic hydrocarbons (PAH) and volatile organic compounds (VOC).
- be managed according to the regulations in force and sent to an authorized site.