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.

Use sealed trucks covered with a shrink-wrap when transporting demolition materials to limit the dispersion of fine particles in the air and to avoid exposure to rain or snow

Adopt a work method that minimizes dust and oxide emissions and/or motor vehicle exhausts. If necessary, control of dust emissions from the work can be done by water spraying, containment equipment and, if necessary, another type of dust suppressant that complies with the BNQ 2410-300 standard.

During excavation, monitor the site to limit dust plumes and take action if necessary

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

Limit the use of engine braking to a minimum when transporting equipment and materials and comply with applicable regulations.

As much as possible, avoid the slamming of the truck bed panel

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

Truckers will respect the Highway Safety Code and speed limits.

When breaking rock during dredging operations, install a curtain of air bubbles to reduce underwater noise disturbance.

Water quality

For work above the Higher High Water Large Tide (HHWLT), 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, and when applicable, carry out these interventions when the work area is flooded (e.g.: following the tides) and stabilize the site before the tide returns

During dredging operations, install a turbidity curtain in the harbor and ensure its effectiveness.

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

No debris from the demolition of infrastructures will be thrown into the water. Any floating debris from the work must be immediately recovered and removed from the water. In addition, debris must be stored more than 30 meters from the water so that it cannot be carried by the wind

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

Workers must be made aware of the need to 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

During dredging, in the event of a significant cloud of turbidity dispersing outside the work area, slow down dredging activities or space out the dredging periods in time

Do not allow machinery to circulate in the water

Mark out and 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

Stop activities when weather conditions deteriorate (strong winds, storms) to prevent the dispersion or suspension of materials outside the work area

Depositing rocks and/or materials as close to the bottom as possible rather than dropping them from the surface and minimizing the rate of deposition

Use dredging equipment that minimizes resuspension of sediment

Respect the limits of the dredging area

Interrupt dredging operations when severe weather conditions are anticipated or occurring to avoid dispersal of sediments outside the work area.

In the case of mechanical dredging, select a cycle time that reduces the upward velocity of the excavator loaded through the water column and use a clamshell bucket as tight as possible or a mechanical dredge with a tight bucket.

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 metres from the shore. If this distance cannot be respected, containment measures must be applied.

Keep the number of hydrocarbon tanks for refueling machinery to a minimum. Install fixed, above-ground tanks in accordance with current regulations, capable of collecting and passively containing 150% of the nominal capacity

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.

When weather conditions deteriorate (e.g., high winds, storms), stop work to prevent the dispersion of resuspended material from the work

Use of CCA treated wood

Require that CCA-treated wood has undergone a chromotropic acid test to verify that the product is properly fixed

Require treated wood to be delivered under covers.

Inspect treated wood at time of construction for surface deposits and dryness. Do not use non-compliant material.

Encourage the sizing and prefabrication of wood parts to desired specifications prior to pressure treatment.

Consider incorporating a water repellent when treating wood with a water-based agent.

Investigate with the supplier the possibility of a 24 or 48 hour industrial pond immersion period for CCA treated wood to remove excess and avoid the large release that occurs at the start of water placement.

Wood treatments should not be applied in situ. In the case of finishing adjustments that can only be made on site, wood treatments should not be applied in situ when the wood is in direct contact with the water. Prefer periods of low water, low tide and no precipitation

Recover and dispose of debris and sawdust according to the regulations in effect for this type of material. If these materials are temporarily stored on the site, they must be placed between tarps or in a watertight container.

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.).

Locate the storage area at least 30 m away from environmentally sensitive areas and watercourses and at least 3 m away from drainage ditches. Select a flat site or a slope of less than 10%.

Store treated wood on a waterproof membrane and cover it with a protective tarp to protect it from the weather when not in use. Prefer surfaces of limited permeability, such as clay and compacted earth, asphalt or concrete away from surface water. If treated wood is to be stored for more than two weeks, it should be placed in waterproof containers.

Proceed gradually and slowly to avoid the spread of sediment contamination, minimize substrate disturbance, and avoid bringing contaminated sediment to the surface, if necessary

If necessary, store contaminated demolition materials on a waterproof membrane and cover with a protective tarp to protect them from the weather Prefer surfaces of limited permeability, such as clay and compacted earth, asphalt or concrete away from surface water

Monitoring will be conducted during excavation to detect any contamination (e.g., presence of hydrocarbon odors) in excavated soil

Dredged and excavated material will be managed according to the results of the analysis and in accordance with the MELCC's Guide d'intervention - Protection des sols et réhabilitation des terrains contaminés.

If materials were spilled during loading and transportation, they must be recovered and the area cleaned up.

Avian fauna

Where possible, work should be conducted between August 16 and April 30, outside of the migratory bird nesting season

If work cannot be conducted during this period, provide a management plan that includes appropriate measures to reduce the risk of impact to migratory birds and bycatch

Do not approach any seabird or waterfowl colonies during the breeding and nesting season, stay at least 300 m away from colonies and avoid disturbing migratory birds during the nesting season

Avoid discharging any residual material into the water and avoid oil spills

Benthic and ichthyological fauna and aquatic flora

Implement the mitigation measures proposed in the water quality section to reduce impacts to fish and fish habitat.

Apply measures that will limit sediment resuspension to prevent disturbance to aquatic species

Do not perform any work in water at night

Marine Mammals

Undertake work generating underwater noise in a progressive manner to allow aquatic species that may be present in the work area to leave the area

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.

It is strongly recommended to always apply antifouling paint on structures that can be painted (wood, styrofoam, PVC)

Navigation and port facilities

Comply with all conditions of the approval issued under the Canada Navigable Waters Act, if applicable

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

Suspend work requiring the use of particularly noisy machinery on Sundays, holidays, and in the evening and at night between 7:00 a.m. and 7:00 p.m.

Limit the use of the engine brake when transporting equipment and materials

Truckers will respect the Highway Safety Code and speed limits

Throughout the work, clean up the traffic lanes when required

Following the work, restore the roadways to at least their original 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.

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.