

**ENVIRONMENT CANADA
SCREENING**

**OCEAN DISPOSAL:
FISH WASTE**

1. PROJECT DESCRIPTION

1.1 Project identification

Date: _____	HRTS No.: _____
	FEAI No.: _____

Location CEPA s. 129(d) / Regs s.4(1)(d) Longitude: _____ Latitude: _____ Region: _____

Project title Title: _____ Brief description: _____ _____ _____
--

Identification of resource persons Person in charge, Environment Canada: _____ Resource person, Environment Canada: _____ Resource person, Agency: _____ Resource person, Public Registry: _____

Identification of responsible authority (RA) Lead responsible authority: _____ Other responsible authorities involved: _____ _____ For this project, Environment Canada acts as: Lead responsible authority: _____ Responsible authority: _____
--

Other permits required Permits under NWPA: _____ Permits under the Fisheries Act: _____ Other permits required: _____ _____
--

1.2 Project justification

Project objectives

What is the rationale for the project?

Alternatives, project optimization

(refer to Ocean Disposal Permit Application- information required under CEPA Schedule VI)

schedule vi, s.2,s.5

Identify and describe any alternatives considered. Indicate how the project was optimized.

schedule vi, s.5

Were any other options for the disposal of fish waste considered (recycling, land disposal, etc.)?

schedule vi, s.5, s.11, s13

Were alternative disposal sites examined? Describe the process for selecting the dumping site and indicate the site selection criteria. Indicate any alternatives examined and the factors considered. Show that the site selected is appropriate (meets short, medium and long-term criteria respecting navigability, predictability of the behaviour of waste discharged, precautions concerning wildlife habitat, etc.).

schedule vi, s.13,?

How were the various steps involved in the implementation of the project optimized (methods, periods of the year, project schedules, and other)? Briefly describe the scope of the analyses conducted and provide the rationale for the choice of the project and any alternatives selected.

1.3 Project description

(refer to Ocean Disposal Permit Application- project description information required under CEPA Schedule VI)

Location

CEPA s. 129/ schedule vi, s.17 / regs s.4(1)(d)

Indicate the location of the various components of the project as precisely as possible (processing plant, storage sites, route taken to get to the wharf, dumping site).

NOT COVERED IN CEPA!

Related projects

Is this proposal part of a larger project? If so, describe associated or future projects. The environmental assessment must cover the entire project. Are there other fish processing plants that carry out ocean disposal of fish waste in the vicinity?

Project components

Describe the main components of the project. Attach relevant plans and drawings.

Description of fish waste to be disposed of:

CEPA s.129(1)

- characteristics of the waste to be disposed of: origin, species involved, parts (carcasses, crab shells, etc.), quantities, how long ago the fish were caught, etc.;

- treatment carried out (grinding or other treatment designed to minimize floating of the waste).

Handling / Loading: (CEPA s.129(f))

- handling and loading equipment and machinery used;
- storage required, location, storage method and duration.

Transportation: (CEPA s.129(e))

- characteristics of land transportation equipment;
- land transportation activities and routes taken;
- water transportation equipment used;
- extent of movements (number of trucks, ships, barges or other).

Disposal/Presence: (CEPA s.129(b))

- characteristics of disposal equipment;
- space and/or volume occupied by wastes;
- disposal techniques;
- holding structures.

Project schedule

When will the project be conducted? Attach a project schedule.
Provide the planned work schedule, and any other anticipated restrictions or constraints.

1.4 Description of the environment

Description of the dumping site

Describe the characteristics of the dumping site:

Location: CEPA s.129(d)

- geographic location;
- distance from the shore, fishing grounds and aquaculture facilities.

Characteristics of the ocean floor: CEPA - Schedule 6, s.11(a) / LC Guidelines, Part 17,18

- topography and geology;
- sediment size;
- sediment quality;
- geochemical characteristics;
- composition of biological communities;
- biological activities that occur on the ocean floor;
- prior dumping at the site.

Physical characteristics of the water column: LC Guidelines, Part 17,18

- temperature;
- depth;
- possible existence of a thermocline / pycnocline (and its variations);
- tidal characteristics;
- direction and average velocity of surface and bottom drift;
- wind and swell characteristics, occurrence of storms;

- suspended solids.

Chemical and biological characteristics of the water column: LC Guidelines, Part 18

- pH;
- salinity;
- dissolved oxygen content at the surface and in the water column;
- chemical and biochemical oxygen demand;
- nutrients;
- primary productivity.

Where existing data are used, indicate the source of the data and justify their use for the project under study.

Previous use of the site

Where applicable, indicate previous uses of the site; previous dumping; characteristics of the wastes or materials discharged at the site; results of previous analyses; previous environmental risks; probable environmental impacts, mitigation measures implemented and the results of follow-up.

Description of the surrounding natural environment

Describe the surrounding natural environment, focussing on sensitive areas, such as critical wildlife habitat and protected areas, conservation areas or areas of particular interest (where necessary, provide plans and photographs).

Physical environment:	hydrodynamics, ice and sedimentology characteristics and quality of the ocean floor water quality characteristics and quality of the materials involved
Biological environment: LC Guidelines, Part 19	terrestrial vegetation aquatic and riparian vegetation wildlife waterfowl fish benthic organisms marine mammals sanctuaries, conservation areas

Description of the human environment LC Guidelines, Part 19

Describe human facilities and activities, focussing on sensitive elements (residential areas, heritage sites, recreational activities, commercial activities).

- Recreational activities (swimming, water sports, sport fishing, hunting, etc.)
- Commercial activities (fishing, navigation, aquaculture)
- Heritage sites and protected areas
- Aesthetic and scenic resources
- Quality of life
- Existing infrastructure (sea water intakes, outfalls, wharves. etc.)

2. ENVIRONMENTAL ASSESSMENT OF THE PROJECT

This section covers the identification and description of the environmental impacts of the ocean disposal project and related mitigation measures. It is designed to answer questions related to the project, by providing the basic information needed to explain the conclusions, as well as the necessary references.

PHASE A: LAND TRANSPORTATION, LOADING AND WATER TRANSPORTATION

LC Guidelines, Parts 19, 22-24

A-1 Disturbance of the aquatic environment (aquatic wildlife and marine habitats)

A-1a Effects on marine mammals

Identify and describe the effects of the disturbance on marine mammals during water transportation.. Where appropriate, describe the proposed mitigation measures.

A-1b Effects on fish and marine habitat

Indicate whether the transportation of fish waste by water is likely to affect fish and marine habitats; describe the anticipated impacts and planned mitigation measures.

A-2 Disturbance of birds and coastal habitats (riparian habitat)

Indicate whether the transportation (by land or water) or loading of fish waste is likely to have an impact on birds or coastal habitat. If so, describe the anticipated impacts and the mitigation measures that will be taken.

A-3 Disturbance of recreational activities

Indicate whether the recreational activities carried out in the sector, on the wharf or in the immediate vicinity (swimming, water sports, sport fishing, hunting, bird watching or whale watching, boarding cruise ships, etc.), are likely to be affected by any stage of the transportation and handling of the wastes. Specify the activities affected, the components of the project affected, and the extent of the anticipated impacts, as well as the mitigation measures.

A-4 Disturbance of commercial activities

Indicate whether the transportation (both by land and water), handling or loading of fish waste is likely to affect navigation or commercial fishing (commercial navigation, fishing or aquaculture industry, dock operations), particularly by causing obstructions on the dock or in navigable waters. Indicate whether any restrictions are set out in the schedules. Describe the impacts and, where applicable, the planned mitigation measures.

A-5 Impact on aesthetic and scenic resources

Indicate whether the transportation, handling and loading of fish waste will have an impact on aesthetic or scenic resources. Describe the mitigation measures.

A-6 Impact on the quality of life

A-6a Impact of noise and dust generation

Identify and describe sources of noise associated with transportation (by land and water), handling and loading of fish waste. Specify the schedules and duration of high levels of noise. Describe the sources of noise (machinery, trucks, back-up sirens). With respect to background noise levels, specify whether any impacts are anticipated on the quality of life of the residents. Describe the proposed mitigation measures.

A-6b Traffic associated with land transportation

On the basis of the anticipated modes of land transportation and the access roads taken, specify the routes from the waste pick-up site to the dock. Indicate whether the project is likely to result in increased traffic in the vicinity, which could affect residential areas (noise, safety of residents, etc.). Describe the planned mitigation measures.

A-6c Odour problems

Identify and provide details concerning sources of foul odours that are likely to be released during handling and loading (duration, extent, etc.). Indicate whether impacts in terms of social concerns are anticipated (disturbance of residents). Describe any mitigation measures proposed.

A-6d Vermin problems

Identify and provide details on problems associated with vermin during the storage of the fish wastes in loading areas (extent of the problem, species in question, duration, etc.). Identify the impacts in terms of social concerns (disturbance of residents, health, etc.) and describe any mitigation measures proposed.

A-7 Disturbance of existing infrastructure - LC Guidelines, Part 19

If the proposed activities are likely to have an impact on existing infrastructure (sea water intakes, outfalls), describe the anticipated impacts and planned mitigation measures.

A-8 Risk of spills

Identify the risks of spills of hazardous materials (particularly petroleum products) that will be used or stored during the various steps (loading, storage, land and water transportation). Identify the substances in question and indicate where they will be used and stored. Describe the safety and prevention measures that will be taken, as well as the emergency plan in the event of the a spill.

A-9 Other impacts

Describe all other impacts that the project is likely to have, and all proposed mitigation measures.

PHASE B: IMMERSION AND PRESENCE OF FISH WASTE

B-1 Effects on hydrodynamics, ice and sedimentology

Determine whether there is a potential for significant changes in the bathymetric profile or ice regime at the dumping site as a result of discharging the wastes. Indicate the anticipated level of impact, extent of the area affected and duration of the disturbance.

B-2 Modification of the characteristics and quality of the ocean floor

Indicate whether the ocean disposal of the fish wastes can result in the disturbance of the ocean floor. Describe the effects on the presence of the wastes, indicating the extent of the area affected. Describe the mitigation measures that will be implemented to minimize the impacts of the project.

LC Guidelines, Parts 22-23, 25-27, 34-35

B-3 Disturbance of wildlife and marine habitats

B-3a Effects on resources

Describe the potential impact on fish or other wildlife populations (marine mammals, macrofauna, benthic organisms, etc.) that could be affected by the disposal activities and by the presence of the fish wastes. Specify the nature and scope of the impacts. Describe the proposed mitigation measures (seasonal restrictions due to migration patterns, adoption of alternative disposal procedures, etc.).

B-3b Effects on habitats

Describe the impact on the modification of habitat, aquatic vegetation or sensitive areas that may be present (spawning grounds, nursery areas, migration corridors, etc.) that could result from the actual discharging of the fish waste or from the presence of the waste on the ocean floor (burial, habitat loss caused by encroachment or changes in the substrate or wildlife, etc.). Indicate whether these modifications could have impacts on biological communities or on biological activity. Describe the proposed mitigation measures.

B-4 Disturbance of birds and coastal habitats

Describe the potential impacts of the disposal and presence of fish waste on seabirds. Evaluate the effects of the disposal and dispersal of wastes on beaches and coastal habitats. Describe the planned mitigation measures.

B-5 Disturbance of recreational activities

Specify whether the project is likely to have direct or indirect impacts on recreational activities, such as swimming, water sports, fishing (from land or water), hunting, or any other activity that is carried out in the vicinity. Indicate whether restrictions have been provided for in terms of when the project can be carried out, in relation to when and where recreational activities are carried out. Describe the anticipated impacts and proposed mitigation measures.

B-6 Disturbance of commercial activities

Specify whether the presence of equipment, the actual dumping operations or the presence of fish wastes following disposal is likely to have direct or indirect impacts on commercial activities, such as the retrieval of fishing gear, navigation and aquaculture, lobster culture, etc. Specify whether restrictions are planned in terms of the disposal site selected or the periods allocated for carrying out the work in relation to activity periods and sites. Describe the anticipated impacts and proposed mitigation measures.

B-7 Impact on heritage and protected areas

If the fish waste is discharged in a protected area (archaeological site, site of natural or historic significance), describe the impacts that are likely to affect the site, either directly or indirectly. Where applicable, specify the proposed mitigation measures.

B-8 Impact on aesthetic and scenic resources

Describe the potential impact of the disposal of fish wastes on the aesthetic resources in the area, particularly the impact of waste floating on the water surface or washed up on shore. Determine the scope of the impact, in terms of visual quality and odours likely to be released by the fish wastes. Specify the impacts on the aesthetic value of the sites and specify the measures to be taken to minimize these impacts.

B-9 Impact on quality of life

Describe the potential impact on the quality of life in the sector identified, particularly the risks of the presence of floating wastes or wastes that have been washed ashore. Describe the impact of odours and the sanitary conditions of the site. Identify the sectors and potential number of residents or visitors that could be affected. Describe the proposed mitigation measures.

B-10 Disturbances of existing infrastructure

Describe the impacts the project is likely to have on existing infrastructure (sea water intake, outfalls, etc.). Specify, where applicable, the proposed mitigation measures.

B-11 Other impacts

Describe any other impacts that the ocean disposal of fish wastes is likely to have and specify any other proposed mitigation measures.

SUMMARY OF POTENTIAL IMPACTS

OCEAN DISPOSAL, FISH WASTE: _____

Ref.	Potential impact	Impact anticipated (√)
PHASE A: LAND TRANSPORTATION, LOADING AND WATER TRANSPORTATION		
A-1a	Effects on marine mammals	
A-1b	Effects on fish and marine habitat	
A-2	Disturbance of birds and coastal habitats	
A-3	Disturbance of recreational activities	
A-4	Disturbance of commercial activities	
A-5	Impact on aesthetic and scenic resources	
A-6a	Impact of noise and dust generation	
A-6b	Traffic associated with land transportation	
A-6c	Odour problems	
A-6d	Vermin problems	
A-7	Disturbance of existing infrastructure	
A-8	Risk of spills	
A-9	Other impacts of transportation and loading	
PHASE B: DISPOSAL AND PRESENCE OF FISH WASTE		
B-1	Effects on hydrodynamics, ice and sedimentology	
B-2	Modification of the characteristics and quality of the ocean floor	
B-3a	Effects on marine resources	
B-3b	Effects on marine habitats	
B-4	Disturbance of birds and coastal habitats	
B-5	Disturbance of recreational activities	
B-6	Disturbance of commercial species	
B-7	Impact on heritage and protected areas	
B-8	Impact on aesthetic and scenic resources	
B-9	Impact on quality of life	
B-10	Disturbance of existing infrastructure	
B-11	Other impacts of ocean disposal and the presence of fish wastes	
OTHER IMPACTS:		

3. PUBLIC CONCERNS

Public views

Specify the environmental issues raised by this project that cause public concern:

- visual aspects
- noise
- road traffic
- use of hazardous substances
- adverse impact on fishing and hunting
- threatened species
- recreational activities
- heritage
- Aboriginal communities
- business opportunities
- safety of residents and children
- municipal or community services
- boating and marine activities
- access to the site
- etc.

Public information CEPA s.127(2)(d), 133(1)

Provide details on public meetings, public notices and media coverage of the issue and all other communications to which the public had access in order to learn about the project or express its views.

Local planning

Specify how the project ties in with local, municipal, regional and provincial development projects.

Mitigation and compensation measures

Describe the measures that will be taken to facilitate the integration of the project into the environment, taking account of public concerns.

4. SUMMARY OF IMPACTS, CUMULATIVE EFFECTS AND FOLLOW-UP PROGRAM

Impacts of the proposal and mitigation measures

Provide a summary of the main impacts of the project, public concerns and mitigation measures proposed to minimize the project impacts.

Residual impacts

Provide a summary of the residual environmental impacts of the project, i.e., permanent impacts that remain after the mitigation measures have been applied.

Cumulative environmental effects¹

Indicate whether the level of the impact is likely to be modified if combined with similar impacts from other projects or activities being carried out in the vicinity (for example, activities that can affect water quality, fish habitat, fishing). Describe the anticipated cumulative effects; indicate how the impacts presented in the preceding section can be magnified by other similar impacts.

CEPA s.132

Follow-up program

Indicate whether a follow-up program is recommended and provide a brief description. If a follow-up program is not considered necessary, explain why.

¹ Cumulative environmental effects are defined as: “The effect on the environment which results from effects of a project when combined with those of other past, existing and imminent projects and activities. These may occur over a certain period of time and distance.” *Canadian Environmental Assessment Agency, 1994. Canadian Environmental Assessment Act - Responsible Authority’s Guide. November 1994, 216 pp.*

5. SIGNATURES, IDENTIFICATION OF RESOURCE PERSONS AND RECOMMENDATIONS

References

Provide a list of the individuals contacted and the reports consulted during the screening process.

Permits / authorizations / approvals

Provide a list of the permits, authorizations and approvals obtained as part of the screening process. Attach relevant documents.

Recommendations

This form:

was completed by: _____
Position / Role: _____
Recommendation: _____
Comments: _____

was reviewed by: _____
Position / Role: _____
Recommendation: _____
Comments: _____

was reviewed by: _____
Position / Role: _____
Recommendation: _____
Comments: _____

was reviewed by: _____
Position / Role: _____
Recommendation: _____
Comments: _____

Recommendation:

- Significant adverse environmental effects unlikely or can be mitigated; the proposal can proceed, ensure implementation of mitigation measures 1
- Significant adverse environmental effects that cannot be justified in the circumstances; the proposal, at it stands, must be abandoned 2
- Uncertain whether the project is likely to cause adverse environmental effects, refer the project to the Minister of the Environment for mediation or public review 3
- Significant adverse environmental effects justified in the circumstances, refer the project to the Minister of the Environment for mediation or panel review 4
- Public concerns warrant a public review; refer the project to the Minister of the Environment for mediation or panel review 5

6. FINAL DECISION

Recommendation

This section must be completed by the REGIONAL DIRECTOR, ENVIRONMENT CANADA.

REGIONAL DIRECTOR, PLEASE CHECK ONE BOX ONLY:

Decision:

The permit can be issued because:

it is unlikely that the project will cause significant adverse environmental effects or the effects can be mitigated by adequate measures.

The project, as proposed, must be abandoned because:

_____ it causes significant adverse environmental effects, which are not justified under the circumstances.

The project must be referred to the Minister of the Environment for mediation or public review because:

_____ it is clear that the project causes significant adverse environmental effects, even with the implementation of the mitigation measures;

_____ it causes significant adverse environmental effects, but they are justified under the circumstances;

_____ public concerns justify a public review.

Completed by: _____

Title: _____

Date: _____