

## Physical Environment (quality of soil, water, and air)

### **The dismantling of the wooden quay could impact the quality of the soil or sediments if the generated residues are not managed properly.**

- No materials, waste, or demolition or construction debris will be released into the watercourses (Sept-Iles Bay).
- All dismantled sections will be moved onto the land in a methodical and timely manner.
- The residues from the dismantling of creosote-treated wooden structures will be disposed of in accordance with the applicable regulations.
- All demolition residues, including asphalt and concrete, will be disposed of at authorized sites for such purposes.

### **The reworking of the riprap and excavation of marine sediments could impact the quality of surface water.**

- Riprap work and the reworking of the existing riprap, if required, will be carried out with caution to avoid resuspending fine particles.
- Stones will be carefully moved using a crane or excavator (operating with biodegradable vegetable oil). This method will help reduce the lifting of fine particles, while allowing mobile organisms to move to similar nearby habitats.
- For sections located opposite the quay posts, excavation work will be carried out at reduced speeds. Excavated materials will be slowly brought to the surface, allowing water to drain before being placed on impermeable membranes and then disposed of at an authorized site, if necessary.
- For work conducted above the highest high tide level (HHTL), effective measures will be implemented to limit sediment discharge from the site into the aquatic environment and ensure their management (e.g., sediment barriers, berms, sediment traps, sedimentation basins, temporary slope stabilization, water diversion to vegetated areas, etc.). These measures must remain effective during the temporary closure of the site and during flood events or heavy rain.
- Excavated sediments will be managed on land. If required, these materials will be confined or stabilized (e.g., impermeable tarps, sediment barriers, etc.) to prevent sediment discharge into the aquatic environment.
- Work will be suspended if adverse weather conditions are anticipated or occur (e.g., strong winds, storms, etc.) to prevent sediment dispersion outside the work area.
- Sediment excavation work must be supervised by a specialized firm for the management of contaminated sediments.
- Sediments will be managed in accordance with the Criteria for the Evaluation of Sediment Quality in Quebec and its application framework: prevention, dredging, and restoration (Environment Canada and MELCC 2008), as well as the Soil Protection and Contaminated Sites Rehabilitation – Technical Documents (2016) from MDDELCC, specifically following the procedure described in Volume 5, Soil Sampling, Guide for Environmental Sampling for Analytical Purposes.

### **Excavation works could impact the quality of soils and surface water.**

- No spoil, material, debris, or demolition or construction waste will be discharged into watercourses.

- The transport of fine particles beyond the work area, involving the exposure or disturbance of soils, will be avoided.
- Dispose of spoil materials above the highest high tide level (HHTL. If required, confine or stabilize these materials (e.g., impermeable tarps, sediment barriers, etc.) to prevent sediment runoff into aquatic environments.
- The period during which an area is exposed will be minimized. Affected areas should be stabilized as quickly as possible.
- All necessary measures will be taken to prevent the dispersion of fine particles or construction materials during the work, including the implementation of stormwater runoff and leachate control measures (e.g., settling ponds, etc.).
- If any organoleptic contamination indicators (odors, discoloration, etc.) are observed during excavation works (regardless of the excavation method), store the soils in a manner that prevents material loss (e.g., between two impermeable membranes, in sealed containers or waterproof bins).
- Excavation and handling of soils must be conducted to prevent the mixing of contaminated soils with clean soils or other materials that could alter the contamination level and allow for disposal in a less stringent manner.
- Excavation works involving contaminated soils must be supervised by a specialized firm in soil management, if applicable.
- Excavated soils and materials will be managed according to the Soil Protection and Contaminated Sites Rehabilitation – Technical Documents from MDDELCC (2016), specifically following the procedure described in Volume 5, Soil Sampling, Guide for Environmental Sampling for Analytical Purposes.
- It is recommended to take composite samples, in sufficient number based on the volume of soils per pile. The pile should be considered by sections of 30 m<sup>3</sup> (or more).
- Soils that meet established criteria and are free of debris or other undesirable materials may be reused for backfilling.
- Contaminated soils may be temporarily stored on an impermeable surface and covered with tarps, or in sealed, waterproof containers, at least 60 meters away from the shore or any other sensitive elements, for sampling purposes.
- If applicable, contaminated soils will be disposed of as quickly as possible at a site authorized for such purposes in compliance with the Regulation respecting the traceability of excavated contaminated soils (2021).
- Concrete and asphalt residues must be disposed of at a site authorized for this purpose in accordance with the Lignes directrices relatives à la gestion de béton, de brique et d'asphalte issus des travaux de construction et de démolition et des résidus du secteur de la pierre de taille (2009).
- The residue from excavation works and other debris (such as buried materials, wood, etc.) will be sorted and disposed of in accordance with current regulations.

**Concrete works could impact surface water quality.**

- The contractor must ensure the waterproofing of the formwork before starting the pour by checking the welds.
- Constant monitoring will be conducted during concrete works to ensure the implementation of environmental protection measures and to allow for a rapid response in case of an environmental incident.

- Wastewater generated by concrete works (equipment washing, concrete mixing) must be controlled to prevent discharge into water bodies or soil contamination.
- Concrete mixer washout must take place at a nearby designated site, at least 60 meters from the shoreline, and the site must be dismantled after use.
- Washing of concrete trucks and pumps will be prohibited on-site, and any concrete pump start-up products must be collected in sealed containers and transported off-site.
- Concrete and asphalt residues must be disposed of at an authorized site in accordance with the Lignes directrices relatives à la gestion de béton, de brique et d'asphalte issus des travaux de construction et de démolition et des résidus du secteur de la pierre de taille (2009).

**The use of machinery and equipment operating with hydrocarbons could cause local contamination of soils and surface water in the event of an accidental spill.**

- Vehicles and construction machinery will be maintained in good working condition, and daily inspections will be conducted to ensure there are no leaks.
- Any defective machinery, equipment, or material will be immediately removed from traffic routes and work areas.
- Vehicle movement will be restricted to designated traffic routes.
- Hydraulic equipment used near water bodies will be fitted with non-toxic or biodegradable lubricants (bio-lubricants), where technology permits, especially for mechanical shovels used for riprap works.
- All heavy vehicles and machinery will be equipped with absorbents designed for hydrocarbon spill recovery.
- An emergency spill response kit will always be available on-site and will include all necessary materials to contain any potential hydrocarbon leak or accidental spill.
- Maintenance of vehicles and machinery will be conducted outside the worksite or Port boundaries.
- No washing of equipment or machinery is allowed on the worksite. Such maintenance or cleaning activities pose a risk of contaminant discharge into water catchment systems (sanitary or stormwater) or surface waters.
- Only refueling of less mobile machinery (e.g., excavators, cranes) will be permitted on-site and must be done under constant supervision.
- The refueling area for these equipments will be located at least 60 meters from the shoreline of any water body (Sept-Iles Bay), drainage ditches, or sumps.
- Any petroleum tank with a capacity greater than 250 L must be registered with Environment Canada and installed in accordance with current regulations. It must be double-walled and placed in a containment basin, portable or not (e.g., an impermeable basin covered with hydrophobic membranes), capable of containing any spill and preventing contamination of surrounding soils.
- Any petroleum tank must be protected from accidental impact by bumper barriers. Fire prevention equipment (fire extinguishers), a spill absorbent kit, and signs with directives (e.g., no smoking) will be installed at the site.
- The number of hydrocarbon tanks and machinery refueling stations will be minimized to reduce the number of high-risk areas.
- A spill recovery kit for accidental hydrocarbon spills must always be present near refueling areas and at equipment or work sites at risk.

- An emergency response plan must be in place, approved by APSI, and submitted to Transport Canada at least five (5) business days before the start of the works. This plan must describe a procedure for responding to accidental spills, which will be communicated to workers at the start of the project. If a spill occurs, the intervention plan will be applied promptly and rigorously.
- Any hydrocarbon spill or any other hazardous substance must be reported immediately to the following authorities:
- Port of Sept-Iles: 418-961-1111.
- Environment and Climate Change Canada (ECCC), National Environmental Emergencies Centre: 1-866-283-2333.
- MELCCFP, Environmental Emergency: 1-866-694-5454.
- Canadian Coast Guard, Alert and Warning Network (RAA): 1-800-363-4735.
- All necessary measures must be taken to 1) stop the leak, 2) contain the spill, and 3) recover the spilled product.

**Construction waste could impact soil and water quality if not properly managed.**

- Cleanliness and orderliness of the site will be always maintained.
- Dry materials, debris, or waste will be covered to prevent dust from being blown away or debris from being carried by the wind.
- Sufficient containers will be provided to sort construction waste materials to promote recovery, recycling, or reuse.
- Avoid "orphan" trash bins by ensuring that garbage bins are always accompanied by a recycling bin.
- The main recyclable materials are aluminum, paper (including cardboard), plastic, and glass. Metals should be placed in separate containers to promote their recovery.
- Solid and domestic waste will be sent to the Sept-Iles sanitary landfill site.
- Used tires, scrap metal, and recyclable solid waste will be recycled by being taken to appropriate nearby disposal sites.
- At the end of the project, work areas must be cleared of equipment, machinery parts, materials, temporary installations, waste, scrap, rubble, and excavation debris from the works.

**Hazardous materials generated by construction activities could impact soil and water quality if not properly managed.**

- A hazardous materials management plan (storage, transportation, disposal, recovery, control and decontamination measures) will be developed.
- Current regulations regarding the transportation, storage, handling, and disposal of hazardous materials and hazardous waste must be followed.
- No hazardous materials will be mixed with other construction waste.
- Hazardous materials, including residual hazardous materials (RHM), will be stored in a designated area away from vehicle traffic and at least 60 meters from any water body, drainage ditches, sumps, or other sensitive elements.
- Hazardous materials must be stored in a manner that prevents any situation that could cause dangerous physical or chemical reactions due to their incompatibility. Therefore, incompatible materials must be stored in separate areas or in different containers.
- Residual hazardous materials (RHM) (empty containers, contaminated rags, contaminated soils, used oils, etc.) will be managed separately. All RHM will be placed in

sealed containers, clearly labeled, and temporarily stored in weatherproof containers that can hold a spill, awaiting disposal by a specialized company.

- Any shelter where residual hazardous materials are stored must have at least three sides, a roof, and a floor. The floor must be impermeable, resistant to the materials stored, and capable of supporting the material. It must be equipped with a curb forming a containment basin that can hold the larger of the following volumes: 25% of the total capacity of all stored containers or 125% of the capacity of the largest container.
- Residual hazardous materials or contaminated waste will be recovered by a licensed and specialized company for proper disposal.

**Traffic from both road and off-road vehicles may generate dust. Additionally, exhaust gases from road vehicles and machinery contribute to greenhouse gas (GHG) emissions.**

- When transporting granular materials, truck beds will be covered with a tarp to minimize dust dispersion.
- A working method will be adopted that minimizes fine particle emissions. The use of water to suppress dust will only be done with caution and with plans to capture and properly manage runoff water.
- If necessary, a dust suppressant in accordance with the NQ 2410-300 standard "Products used as dust suppressants for unpaved roads and similar surfaces" will be used if the work generates dust that could be carried by the wind.
- To limit exhaust gas emissions, vehicles and heavy machinery will be properly maintained.
- The use of newer vehicles or those equipped with technologies that minimize atmospheric emissions will be encouraged.
- Idling of vehicles will be prohibited unless exceptional circumstances require approval.
- Electrical terminals for engine heaters will be used when possible.

Biological Environment (Vegetation, Fauna, and Habitat)

**Excavation works may cause temporary deterioration of aquatic habitat.**

- No intervention will be carried out in the water between May 11 and June 24 to protect the spawning and egg incubation period of the capelin.
- No debris will be discharged into the aquatic environment. If debris accidentally falls into the water, it must be removed as quickly as possible.
- Equipment and construction materials used in watercourses will be handled carefully to prevent the release of fine particles or contaminants into the aquatic environment.
- Stones will be carefully moved using a crane or mechanical shovel. This method will reduce the lifting of fine particles and allow mobile organisms to move to nearby similar habitats.
- Excavation operations will be conducted at reduced speed, and excavated materials will be slowly raised to the surface, allowing water to drain before being deposited on impermeable membranes and then disposed of at an authorized site.
- Machinery will be inspected to ensure it is clean and free of leaks or invasive species upon arrival on site and will be maintained in this condition throughout the project.
- Machinery used for works near shorelines will be equipped with biodegradable, non-toxic oil.
- It will be strictly prohibited to wash equipment or machinery on-site.

- In winter, abrasives will be used instead of de-icing agents to ensure the safety of access roads.

**Pile driving works could cause disturbance or injury to marine mammals if specific mitigation measures are not implemented for these activities.**

- No noisy underwater operations (vibro-driving, piling) will be carried out during the spring feeding period of cetaceans in Sept-Iles Bay, which lasts from May 1 to July 15, to avoid disturbing or injuring marine mammals.
- Noisy operations (driving or pounding) will be carried out between 6:00 AM and 10:00 PM to ensure a period of nighttime peace without additional disturbance in the aquatic environment.
- No piling will be performed on days with high waves or during dark hours.
- Piles will be driven using vibro-driving to reduce noise intensity. The pounding method will be used to ensure bearing capacity for the last few meters of driving.
- If pile driving must be carried out by pounding, the process will begin progressively ("soft start").
- During the entire duration of the pile driving works, constant monitoring will be performed by a qualified observer (with recognized training for this purpose) to ensure that no cetaceans are present within a defined radius from the work zone, hereinafter referred to as the exclusion zone.
- An effective communication protocol between the observer and the site supervisor will be established to act promptly if a cetacean in distress is detected within the protection zone.
- Cetacean monitoring will begin at least 30 minutes before the start of operations generating underwater noise, and work will only begin if no cetaceans in distress are present within the protection zone.
- The cetacean exclusion zone during vibro-driving operations will require activities to stop if cetaceans are observed within 600 meters of the work area. If cetaceans are present within this distance, vibro-driving activities will only resume after a 30-minute period following the animal's departure from the area.
- The cetacean exclusion zone during pile driving operations will require activities to stop if cetaceans are observed within 1000 meters of the work area. Pile driving activities may only resume after a continuous absence of cetaceans in the protection zone for a period of 30 minutes.
- Under no circumstances will marine mammals be disturbed or harassed to force them out of the protection zone.
- A report on marine mammal monitoring, including the date, time, duration, distance, actions taken during each observation, as well as the species and behavior observed, must be submitted to the PSI within 90 days after the completion of the works.

**The works represent an additional source of noise that could disturb birds. Additionally, the lighting installed to ensure safety may contribute to altering the current light ambiance.**

- Portable lighting devices will be positioned so that they are not visible from surrounding urban areas.
- Lighting will be limited to the minimum required to ensure the safety of activities.

- The contractor must take the necessary measures to comply with laws and regulations concerning the presence of migratory birds, including but not limited to the Species at Risk Act, the Migratory Birds Convention Act, 1994, and the Migratory Birds Regulations. Some measures to minimize impacts on birds include, among others:
- Minimizing encroachment into the natural environment.
- Special attention must be paid to avoid disturbing or destroying any migratory bird nests.
- Avoid approaching or disturbing any bird or bird nest if observed during the works.
- Before starting work, check for the presence of nesting waterfowl on the structures where the works will take place. If any nests are found, immediately notify the ministry representative before proceeding with the works.
- If a nest containing eggs or young migratory birds is discovered near or within the work area, stop all noisy activities near the nesting site, protect the nest(s) with a protection zone, and immediately contact the ministry representative, who will reach out to the Canadian Wildlife Service (CWS) of ECCC to ensure that the appropriate measures are taken.
- On both land and water, maintain a sufficient distance to avoid disturbing nesting birds. Signs that birds have been disturbed include an upright posture when incubating the nest, increased vocalization, and adult birds leaving the nest.

#### Human Environment (Nuisances, Uses, and Heritage)

**The presence of the construction site, the use of machinery and equipment, and the increase in transportation represent sources of noise that can negatively affect the quality of life.**

- Proper planning of the overall schedule and daily working hours will be conducted to minimize disruption of activities and conflicts of use.
- To reduce disturbances for nearby residents, noisy works will be carried out during weekdays between 7:00 AM and 6:00 PM.
- Maximum standardized noise levels will be respected near residential areas. The contractor will ensure compliance with standardized noise levels.
- Equipment, machinery, and practices that minimize noise will be adopted.
- Any defective machinery, equipment, or materials will be immediately removed from traffic routes and work areas.

**Traffic from vehicles and off-road equipment can generate dust.**

- When transporting granular materials, truck beds must be covered with tarps to limit the dispersion of dust that could inconvenience other road users.
- Paved areas will be cleaned to limit dust accumulation if necessary.

**The construction site will temporarily affect port activities and transportation, considering the traffic load and disruptions to circulation.**

- A traffic plan will be developed, and appropriate signage will be implemented to ensure the safety of users, workers, residents, tourists, and other users, while minimizing the risk of accidents.
- Vehicle traffic will be limited to designated routes.
- Traffic near residential areas will be restricted to reduced speeds to minimize noise, vibrations, and dust emissions, as well as for safety reasons.

- School zones will be avoided.
- Excavation works could uncover historical or archaeological artifacts. If artifacts are discovered, construction activities will be immediately suspended. No object or artifact will be removed or displaced.
- The site supervisor will promptly notify the Port of Sept-Îles (418-961-1111) of the discovery and take necessary steps to protect the site.
- Work in the area will remain suspended until the contractor receives authorization to resume operations.

**The works will temporarily affect tourism and recreational activities since access to the area will be limited during the construction period.**

- During the works, public access to the Mgr-Blanche area will be prohibited to ensure safety.
- A contingency plan will be in place to ensure the continuation of tugboat operations, access to the fishing harbor, and the reception of cruise ships during the construction period.
- Recreational activities, such as sports, fishing, and walking, may take place in nearby areas.