



Fisheries and Oceans
Canada

Pêches et Océans
Canada

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Direction de la gestion des écosystèmes
Pièce 200 – 401 rue Burrard
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June 17, 2024

Your file

Votre référence

Our file

Notre référence

24-HPAC-00488

Sunshine Coast Regional District
ATTENTION: Kelly Koper
1975 Field Road
Sechelt, BC V7Z 0A8

Via email: Kelly.Koper@scrd.ca

Dear Kelly Koper:

Subject: Pile Replacement, West Bay Howe Sound, Gambier Island – Implementation of Measures to Avoid and Mitigate the Potential for Prohibited Effects to Fish and Fish Habitat

The Fish and Fish Habitat Protection Program (the Program) of Fisheries and Oceans Canada (DFO) received your proposal on **May 10, 2024**. We understand that you propose to repair and replace various components of the Westbay Port Facility located in the Howe Sound on Gambier Island, BC. Proposed works include:

- Cutting the existing piles at the mudline for removal;
- Installation of 3 permanent timber pilings and minimum 3 temporary pilings; and
- Replacement of the existing floating dock.

Our review considered the following information, herein referred to as your Project Plan:

- *Request for Review* form prepared by Alasdair Lindop of Hatfield Consultants, received by email on May 10, 2024;
- *Habitat Assessment*, prepared by Hatfield Consultants dated May, 2024; and
- *Environmental Protection Plan*, prepared by Hatfield Consultants dated May, 2024.

Your proposal has been reviewed to determine whether it is likely to result in:

- the death of fish by means other than fishing and the harmful alteration, disruption or destruction of fish habitat which are prohibited under subsections 34.4(1) and 35(1) of the *Fisheries Act*; and

- effects to listed aquatic species at risk, any part of their critical habitat or the residences of their individuals in a manner which is prohibited under sections 32, 33 and subsection 58(1) of the *Species at Risk Act*.

The aforementioned outcomes are prohibited unless authorized under their respective legislation and regulations. As of the date of this letter, aquatic species listed under the *Species at Risk Act* may be found in the vicinity of your proposal but are unlikely to be affected by the project activities. These species include:

- Killer Whale, Northeast Pacific northern resident population (*Orcinus orca*, Threatened);
- Killer Whale, Northeast Pacific southern resident population (*Orcinus orca*, Endangered);
- Leatherback Sea Turtle (*Dermochelys coriacea*, Endangered);
- Basking Sharking (*Cetorhinus maximus*, Endangered); and
- Northern Abalone (*Haliotis kamtschatkana*, Endangered).

To avoid and mitigate the potential for prohibited effects to fish and fish habitat (as listed above), we recommend implementing the measures listed below, **which include measures set out in your project proposal**:

1. Environmental monitoring should be conducted during all works, undertakings and activities that may result in potential adverse effects to fish and fish habitat, including those conducted below the marine high water mark. The environmental monitor should be an appropriately qualified professional and ensure mitigation measures are implemented and maintained for the protection of fish and fish habitat.
2. Complete in-water work within the least risk timing windows for Area 28 – Howe Sound Sound (Winter Window: August 16 – January 31), and, to the amount practicable, during the appropriate Reduced Risk Instream Work Window for Pacific salmon of July 15 – September 15, 2024.
3. Complete the works as quickly as possible once they are started.
4. Conduct in-water works during daylight hours in good visibility and weather conditions that permit visual observations and assessments for marine mammals.
5. Operate equipment/machinery from the upland area, above the high water mark or from a barge.
6. Conduct intertidal works, undertakings or activities in the dry (i.e., when the site is dewatered during a low or falling tide).
7. Conduct works at suitable tides to prevent grounding of vessels (e.g., barge) on the seabed.
8. Water-based equipment is not to ground upon the seabed except for the use of anchors or spuds needed to keep the water-based equipment in place.
9. Ensure vessels are not operating in shallow water causing direct, physical disturbance to the seabed/habitat from propeller scour.
10. No spudding down or anchoring is to occur in sensitive habitats such as eelgrass beds.

11. Minimize movements/repositioning of barges and subsequent spudding down and anchoring to minimize the direct physical disturbance to the seabed.
12. Salvage motile marine invertebrate species (e.g., sea stars, etc.) from the project footprint wherever feasible prior to works, and relocate them to suitable nearby habitat outside of the project footprint.
13. Vibratory pile driving and/or drilling are the preferred methods for pile installation rather than impact driving. The following mitigation measures are applicable to pile installation by vibratory hammer and/or drilling only:
 - a. Establish a 500 m cetacean exclusion zone around the project site prior to pile installation.
 - b. An experienced Qualified Environmental Professional(QEP)/Marine Mammal Observer (MMO) will monitor for marine mammals for at least 30 minutes prior to the start of pile installation by vibratory hammer. If a cetacean enters the exclusion zone, temporarily suspend pile installation until the individual has left the exclusion zone or has not been sighted for 30 minutes.
 - c. An experienced QEP will monitor the area in the vicinity of the piles for the presence of fish during all pile driving activities. If injured or dead fish are observed, pile driving must cease immediately. Pile driving can only resume after additional mitigation measures are implemented to avoid and mitigate further impacts to fish.
14. If impact driving (e.g., drop hammer) methods are to be used, complete pile installation in accordance with the following mitigation measures:
 - a. A QEP is to conduct acoustic monitoring during all impact pile driving to verify that underwater acoustic thresholds are not exceeded.
 - b. Install an effective sound attenuation device (e.g., bubble curtain) to be used prior to and during impact pile driving to ensure sound levels do not exceed 207 dB re: 1 μ Pa and a SEL_{cum} of 203 dB re: 1 μ Pa²s outside of the sound attenuation device.
 - c. Establish separate fish and marine mammal exclusion zones (e.g., perimeter) around the sound source prior to impact pile driving. The pinniped exclusion zone is to be a minimum 75 m. The cetacean exclusion zone is to be a minimum of 500 m or the distance where sound levels do not exceed 160 dB_{RMS} re 1 μ Pa during impact pile driving, whichever is greater.
 - d. Monitor the exclusion zones for the presence of fish for at least 10 minutes and for marine mammals for at least 30 minutes prior to the start of impact pile driving.
 - e. An experienced and qualified marine mammal observer(s) must monitor for marine mammals in the exclusion zone for 30 minutes prior to the start of and during all impact pile driving.
 - f. If fish and marine mammals are not observed in the respective exclusion zones during the prestart period, a soft start procedure is recommended where the impact energy is gradually increased over a 10 minute period. The soft start

- procedure is also recommended any time after there is a break of 30 minutes or more during impact pile driving.
- g. If a marine mammal enters the marine mammal exclusion zone, temporarily suspend pile installation until the individual has left the exclusion zone or has not been resighted for 30 minutes.
 - h. If hydroacoustic monitoring indicates that these thresholds are being exceeded, work must be halted and additional measures (e.g., bubble curtain) implemented to effectively reduce sound levels below the above thresholds.
 - i. Retain an experienced qualified environmental professional to monitor the area in the vicinity of the piles during all impact pile driving for the presence of fish. If injured or dead fish are observed, pile driving should cease immediately. Impact pile driving should only resume after additional mitigation measures are implemented to avoid and mitigate further impacts to fish. You have a Duty to Notify DFO if you have caused the death of fish by means other than fishing. Report the death of fish to the DFO-Pacific Observe, Record and Report phone line at 1-800-465-4336 or by email at DFO.ORR-ONS.MPO@dfo-mpo.gc.ca.
15. Conduct water quality monitoring during pile installation to confirm that turbidity levels in the water column outside the immediate vicinity of the works are below approved water quality guidelines. If water quality guideline exceedances are detected, stop work and implement additional mitigation measures (e.g., slow work, installation of a sediment curtain, etc.) to minimize sedimentation.
 16. Develop and implement an erosion and sediment control plan to avoid and minimize the introduction of sediments (e.g., silts, clays, soil and sand) into fish habitat or in areas where the material will enter fish habitat.
 17. Develop and implement a spill response plan to minimize the risk of a deposit of deleterious substances into fish habitat.
 18. Machinery is to be in good working condition and a spill kit(s) is kept on site at all times.

Provided that you incorporate these measures into your plans, the Program is of the view that your proposal is not likely to result in the contravention of the above mentioned prohibitions and requirements.

Should your plans change or if you have omitted some information in your proposal, further review by the Program may be required. Consult our website (<http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html>) or consult with a qualified environmental consultant to determine if further review may be necessary. It remains your responsibility to remain in compliance with the *Fisheries Act*, the *Species at Risk Act* and the *Aquatic Invasive Species Regulations*.

It is also your Duty to Notify DFO if you have caused, or are about to cause, the death of fish by means other than fishing and/or the harmful alteration, disruption or destruction of fish habitat. Such notifications should be directed to the DFO-Pacific Observe, Record and Report phone line at 1-800-465-4336 or by email at DFO.ORR-ONS.MPO@dfo-mpo.gc.ca.

Please notify the Program by email at (Samantha.Ramirez@dfo-mpo.gc.ca) at least 10 days before starting your project, ensuring your file number and appropriate on-site contact information is included. We recommend that a copy of this letter be kept on site while the work is in progress. It remains your responsibility to meet all other federal, territorial, provincial and municipal requirements that apply to your proposal.

Please note that the advice provided in this letter will remain valid for a period of 1 year from the date of issuance. If you plan to execute your proposal after the expiry of this letter, we recommend that you contact the Program to ensure that the advice remains up-to-date and accurate. Furthermore, the validity of the advice is also subject to there being no change in the relevant aquatic environment, including any legal protection orders or designations, during the 1 year period.

If you have any questions with the content of this letter, please contact Samantha Ramirez at our Vancouver office at (778)-233-1613 or by email at Samantha.Ramirez@dfo-mpo-gc.ca. Please refer to the file number referenced above when corresponding with the Program.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Ian Matchett', with a long horizontal flourish extending to the right.

Ian Matchett
A/Senior Biologist
Fish and Fish Habitat Protection Program

c.c.: Alasdair Lindop (Hatfield Consultants) at alindop@hatfieldgroup.com