

REPLACEMENT CLASS SCREENING REPORT

**DISPOSAL OF FISH OFFAL AT SEA IN
NEWFOUNDLAND AND LABRADOR**

**Prepared for
Environment Canada
St. John's, NL**

**Prepared by
Public Works and Government Services Canada
Environmental Services
St. John's, NL**

TABLE OF CONTENTS

1.0	INTRODUCTION.....	4
1.1	CLASS SCREENING AND THE CANADIAN ENVIRONMENTAL ASSESSMENT ACT (CEAA)	4
1.2	RATIONALE FOR REPLACEMENT CLASS SCREENING	5
1.3	CONSULTATION.....	7
1.4	CANADIAN ENVIRONMENTAL ASSESSMENT REGISTRY	7
1.5	CANADIAN ENVIRONMENTAL PROTECTION ACT REGISTRY	8
2.0	PROJECTS SUBJECT TO CLASS SCREENING	8
2.1	PROJECTS SUBJECT TO CEAA	9
2.2	PROJECTS SUBJECT TO REPLACEMENT CLASS SCREENING REPORT	9
2.3	PROJECTS NOT SUBJECT TO THE REPLACEMENT CLASS SCREENING REPORT	10
3.0	PROJECT CLASS DESCRIPTION	10
3.1	NEED FOR AND PURPOSE OF THE PROJECT	11
3.2	ALTERNATIVES TO THE PROJECT	11
3.3	TYPICAL SEASONAL SCHEDULING AND DURATION OF PROJECTS	11
	SPECIES.....	11
	HARVESTING SEASON.....	11
4.0	ENVIRONMENTAL REVIEW METHODS	12
4.1	BOUNDARIES.....	13
4.1.1	<i>PROJECT BOUNDARIES</i>	13
4.1.2	<i>ECOLOGICAL BOUNDARIES</i>	13
4.1.3	<i>SOCIOECONOMIC BOUNDARIES</i>	14
4.2	ANALYSIS AND PREDICTION OF SIGNIFICANCE OF RESIDUAL ENVIRONMENTAL EFFECTS	15
4.3	ENVIRONMENTAL SETTING	16
4.4	ISSUES SCOPING AND VALUED ENVIRONMENTAL COMPONENTS	16
4.4	ANAYLYSIS OF ENVIRONMENTAL EFFECTS ON SELECTED VECS/VSCS	18
4.4.1	<i>MARINE MAMMALS</i>	19
4.4.2	<i>FISH AND MARINE HABITAT</i>	19
4.4.3	<i>MARINE BIRDS</i>	19
4.4.4	<i>COASTAL HABITAT</i>	19
4.4.5	<i>HYDRODYNAMICS, ICE, AND SEDIMENTOLOGY</i>	19
4.4.6	<i>RECREATIONAL ACTIVITIES</i>	20
4.4.7	<i>COMMERCIAL ACTIVITIES</i>	20
4.4.8	<i>AESTHETIC AND SCENIC RESOURCES</i>	20
4.4.9	<i>QUALITY OF LIFE</i>	20

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

4.4	EVALUATION OF RESIDUAL ENVIRONMENTAL EFFECTS	30
4.5.1	MARINE MAMMALS	30
4.5.2	FISH AND MARINE HABITAT	30
4.5.3	MARINE BIRDS	30
4.5.4	COASTAL HABITAT	30
4.5.5	HYDRODYNAMICS, ICE, AND SEDIMENTOLOGY	30
4.5.6	RECREATIONAL ACTIVITIES	30
4.5.7	COMMERCIAL ACTIVITIES	31
4.5.8	AESTHETIC AND SCENIC RESOURCES	31
4.5.9	QUALITY OF LIFE	31
4.5	EFFECTS OF THE ENVIRONMENT ON THE PROJECT	33
4.7	CUMULATIVE EFFECTS	33
4.8	MONITORING	34
5.0	ROLES AND RESPONSIBILITIES	34
5.1	PROCEDURES FOR AMENDING THE REPLACEMENT CLASS SCREENING REPORT	35
6.0	REFERENCES	36
	MESSIEH, DR. SHOUKRY (1991). <i>FISH OFFAL DISPOSAL IN ATLANTIC CANADA</i> . HABITAT ECOLOGY DIVISION. BEDFORD INSTITUTE OF OCEANOGRAPHY. A DISCUSSION PAPER PREPARED FOR MASSH, 7 P + APPENDIX.	36
	VIKING SEA PRODUCTS, ANCHOR POINT, NEWFOUNDLAND	39
	• REFER TO ATTACHED CHART	39

APPENDIX A: SITE SPECIFIC INFORMATION

LIST OF TABLES

TABLE 1: DISPOSAL SITES SUBJECT TO THE CLASS SCREENING	8
TABLE 2: HARVESTING SEASON OF SPECIES PROCESSED IN NEWFOUNDLAND AND LABRADOR	11
TABLE 3: RATING SYSTEM USED TO DETERMINE THE SIGNIFICANCE OF RESIDUAL ENVIRONMENTAL EFFECTS	15
TABLE 4: ISSUES SCOPING/PATHWAY ANALYSIS SUMMARY MATRIX – VALUED ENVIRONMENTAL AND SOCIO-ECONOMIC COMPONENTS OF CONCERN	17
TABLE 5: POTENTIAL ENVIRONMENTAL EFFECTS (BIOPHYSICAL & SOCIO-ECONOMIC) SUMMARY AND MITIGATION	22
TABLE 6: RESIDUAL ENVIRONMENTAL EFFECTS ACROSS ALL PROJECT PHASES FOR EACH VALUED ENVIRONMENTAL COMPONENT (VEC) AND VALUED SOCIO-ECONOMIC COMPONENT (VSC) FOLLOWING THE APPLICATION OF MITIGATION MEASURES	32

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

1.0 INTRODUCTION

Environment Canada (EC) regulates the disposal of substances at sea by means of a system of permits under the *Canadian Environmental Protection Act, 1999* (CEPA) and the Ocean Disposal Regulations.

Under CEPA, each permit application or amendment is subject to an environmental assessment to determine if a permit will be issued. Fish offal that cannot be recycled as fertilizer, animal feed or other products may be considered suitable for disposal at sea.

Each year, EC issues between 40 and 50 permits and permit amendments for the disposal of fish offal in waters off the coast of Newfoundland and Labrador. Few such permits for disposal of fish offal are required elsewhere in Canada. Disposal practices in Newfoundland and Labrador differ from those in other parts of the country due to a lack of land-based alternatives. The act of issuing or amending a disposal at sea permit also triggers an environmental assessment under the *Canadian Environmental Assessment Act* (CEAA). Legislation limits each permit to a valid term of no more than 365 days resulting in a large number of annual assessments.

CEPA and CEAA are both designed to promote sustainable development and both support a precautionary approach to managing environmental effects. The parallels between CEAA and CEPA are even more evident in those sections of CEPA that apply to Disposal at Sea activities. For such activities CEPA requires an effects assessment of the following: environmental costs, human health risks, economics and hazards and accidents. This can be compared to CEAA, which requires an assessment of any change that the project may cause in the environment and on human health and socio-economic conditions. The similarities between the two pieces of legislation extend to requirements relating to the scoping of environmental effects and the requirement to consider the need to monitor environmental effects. Nevertheless, the Disposal at Sea permitting process is an independent regulatory process that requires harmonization and integration with the CEAA process which is a planning tool. This needs to be done in the most efficient manner possible. Achieving such harmonization, integration and efficiencies is consistent with one of the purposes of CEAA. EC has evaluated available options to streamline the environmental assessment process and reduce the overlap between CEPA and CEAA. The result is the proposal for a Replacement Class Screening Report (RCSR) for the disposal of fish offal at sea in Newfoundland and Labrador, which would serve to increase the efficiency and effectiveness of the decision-making process.

Declaration of the replacement class in accordance with the CEAA will eliminate the requirement to conduct project specific screenings prior to the issuance of a permit or permit amendment. However, the CEPA assessment process remains in effect and EC will continue to consult the Regional Ocean Disposal Advisory Committee (RODAC) as appropriate prior to the issuance of every permit. Any emerging issue not addressed in the RCSR will result in the project not being captured by the RCSR and a project-specific CEAA screening will ensue.

This report was developed to meet the requirements of the Canadian Environmental Assessment Agency. The RCSR does not absolve a proponent's responsibility to meet the requirements of CEPA for their project.

1.1 CLASS SCREENING AND THE CANADIAN ENVIRONMENTAL ASSESSMENT ACT (CEAA)

The *Canadian Environmental Assessment Act* (CEAA) and its regulations set out the legislative basis

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

for federal environmental assessments. The legislation ensures that the environmental effects of projects involving the federal government are carefully considered early in project planning. The CEAA applies to projects that require a federal authority (FA) to make a decision or take an action, whether as proponent, land administrator, source of funding or a regulator (issuing a permit or licence). The FA then becomes a responsible authority (RA) and is required to ensure that an environmental assessment of the project is carried out prior to making its decision or taking an action that would facilitate the project to proceed.

Most projects are assessed under a screening type of assessment. A screening systematically documents the anticipated environmental effects of a proposed project, and determines the need to modify the project plan or recommend further mitigation to eliminate or minimize the significance of these effects. Screenings are conducted for projects which are not on the *Exclusion List Regulations* or the *Comprehensive Study List Regulations* and have not been identified as requiring mediation or an assessment by a review panel.

The screening of some routine projects may be streamlined through the use of a class screening report. This kind of report presents the accumulated knowledge of the environmental effects of a given type of project and identifies measures that are known to reduce or eliminate the likely adverse environmental effects. The Agency may declare such a report appropriate for use as a class screening after taking into account comments received during a period of public consultation.

A replacement class screening consists of a single report that defines the class of projects and describes the associated environmental effects, design standards and mitigation measures for projects assessed within the report. It includes a conclusion of significance of environmental effects of all projects assessed by the replacement class screening. Once the Agency declares a replacement class screening report, no further environmental assessment is required for projects within the class.

1.2 RATIONALE FOR REPLACEMENT CLASS SCREENING

According to the Agency, any proposed RCSR must demonstrate that the projects covered meet several criteria. The applicability of class screenings to fish offal disposal at sea projects is based upon the following six criteria:

1. Well-defined Class of Projects: Fish offal disposal at sea projects all have similar characteristics. The source of fish waste is wild fisheries stock fit for human consumption. Permit applications for degraded fisheries wastes and/or aquaculture industry wastes will not be eligible for consideration under the class assessment. Disposal sites are located within several kilometres of the Newfoundland and Labrador coastline, all of which are likely to have similar environmental settings. Disposal of fish offal is a simple and straightforward process because the types of vessels and equipment used, the process for loading, storage, transport are common to all projects. For example, most disposal at sea projects use simple metal containers for storage and barges or open vessels for transport. Most of the material leaves the plant via a flume, is de-watered with a screw and sump mechanism and flows into the barge. Forklifts are also used. Most barges are discharged via a manually operated door. The characteristics of fish offal are well known and annual quantities of fish offal typically disposed of at sea have been estimated.

2. Well-understood Environmental Setting: EC has been responsible for the Ocean Disposal program and has authorized use of fish offal disposal sites in Newfoundland and Labrador for nearly twenty

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

years. Some sites were in use for many years after designation as “gurry grounds” by local fishery officers. EC ensures that each disposal site has good dispersion capabilities and is situated well away from conflicting uses. Information on the environmental characteristics of each site is either available or (at a minimum) easily obtainable (e.g., location, salinity, currents, water depth, seabed type, and local uses).

3. *Unlikely to Cause Significant Adverse Environmental Effects, Taking into Account Mitigation Measures:* Based on previous experience with ocean disposal sites, significant adverse environmental effects are unlikely to occur. Minor environmental impacts have occurred in the past, for example, waste washing up on shorelines (temporary effects on nearshore marine water quality and aesthetics), largely due to improper disposal methods or abnormal environmental conditions during disposal. These effects are readily manageable through disposal protocols, compliance promotion, enforcement, and contingency planning. Based on monitoring undertaken by EC at several ocean disposal sites, there appears to be little evidence of significant cumulative effects.

4. *Project-Specific Follow-up Measures:* In the case of fish offal disposal at sea, project-specific follow-up programs are not typically required nor conducted. Disposal site monitoring is carried out at selected sites, as required under CEPA. EC’s Ocean Disposal Program undertakes this monitoring. This disposal site monitoring is used to verify that permit conditions were met and that scientific assumptions made during the permit review and site selection process were correct and sufficient to protect the environment. Monitoring activities are conducted in accordance with national guidelines.

5. *Effective and Efficient Planning and Decision-making Process:* Most fish offal disposal at sea projects involve activities that are straightforward and routine in nature, so planning is uncomplicated (see item 1 above). In Newfoundland and Labrador, EC has been the only RA for fish offal projects. However permits are assessed with advice from RODAC. This expert committee includes representation from EC, Fisheries and Oceans Canada, Transport Canada and often from relevant provincial regulatory authorities. The permit review involves a numbers of steps and may take 2 to 3 months. Most project proponents are highly experienced in the disposal operations and with CEPA requirements. A RCSR will reduce the duplication between CEPA and CEAA processes, making the planning and regulatory processes more effective and efficient.

6. *Public Concerns Unlikely:* Anyone applying for a permit from EC must publish a notice of intent in a newspaper of general circulation in the vicinity of the proposed operation. This notice must state the type of material and the intended location for loading and disposal. The applicant then submits this published announcement with a permit application. The notice of intent allows interested people to express their concerns and gives EC the chance to address these concerns while assessing applications. Before any ocean disposal permits and amendments to a permit come into force, they must have been published in the Canada Gazette at least 30 days prior. This provides the public an additional opportunity to comment. To date there has been no public response to such notifications. A more telling barometer of public concerns is the low number of complaints received concerning ocean disposal operations. These operations are carried out in full view of the public and EC’s history of responding promptly and resolving any problems should promote confidence - and there have been few public complaints in relation to disposal activities.

One area with potential public interest is alternative use of fish offal. Under CEAA alternative use is an alternative to the project and is not a mandatory factor to consider at the screening level. It is, however, a mandatory consideration under CEPA. EC believes that a replacement class screening

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

approach for routine fish offal projects will allow for a more efficient use of resources, enabling EC staff and the CEPA regulatory process to focus on alternative uses, frequently the most challenging aspect of Disposal at Sea permitting.

1.3 CONSULTATION

The Regional Ocean Disposal Assessment Committee (RODAC), consisting of Transport Canada; Department of Fisheries and Oceans; Parks and Natural Areas, Department of Environment and Conservation; local offices of the Government Services Centre, Department of Government Services (St. John's, Clarenville, Gander, Grand Falls – Windsor, Corner Brook, and Happy Valley - Goose Bay) and the Provincial Archaeology Office, Department of Tourism, Culture and Recreation, were provided with an opportunity to comment on the Scope of Assessment and the draft RCSR prior to a review by the Agency. A copy of the draft RCSR was also provided to the Innu Nation, the Labrador Inuit Association, and the Labrador Métis for review and comments.

1.4 CANADIAN ENVIRONMENTAL ASSESSMENT REGISTRY

The purpose of the Canadian Environmental Assessment Registry (the Registry) is to facilitate public access to records relating to environmental assessments and to provide notice in a timely manner of assessments. The Registry consists of two components – an Internet site and a project file.

The Internet site is administered by the Agency. The responsible authority and the Agency are required to post specific records to the Internet site in relation to a class screening report.

Upon declaration of the class screening report, the Agency requires responsible authorities to post on the Internet site of the Registry, every three months, a statement of projects for which a replacement class screening report was used. The statement should be in the form of a list of projects, and will include:

- the title of each project for which the replacement class screening report was used;
- the contact information (name or number);
- the location of each project; and
- the date when it was determined that the project falls within the category of projects covered by the report.

The responsible authority must also provide annual confirmation of cumulative effects assessment conditions to ensure no new projects cause any significant adverse environmental effects.

The project file component is a file maintained by the responsible authority during an environmental assessment. The project file must include a copy of the RCSR. The responsible authority must maintain the file, ensure convenient public access, and respond to information requests in a timely manner.

Further information regarding the Canadian Environmental Assessment Registry can be found in “The Canadian Environmental Assessment Registry”, prepared by the CEAA.

1.5 CANADIAN ENVIRONMENTAL PROTECTION ACT REGISTRY

Under Section 12 of the *Canadian Environmental Protection Act, 1999*, the Minister of the Environment is mandated to establish a registry, to be called the "Environmental Registry". The Environmental Registry may be referred to as the "CEPA Environmental Registry" or the "CEPA Registry".

The CEPA Environmental Registry is a comprehensive source of public information relating to activities under the *Canadian Environmental Protection Act, 1999 (CEPA 1999)*. In addition to providing up-to-date copies of current CEPA 1999 instruments, the primary objective of the Environmental Registry is to encourage and support public participation in environmental decision-making, by facilitating access to documents arising from the administration of the Act.

Approved and published Disposal at Sea permits may be viewed CEPA Registry at the following website address:

<http://www.ec.gc.ca/ceparegistry/default.cfm>

2.0 PROJECTS SUBJECT TO CLASS SCREENING

The candidate class for this RCSR is the disposal of fish offal at the disposal sites listed in Table 1 for which a permit or permit amendment is required under the *Canadian Environmental Protection Act (CEPA)* and the Ocean Disposal Regulations. Amendments to Table 1 through the addition of new sites will be addressed on a case-by-case basis. Each new site will first be assessed under CEAA and CEPA as an individual project prior to being included in this RCSR.

Table 1: Disposal Sites Subject to the Class Screening

Disposal Site	Latitude	Longitude
Aquaforte	47°00.25	52°56.00
Bay de Verde	48°04.09	52°53.96
Bell Island	47°37.60	52°55.10
Cape Broyle	47°05.22	52°54.23
Port Union	48°29.00	52°56.00
Witless Bay	47°16.34	52°47.54
Bonavista	48°40.67	53°14.00
Brigus	47°32.40	53°11.20
Chance Cove	47°41.50	53°49.00
Cupids	47°34.23	53°13.60
Dover	48°51.00	53°57.00
Happy Adventure	48°37.08	53°44.00
Long Cove	47°36.00	53°39.00
New Harbour	47°37.00	53°36.00
O'Donnell's	47°04.00	53°38.00
Plate Cove	48°30.95	53°31.00
Salvage	48°42.50	53°39.00
Ship Cove	47°35.00	53°11.00
Ship Harbour	47°20.72	53°54.51

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

St. Joseph's	47°06.60	53°34.40
Valleyfield	49°05.55	53°35.85
Change Islands	49°40.69	54°23.20
Comfort Cove	49°24.75	54°50.40
Cottlesville	49°30.70	54°53.70
Fogo	49°43.65	54°16.35
Herring Neck	49°38.06	54°37.00
Joe Batt's Arm	49°44.20	54°90.60
Seldom	49°35.79	54°10.00
Twillingate	49°41.83	54°45.50
Conche	50°51.60	55°57.90
Hermitage	47°34.40	55°55.80
La Scie	49°58.72	55°37.00
Little Bay Islands	49°38.60	55°45.90
Mary's Harbour	52°18.75	55°48.50
Pinsent's Arm	52°41.80	55°52.15
St. Anthony	51°21.49	55°32.28
St. Lawrence	46°53.50	55°21.35
St. Lewis	52°21.40	55°41.90
Triton	49°33.30	55°34.00
Anchor Point	51°14.00	56°49.80
Charlottetown	52°47.60	56°03.56
Englee	50°44.40	56°06.90
Fleur de Lys	50°06.70	56°07.50
Jackson's Arm	49°51.50	56°43.66
L'Anse au Loup	51°31.30	56°49.60
Cartwright	53°41.95	57°02.15
Cox's Cove	49°08.00	58°04.00
Rigolet	54°11.20	58°24.20
Makkovik	55°05.60	59°10.20
Postville	54°54.40	59°45.60
Hopedale	55°27.20	60°12.35
Nain	56°32.61	61°41.00

2.1 PROJECTS SUBJECT TO CEAA

The disposal of fish offal at sea is a project under the CEAA because it is captured under section 3 of the *Law List Regulations* and section 40 of the *Inclusion List Regulations*. Assessments of disposal of fish offal at sea projects are triggered under Section 5(1) d because Division 3 of Part 7 of the CEPA is used to issue a permit. The scope of the RCSR is being expanded to include loading and transport to the disposal site based on the requirements of CEPA.

2.2 PROJECTS SUBJECT TO REPLACEMENT CLASS SCREENING REPORT

Projects subject to the RCSR include the disposal of fish offal at the locations provided in Table 1 for which a permit or permit amendment is required under Division 3 of Part 7 of the CEPA. Amendments to Table 1 through the addition of new sites will be addressed on a case-by-case basis.

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

Each new site will first be addressed under CEAA and CEPA as part of a stand-alone project prior to consideration of inclusion in Table 1.

2.3 PROJECTS NOT SUBJECT TO THE REPLACEMENT CLASS SCREENING REPORT

The disposal of fish offal at sea at any location, other than those identified in Table 1 is not included within the scope of the RCSR and must undergo an individual environmental assessment. Disposal of degraded fish wastes, wastes from fish considered unsuitable for human consumption on delivery to the processing plant and/or aquaculture industry wastes will not be eligible for consideration under the RCSR. Any emerging issue identified during the CEPA review process that is not addressed in the RCSR will result in the project not being captured by the RCSR and a screening will be conducted. Projects that may adversely affect species at risk or, their habitat, are not eligible for consideration under this RCSR.

3.0 PROJECT CLASS DESCRIPTION

The scope of the project covered by this RCSR involves the disposal of fish offal at the sites identified in Table 1 for which the CEPA site selection and evaluation process has already occurred and a Disposal at Sea permit under CEPA has been issued in the past. This includes handling and loading of fish offal at source; storage on board transportation vessels; transportation to the disposal site; and disposal at the specified site. Most of the projects use simple metal containers for storage and barges or open vessels for transport. Most of the material leaves the plant via a flume, is de-watered with a screw and sump mechanism and flows into the barge. Land transportation is not required. Forklifts are also sometime used. Most barges are discharged via a manually operated door. Existing disposal protocols and standard CEPA permitting conditions dictate how disposal at sea is currently undertaken.

In general, fish offal is waste resulting from industrial fish processing operations that the processor cannot market or use in other ways. Fish offal may consist of flesh, skin, bones, entrails, shells or stickwater. Fish offal can account for 30% to 60% of the landed volume of fish depending on the species. Under CEPA fish wastes may be considered suitable for disposal if the fish received at the plant was fit for human consumption according to national standards and no significant subsequent degradation has occurred. Raw fish considered unsuitable for human consumption on delivery to the processing plant normally ends up in a landfill. Industrial fish processing operations in Newfoundland and Labrador generate waste from both wild stock and aquaculture. As mentioned previously, Environment Canada does not issue permits for aquaculture wastes.

The CEPA permitting process normally takes approximately 120 days and generally involves the submission of a completed application, a review by RODAC (2 months), approval or rejection of the application, permit drafting and approval (3 – 7 days), and submission of the permit to the Canada Gazette for publishing. Following a 30 day period for public comments, disposal operations may begin provided there are no unresolved objections to the project.

Disposal permits include basic information as required under CEPA such as the permittee; the term of the permit or valid dates for loading and disposal operations; the loading and disposal site locations and the route to follow; the equipment and methods to be used; the nature and quantity of the substance to be disposed of, and reporting or monitoring requirements. In addition, the permit

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

includes other requirements and restrictions to effectively control the operation and protect the marine environment, such as restricting the timing of the operation to protect migrating species or defining a specific route for transport equipment to avoid recreational areas.

3.1 NEED FOR AND PURPOSE OF THE PROJECT

In rural Newfoundland and Labrador industrial fish processing is an important part of the local economy and without these operations a majority of communities would not survive. In 2003, total fish landings reached 301, 049 tonnes with an estimated value of \$560 million creating 15200 person years of employment. Fish offal is a by-product of these operations that needs to be accommodated, as a number of fish parts are not marketable or profitable.

3.2 ALTERNATIVES TO THE PROJECT

As a condition of the CEPA permit, applicants are required to explore relevant options for the disposal of fish waste including the reprocessing to fish meal, production of silage to be used as food for domestic animals/aquaculture and in biochemical industry products, and use as fertilizer (i.e. composting) in land farming and reduction. If options to disposal are available an application for disposal at sea will be rejected. Environment Canada has worked in Newfoundland and Labrador to promote alternative methods to manage fish offal. Alternatives to disposal have been considered for each of these disposal sites. The lack of secondary processing facilities, the transportation cost and other expenses related to infrastructure make alternative usage uneconomical.

3.3 TYPICAL SEASONAL SCHEDULING AND DURATION OF PROJECTS

The seasonal scheduling and duration of the project is dependant on the applicant (fish plant operator) and the species processed. Most fish plants in Newfoundland and Labrador are seasonal by nature of the processing license they hold. The harvesting season of species processed in Newfoundland and Labrador are provided in Table 2. Loading locations and durations are variable, however, fish waste may be stored in the disposal boat or barge for a maximum of 96 h (CEPA permit). The disposal duration is typically < 1 h and may occur one to two times daily (1 – 16 tonnes per trip).

Table 2: Harvesting Season of Species Processed in Newfoundland and Labrador

Species	Harvesting Season
American Eel (<i>Anguilla rostrata</i>)	August to November from inshore and inland waters
American Smelt (<i>Osmerus mordax</i>)	September to April from inshore and inland waters
Arctic Char (<i>Salvelinus alpinus</i>)	July to August inshore
Atlantic Salmon (<i>Salmo salar</i>)	June to August inshore Labrador
Bluefin Tuna (<i>Thunnus thynnus</i>)	August to November offshore
Capelin (<i>Mallotus villosus</i>)	May to July inshore
Dogfish Shark (<i>Squalus acanthias</i>)	July to November inshore
Mackerel (<i>Scomber scombrus</i>)	July through October
Swordfish (<i>Xiphias gladius</i>)	July to November offshore
American Plaice (<i>Hippoglossoides platessoides</i>)	Year round offshore, May to October inshore

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

Atlantic Cod (<i>Gadus morhua</i>)	Year round offshore, May to October inshore
Atlantic Halibut (<i>Hippoglossus hippoglossus</i>)	June to August offshore
Atlantic Pollock (<i>Pollachius virens</i>)	Year round offshore, June to October inshore
Greenland Halibut – Turbot (<i>Reinhardtius hippoglossides</i>)	Year round offshore, May to October inshore
Grenadier – Roundnose (<i>Coryphaenoides</i>); Roughhead (<i>Macrourus berlax</i>)	Year round offshore
Haddock (<i>Melanogrammus aeglefinus</i>)	Year round offshore
Hake – Red Hake (<i>Urophycis cuss</i>); White Hake (<i>Uropycis tenuis</i>)	Year round offshore, June to October inshore
Lumpfish (<i>Cyclopterus lumpus</i>)	May to July inshore
Redfish (<i>Sebastes marinus</i> , <i>Sebastes fasciatus</i> , <i>Sebastes mentella</i>)	Year round offshore, May through September inshore
Skate – Thorny (<i>Raja radiate</i>); Smooth (<i>Raja senta</i>)	Year round offshore, May to October inshore
Winter Flounder (<i>Pseudopleuronectes americanus</i>)	Year round offshore, May to October inshore
Witch Flounder (<i>Glyptocephalus cynoglossus</i>)	Year round offshore, May to September inshore
Yellowtail Flounder (<i>Limanda ferruginea</i>)	Year round offshore
Clams – Stimpson Surf Clam (<i>Spisula polynyma</i>)	Year round offshore
Clams - Soft Shell Clam (<i>Mya arenaria</i>)	April to December inshore
Coldwater Shrimp	Year round offshore Labrador waters, from April to November in the Gulf of St. Lawrence and South Coast
Lobster (<i>Homarus americanus</i>)	Late April to July inshore
Scallops – Sea Scallops (<i>Placopecten magellanicus</i>)	Year round on South Coast and southern Grand Banks
Scallops – Icelandic Scallops (<i>Chlamys islandica</i>)	Year round on South Coast and from May to November in remaining areas
Sea Cucumber (<i>Cucumaria frondosa</i>)	May to November inshore, currently by- catch in scallop fishery, but can be harvested directly
Sea Urchins (<i>Strongylocentrotus droebachiensis</i>)	October to April inshore
Snow Crab (<i>Chionoecetes opilio</i>)	May to October
Squid (<i>Illex illecebrosus</i>)	August to November inshore
Whelk (<i>Buccinum undatum</i>)	Year round on South Coast, May to November in northern inshore waters

4.0 ENVIRONMENTAL REVIEW METHODS

The purpose of this section is to detail the methodology used to ensure the potential effect of fish offal disposal at sea activities are addressed in a consistent manner, regardless of the disposal site. To accomplish this, Valued Ecosystem Components (VECs) and Socio-Economic Components (VSCs) are identified and selected through an issues scoping approach. Study boundaries for the environmental assessment have been defined and established for ecological, socio-economic, and

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

spatial purposes. Interactions between project activities and the VECs/VSCs are described for the project and the resulting potential environmental effects of the disposal of fish offal at sea are outlined. Mitigation measures are applied to reduce the potential of environmental effects associated with project activities and the VECs/VSCs. An analysis of residual environmental effects and their significance is completed as well. Effects of the environment on the project and potential cumulative effects are also examined.

4.1 BOUNDARIES

An important aspect of the environmental assessment process is the determination of the study boundaries. A boundary is a function of the extent and duration of potential interaction between the proposed undertaking and a VEC/VSC. Generally, these boundaries are defined by the temporal and spatial characteristics encompassing those periods and areas, during and within which, the VECs/VSCs are likely to interact with, or be influenced by, the project. The environmental assessment boundary for the disposal of fish offal at sea is defined by the spatial and temporal extent of potential disturbances to the physical and chemical characteristics of the habitat, such as water and sediments. Boundaries have been established for the project, for ecological purposes and for socioeconomic purposes.

4.1.1 PROJECT BOUNDARIES

Project boundaries refer to the spatial and temporal extent of project activities, and are dictated primarily by the project specific characteristics (location of disposal sites) indicated in the information on each disposal site. Temporal project boundaries include loading, transporting, and disposal activities and the duration in which fish offal may be present at the disposal site. Operation activities with the presence of the disposal equipment will occur during specific periods at each of the sites, depending on fish processing operations, which can typically occur year round. Spatial project boundaries are defined as the specific site area, which includes the transportation corridor from plant to disposal sites, areas of disposal, and the zones of influence around the disposal site (biological and physical). For cumulative effects assessment purposes, the hydro-geographically linked areas of the disposal site (may be the same) and adjacent waterways (may be the same) are included.

4.1.2 ECOLOGICAL BOUNDARIES

Ecological boundaries are determined by the temporal and spatial scales over which environmental components or populations function. The establishment of temporal ecological boundaries takes into consideration the potential variety of relevant characteristics of environmental components or populations including:

- magnitude, frequency and trends in the natural variation of a population or ecological component;
- the time required for a biological, physical and/or chemical response to an effect to become evident, and
- the time required for a population or ecological system to recover from an effect and return to its pre-impact state.

In dealing with temporal ecological boundaries for impact assessment, there is a need to consider intervals that are biologically meaningful with respect to the life cycle of the species being examined.

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

The time scales that need to be considered in assessing potential environmental effects vary widely among species and environmental components. The degree of a potential impact on a particular species or environmental component is also influenced by other temporal characteristics including:

- the portion of the year that the species or component remains in the proposed project area;
- the timing of sensitive life history periods (such as larval life phase or bird nesting periods) in relation to the schedule or proposed activities; and
- whether the project activity cycle includes a period of dormancy.

Spatial ecological boundaries are determined by the distribution, patterns of movement, and potential zones of interaction between an environmental component and the project. Direct project environment interactions are expected to be localized within the project boundary system and are unlikely to occur beyond this spatial extent. However, effects may also extend beyond the limits of direct potential interactions between the project and the VEC, particularly in the case of migratory species, and these are considered in the assessment. As noted previously, for cumulative effects assessment purposes, the hydro-geographically linked areas of the disposal site (may be the same) and adjacent waterways (may be the same) are included.

4.1.3 SOCIOECONOMIC BOUNDARIES

Socioeconomic boundaries refer to the temporal and spatial scales for economic systems and socioeconomic aspects of the environment, which include:

- the time required for a response to a change in the socioeconomic environment to become evident;
- the time necessary for a response to a project-related effect to become evident; and the time required for the socioeconomic environment to recover from an effect and return to into original state.

It can be difficult to distinguish between changes in the socioeconomic environment which are project related and those which are independent of the implementation of the project. In considering the effects of the project under CEAA, socioeconomic effects are considered only principally as they derive from any change that the project may cause on the environment.

Distinctions are made between the social and economic effects arising from the project itself and those attributable to the effects on the environment. Socioeconomic effects, defined as the direct impacts of a project on existing socioeconomic conditions, unrelated to any change to the environment, are not considered. In this way, the physical operation of a disposal process is considered in context of how the project can change conditions in that environment (resource harvesting activities, navigation). Spatial boundaries are established on the basis of the spatial characteristics of the socio-cultural and economic environment. These take into consideration resource harvesting activities, some of which are specific to particular places (i.e. fisheries resources) and times (i.e. fishing seasons).

4.2 ANALYSIS AND PREDICTION OF SIGNIFICANCE OF RESIDUAL ENVIRONMENTAL EFFECTS

Under CEEA, the significance of environmental effects must be considered. This section provides criteria for evaluating the significance of potentially adverse environmental effects. Analysis of the significance of residual environmental effects is based on several criteria including magnitude, geographic extent, duration, frequency, and reversibility, and the ecological context of the effect (see table below) in accordance with the November 1994 Agency Reference Guide, *Determining Whether a Project is Likely to Cause Significant Adverse Environmental Effects*, and the “Responsible Authorities Guide to the Environmental Assessment Act”. The criteria were assessed using past experience and professional judgement and are combined to determine whether or not an activity’s effect is significant.

Table 3: Rating System Used to Determine the Significance of Residual Environmental Effects

Criteria	Importance Level Rating		
	Negligible (1)	Minor (2)	Major (3)
Magnitude (M)	Negligible levels of disturbance and/or damage (i.e. within natural variation)	Minor levels of disturbance and /or damage (i.e. Temporarily outside range of natural variation)	Major levels of disturbance and/or damage (i.e. Outside range of natural variation)
Geographic Extent (GE)	Limited to loading, transporting and disposal site	Extends beyond the loading, transporting and disposal site, but remains within project boundaries	Extends beyond the project boundaries
Duration of Effect (D)	Less than one day	Days to weeks	A month or longer
Frequency of Effect (F)	Occurs on a monthly basis or less frequently	Occurs on a weekly basis	Occurs on a daily basis or more frequently
Reversibility (R)	Effects reversible over short term without active management	Effects reversible over short term with active management	Effects reversible over extended term with active management or effects are irreversible

These criteria are combined to determine whether or not a residual environmental effect is significant based on the following definitions:

Significant

A residual environmental effect is considered *significant* when it induces frequent, major levels of disturbance and/or damage and when the effects last longer than a month and, extend beyond the project boundary following the application of mitigation measures. It is either reversible with active management over an extended term or irreversible. A *significant* effect would not be consistent with

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

well-defined environmental protection outcomes such as no degradation of shorelines, no loss of fish or aquatic habitat, etc. and as defined would not be tolerated under CEPA.

Not Significant

A residual environmental effect is considered *not significant* when it has infrequent, minor or negligible levels of disturbance and/or damage and when the effects, last less than a week and, are contained within the project boundaries following the application of mitigation measures. An effect that is *not significant* is reversible with or without short-term active management.

4.3 ENVIRONMENTAL SETTING

A description of the environmental setting for each of the disposal sites covered by the RCSR is provided in Appendix A. In general, fish offal disposal sites are located around the coast of Newfoundland and Labrador in dispersive environments that promote biological consumption of the wastes by marine organisms in accordance with CEPA. Disposal sites are selected based on criteria detailed in the “International Maritime Organization (IMO) Specific Guidance for Assessment of Fish Waste, or Material Resulting from Industrial Fish Processing Operations” in accordance with CEPA Part 7 requirements and are selected to promote biological consumption (i.e. consumption of the wastes by marine organisms). Disposal sites are selected based on an understanding of the nature of the seabed, including its topography, geo-chemical and geological characteristics, its biological composition and activity, and prior dumping activities affecting the area; the physical nature of the water column, including temperature, depth, possible existence of a thermocline/pycnocline and how it varies in depth with season and weather conditions, tidal period and orientation of the tidal ellipse, mean direction and velocity of the surface and bottom drifts, velocities of storm-wave induced bottom currents, general wind and wave characteristics, and the average number of storm days per year, suspended matter; and the chemical and biological nature of the water column, including pH, salinity, dissolved oxygen at surface and bottom, chemical and biochemical oxygen demand, nutrients and their various forms and primary productivity. Important amenities, biological features and uses of the sea considered in determining the specific locations of the disposal sites include: the shoreline and bathing beaches; area of beauty or significant cultural or historical importance; areas of special scientific or biological importance, such as sanctuaries; fishing areas; spawning, nursery and recruitment areas; migration routes; seasonal and critical habitats; shipping lanes; military exclusion zones; and engineering uses of the seafloor, including mining, undersea cables, desalination or energy conversion sites.

4.4 ISSUES SCOPING AND VALUED ENVIRONMENTAL COMPONENTS

This section describes the process used to identify Valued Environmental and Socio-Economic Components (VECs/VSCs), which are components of the environment valued by society and upon which the assessment focused. The selection of VECs/VSCs for this assessment involved issues scoping and pathway analysis a process that has previously been undertaken for each of the identified disposal sites during the initial site selection and CEPA permitting process.

The first step in the selection of VECs/VSCs involved issues scoping to identify Environmental and Socio-Economic Components of Concern (ECCs), and was based on concerns expressed by various stakeholders, non-government organizations, scientific community and government departments and agencies; consideration of available literature and reference materials; and previous assessment

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

experience. As a condition of the CEPA permit, applicants must contain proof of publication of a “Notice of Intent” in a newspaper of general circulation in the vicinity of the proposed loading and disposal activities to satisfy Section 127(2)(d) of CEPA. To those in the vicinity, the notice explains the planned disposal activities, the intent of the project, as well as its duration and location. Comments received during the notification process are considered in the permitting process and are used to help identify VECs/VSCs. The initial permit application for each of the sites covered by this RCSR has been vetted through members of RODAC for review and comment. Annual renewals have also been reviewed internally to Environment Canada and by DFO and Transport Canada. Every five years the complete RODAC review is repeated.

The second step in the selection of VECs/VSCs, involved examination of the issues and concerns identified through issues scoping to assess the pathways (or linkages) by which the proposed project activities may affect each ECC. There is no pathway of concern for a number of the ECCs, including those components avoided as part of the CEPA site selection process. Therefore, these ECCs are not considered further in the assessment. Initial site selection is based on a set of criteria detailed in the International Maritime Organization (IMO) “Guidelines for the Assessment of Wastes or Other Matter that May be Considered for Dumping”. Shoreline and bathing beaches; areas of beauty or significant cultural or historical importance; areas of special scientific or biological importance, such as sanctuaries; fishing areas (i.e. lobster fishing grounds); spawning, nursery and recruitment areas; migration routes; seasonal and critical habitat; shipping lanes; military exclusion zones; and engineering uses of the seafloor, including mining, undersea cables, desalination or energy conversion sites, are considered and avoided when selecting a site. This process focuses the assessment on those VECs/VSCs where significant adverse or beneficial effects may potentially arise as a result of the proposed project.

Table 4 summarizes the rationale for exclusion/inclusion of ECCs as VECs/VSCs. Where a clear linkage or pathway between ECCs and the proposed activities can be identified, and potential effects may be a concern, these components become the VECs/VSCs on which the assessment focuses. The VECs/VSCs most likely to be affected by the project as described include: Fish and Marine Habitat (including the benthic community); Marine Mammals; Birds and Coastal Habitat; Hydrodynamics, ice, and sedimentology; and Socio-economic factors (i.e. recreational activities, commercial activities, aesthetic and scenic resources and quality of life).

Table 4: Issues Scoping/Pathway Analysis Summary Matrix – Valued Environmental and Socio-Economic Components of Concern

Environmental/Socio-Economic Component of Concern (ECC)	Pathway of Concern		VEC/VSC		Rational for Inclusion/Exclusion as VEC/VSC
	Yes	No	Yes	No	
<i>Biophysical Setting</i>					
Fish and Marine Habitat (Water Quality, Substrate or Sediment Quality)	X		X		Protected by regulation
Marine Mammals	X		X		Concern identified
Marine Birds	X		X		Concern identified

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

Coastal Habitat	X		X		Concern identified
Species at Risk	X			X	Avoided during site selection
Change in Hydrodynamics	X		X		Concern identified
<i>Socio-Economic Setting</i>					
Odours	X		X		Concern identified
Commercial/Recreational and Aboriginal Fisheries	X		X		Avoided during site selection; commercial fishers consulted during site selection.
Flies	X		X		Concern identified
Archaeological Resources		X		X	Avoided during site selection. Dispersive disposal sites will not permanently alter or destroy artefacts.
Environmental Significant or Protected Areas		X		X	Avoided during site selection

4.4 ANALYSIS OF ENVIRONMENTAL EFFECTS ON SELECTED VECS/VSCS

The methodology used in this assessment is based on those environmental components of greatest concern. As a result potential environmental effects associated with project activities (loading, transporting, immersion and presence of the fish offal, and accidents/malfunctions) are described throughout this section and summarized in Table 5. Most of the potential environmental effects have previously been addressed during the CEPA site selection and permitting process that seeks to predict the fate of disposed material through the development of an Impact Hypothesis. Minor environmental impacts have occurred in the past, such as waste washing up on shorelines, largely due to improper disposal methods. These effects are readily manageable through the required disposal protocol that includes discharging waste from the equipment or vessel while steaming within 300 m of the approved disposal site in a manner that promotes the greatest degree of dispersion (Letter 8). All vessels are required to operate at maximum speed while discharging offal. These disposal protocols and permitting requirements are included as a part of the required mitigation detailed in Table 5. Fuel/oil spills may occur in association with fish offal loading and transportation activities. Other hazardous products associated with operations, such as hydraulic fluids, lubricating oil, and solvents will be used in relatively small quantities. An accidental spill or unplanned event could occur as the result of a leak in a fuel storage unit, breach of hoses/lines on equipment, or if equipment is overturned. Accidental spills or unplanned events related to hazardous materials can be damaging to marine wildlife and habitat as well as birds and coastal habitats and are addressed below.

Fish offal Disposal at Sea permits are subject to Environment Canada’s “Compliance and Enforcement Policy for the *Canadian Environmental Protection Act, 1999*” that includes measures to promote compliance, inspection and investigation procedures and responses to alleged violations protocols. Disposal operations are inspected on a sample basis. Ocean Disposal Permits are subject to inspection and enforcement staff have periodically investigated and prosecuted offenders. A 1996 compliance study was completed on six regulations under the *CEPA*, including Disposal at Sea. Overall compliance was found to be 97 percent.

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

4.4.1 MARINE MAMMALS

The transportation of fish offal to the disposal site could potentially disturb marine mammals (i.e. whales or seals in the area). However, given that marine mammals can avoid disturbed areas and the trips made for transporting fish waste are not frequent (1 or 2 trips per day on a seasonal basis) and typically less than that expected from commercial fish activities that occur in the area, this impact will generally be negligible. The immersion and presence of fish offal is not likely to have direct adverse effects on marine organisms and the waste loadings have been shown to be beneficial to detritivores.

4.4.2 FISH AND MARINE HABITAT

Transporting fish offal by boat or barge is not likely to have an impact on fish or marine habitat. However, the immersion and presence of fish offal could potentially have an impact on fish and marine habitat at the dumping site. In some cases, a net decline in macrofauna distribution at dumping sites has been noted due to smothering and an increase in opportunistic species such as polychaete *Capitella capitata* (Fudge 1989). If fish waste is dumped at a site that does not have strong currents, it is likely that it will not be dispersed upon discharge and will therefore accumulate on the ocean floor. The thickness limits its assimilation into the ecosystem. Its slow rate of decomposition, which can sometimes take several years, results in a subsequent increase in biological oxygen demand and the formation of a black ooze. Due to the lack of oxygen, the ooze eventually becomes a waste that cannot be used or assimilated by detritivores (Fudge, 1989). In some areas, the black ooze is covered with a thin film of white scum. The scum is reflective and is probably composed of sulphur-oxidizing and other bacteria associated with partly degraded organic waste.

4.4.3 MARINE BIRDS

It has been well documented that anthropogenic food sources, including fisheries waste, attract and are consumed by some marine birds, most notably gulls. These food sources may lead to local increases in gull populations, especially near breeding colonies, creating artificially large populations. Marine bird breeding colonies contain many species, some of which are vulnerable to predation from gulls. Specific to Newfoundland, gulls have been shown to take significant numbers of eggs, chicks and adults of species such as Leach's Storm-Petrel (Stenhouse et al. 2000) and Black-legged Kittiwake (Massaro et al. 2000). Although gulls and other marine birds have always bred in association with one another, artificially high gull populations have significant impacts on other species.

Concentrations of marine birds may also be disturbed by the ships or barges transporting the fish offal to the disposal site.

4.4.4 COASTAL HABITAT

Coastal habitats could be impacted in situations where a large volume of fish offal is washed ashore by currents. The decomposition of the organic matter, combined with the presence of gulls attracted by this source of food, could have an impact on the environment.

4.4.5 HYDRODYNAMICS, ICE, AND SEDIMENTOLOGY

Loading and transporting fish offal to the dumping site is not likely to have an impact on hydrodynamic or sedimentological conditions. The disposal of fish offal is not likely to have an

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

impact on the bathymetric, hydrodynamic or sedimentological conditions at the dumping site, particularly if the site is characterized by good dispersal conditions. The waste that is dumped will occupy a very limited area for a period of time and should be quickly assimilated by the ecosystem. In non-dispersive environments, however, bathymetric conditions can be affected at the disposal site. Water depths can be reduced and wave behaviour can be altered.

4.4.6 RECREATIONAL ACTIVITIES

During the loading of fish offal, activities on the dock (fishing, recreational boating, etc.) could be disturbed by congestion on the dock, restricted access to docking areas, and associated odours. The significance of the impact would depend on the duration of the loading activities, the level of congestion on the dock and its approaches and the duration for which the fish waste is stored on the dock. Transportation equipment could interfere with recreational activities (water sports, boating) carried out in the vicinity as a result of increased noise and congestion. In situations where fish waste remains floating on the surface or washes up on shore there could be an impact on recreational activities carried out in, on or near the water (personal watercraft use, diving, sport fishing, hunting, etc.). Floating fish waste could also increase the presence of gulls which could also be a deterrent for recreation users. The decomposition of fish waste may have impacts on the recreational environment, including odour problems, aesthetic problems and poor sanitary conditions at the sites. In addition, if fish waste were to accumulate along the shoreline it may promote the proliferation of bacteria and parasites and attract rodents and scavenger birds (gulls, etc.). All of the above factors could detract from the recreational value of the area.

4.4.7 COMMERCIAL ACTIVITIES

The presence and operation of loading equipment at the dock (barges, ships) could cause temporary problems for commercial fishing activities (i.e. docking, unloading of catches, refuelling, etc.) due to a total or partial restriction on access to the dock, approaches, and docking areas. The transportation equipment may disturb commercial activities (fishing, water transportation, etc.) carried out in the vicinity (congestion of waterways). The immersion and presence of fish offal around the dumping site could also have an impact on fishing and aquacultural activities as the fixed gear or aquacultural equipment of fishermen and aquacultural producers could become fouled by accumulations of fish waste.

4.4.8 AESTHETIC AND SCENIC RESOURCES

Transporting fish offal by boat or barge is not likely to have an impact on aesthetic and scenic resources. However, the presence of fish waste floating on the surface or washing up on shore as described in the situations above could have an impact on the aesthetic quality of the water and the landscape in general. Decomposition of the waste may also have an impact on the quality of the site, including odour problems, aesthetic problems and sanitary conditions at the site. In addition, accumulation of fish waste on shore may promote the proliferation of bacteria and parasites and attract rodents. These factors will likely detract from the aesthetic value of the sites.

4.4.9 QUALITY OF LIFE

The loading and transportation of fish offal may have an impact on the quality of life of nearby

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

residents, due to the noise of the vehicles, as well as the generation of odours during loading of the barges and storage on the dock. The storage of fish waste could also attract vermin and scavengers such as gulls. The decomposition of fish waste washed up on shore could have impacts on quality of life, including odour problems, aesthetic problems and poor sanitary conditions at the site. The accumulation of fish waste on the shore can promote the proliferation of bacteria and parasites and attract rodents and scavenger birds (gulls).

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

Table 5: Potential Environmental Effects (Biophysical & Socio-Economic) Summary and Mitigation

Valued Environmental or Socio-Economic Component (VEC/VSC)	Project Phase	Potential Effect (s)	Mitigation Required
Marine Mammals	Transporting	The transportation of fish waste to the dumping site could disturb marine mammals. However, given that marine mammals can avoid disturbed areas and the trips made for transporting fish waste are few and far between (1 or 2 trips per day on a seasonal basis), this impact will generally be negligible.	None required.
Fish and Marine Habitat	Immersion and Presence	Disposal of fish waste may have a direct effect on organisms (decline in macrofauna) due to smothering. If fish waste is dumped at a site that does not have strong currents, it is likely that it will not be dispersed upon discharge and will therefore accumulate on the ocean potentially increasing biological oxygen demand, and increasing inorganic chemical levels (i.e. lead, mercury) and the bacteria associated with partly degraded organic waste.	<p>Disposal site has been selected to promote dispersal and assimilation of the waste in accordance with CEPA. Important activities for aquatic organisms (i.e. spawning periods and grounds, nursery areas) have been avoided or taken into account in establishing permit conditions. Adhere to the ocean disposal protocol and permit conditions. Including:</p> <ul style="list-style-type: none"> ▪ discharge the waste in areas where the prevailing currents are offshore currents, which promote dispersal of the waste and prevent it from being carried back to shore; ▪ for large quantities of waste, dump over a larger area or use a second site to avoid accumulation;

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

Valued Environmental or Socio-Economic Component (VEC/VSC)	Project Phase	Potential Effect (s)	Mitigation Required
			<ul style="list-style-type: none"> ▪ dump fish waste while the vessel is moving to promote dispersal; when discharging from barges with more than one pocket, dumping should be carried out one pocket at a time, with a pause of several minutes between pockets to promote dispersal.
	Malfunctions and Accidental Events	Degradation of marine habitat and adverse effects on flora and fauna due to release of potentially hazardous chemicals.	<ul style="list-style-type: none"> ▪ Routine maintenance and inspections to ensure equipment is kept in good working order will reduce the potential for leakage of lubricants and fuel. ▪ All spills or leaks should be promptly contained, cleaned up and reported to the 24 hour environmental emergencies reporting system (1-800-565-1633) in accordance with CEPA permit conditions.
Marine Birds	Loading, Transporting, and Immersion and Presence	The presence of fish offal attracts gulls and lead to artificially high local populations. Artificially high populations of gull will have significant negative impacts on other marine bird species.	<ul style="list-style-type: none"> ▪ Ensure fish offal is covered and inaccessible to birds at all project stages.
	Transporting	During the transportation of the fish offal to the dumping site, concentrations of marine birds may be disturbed.	Important bird gathering areas have been avoided or taken into account in establishing CEPA permitting conditions (i.e. At the Bay de Verde disposal site between mid September

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

Valued Environmental or Socio-Economic Component (VEC/VSC)	Project Phase	Potential Effect (s)	Mitigation Required
			and mid October disposal of offal is to be restricted to daylight hours to minimize the effect on Leach’s Storm Petrels).
	Malfunctions and Accidental Events	Adverse effects on birds due to release of potentially hazardous chemicals.	<ul style="list-style-type: none"> ▪ Routine maintenance and inspections to ensure equipment is kept in good working order will reduce the potential for leakage of lubricants and fuel. <p>All spills or leaks should be promptly contained, cleaned up and reported to the 24 hour environmental emergencies reporting system (1-800-565-1633) in accordance with CEPA permit conditions</p>
Coastal Habitat	Immersion and Presence	Coastal habitats could be disturbed by offal washing ashore. The decomposition of the organic matter, combined with the presence of gulls attracted by this source of food, could have an impact on the environment.	<p>Adhere to the ocean disposal protocol and permit conditions. Including:</p> <ul style="list-style-type: none"> ▪ Dump the waste in sectors where the currents are such that the waste is carried offshore. ▪ Retrieve any fish offal lost before reaching the disposal site. ▪ Cover offal will a net to prevent access by gulls.
	Malfunctions and Accidental Events	Degradation of coastal habitat due to release of potentially hazardous chemicals.	<ul style="list-style-type: none"> ▪ Routine maintenance and inspections to ensure equipment is kept in good

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

Valued Environmental or Socio-Economic Component (VEC/VSC)	Project Phase	Potential Effect (s)	Mitigation Required
			<p>working order will reduce the potential for leakage of lubricants and fuel.</p> <ul style="list-style-type: none"> ▪ All spills or leaks should be promptly contained, cleaned up and reported to the 24 hour environmental emergencies reporting system (1-800-565-1633) in accordance with CEPA permit conditions.
Hydrodynamics, Ice and Sedimentology	Immersion and Presence	In non-dispersive environments bathymetric conditions can be affected at the disposal site. Water depths can be reduced and wave behaviour can be altered.	<p>Disposal site has been selected to promote dispersal and assimilation of the waste (i.e. prevailing currents are offshore, which promote dispersal of the waste and prevent it from being carried back to shore) in accordance with CEPA. Adhere to the ocean disposal protocol and permit conditions. Including:</p> <ul style="list-style-type: none"> ▪ for large quantities of waste, dump over a larger area or use a second site to avoid accumulation; ▪ dump fish waste while the vessel is moving to promote dispersal; when discharging from barges with more than one pocket, dumping should be carried out one pocket at a time, with a pause of several minutes between

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

Valued Environmental or Socio-Economic Component (VEC/VSC)	Project Phase	Potential Effect (s)	Mitigation Required
			<p>pockets to promote dispersal.</p> <ul style="list-style-type: none"> ▪ at sites (i.e. Cape Broyle) where water depth is less than 35 m, measures of depth must be obtained and reported near the time of the first disposal and then every two months during the disposal activities to ensure depths are maintained.
Recreational Activities	Loading	<p>During loading, restricted access to the dock, congestion, and odours, could disturb recreational activities (i.e. boating, fishing, etc.).</p> <p>Due to the commercial nature of the loading sites (at or adjacent to fish process operations), recreational activities at the sites are limited or non-existent. Offal loading and disposal is simply one component of the overall fish processing operation and cannot be distinguished from other components. Impacts on recreational activities are not expected.</p>	None required.
	Transporting	The transportation equipment may disturb recreational activities (water sports, boating) carried out in the vicinity (noise and congestion).	<ul style="list-style-type: none"> • Recreational activities have been avoided during the CEPA site selection process.
	Immersion and Presence	The presence of fish waste floating on the surface or washed up on shore is likely to have an impact on recreational activities	Disposal site has been selected to promote dispersal and assimilation of the waste (i.e. prevailing currents are

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

Valued Environmental or Socio-Economic Component (VEC/VSC)	Project Phase	Potential Effect (s)	Mitigation Required
		<p>carried out in, on or near the water (personal watercraft use, diving, sport fishing, hunting, etc.). The presence of gulls would be likely. Decomposing fish waste will create odours, aesthetic problems and poor sanitary conditions at the sites. The fish waste may also promote the proliferation of bacteria and parasites and attract rodents and scavengers.</p>	<p>offshore, which promote dispersal of the waste and prevent it from being carried back to shore) in accordance with CEPA. Adhere to the ocean disposal protocol and permit conditions. Including:</p> <ul style="list-style-type: none"> ▪ for large quantities of waste, dump over a larger area or use a second site to avoid accumulation; ▪ dump fish waste while the vessel is moving to promote dispersal; when discharging from barges with more than one pocket, dumping should be carried out one pocket at a time, with a pause of several minutes between pockets to promote dispersal. ▪ dispose of fish waste within 24 hours of catching to minimize bloating of the swim bladder (phenomenon which causes fish waste to float); ▪ where fish cannot be disposed of quickly after catching, store it in a manner which prevents or reduces bloating and decomposition (i.e. by grinding).
Commercial Activities	Loading	The presence and operation of equipment at	None required.

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

Valued Environmental or Socio-Economic Component (VEC/VSC)	Project Phase	Potential Effect (s)	Mitigation Required
		<p>the dock could cause temporary problems for commercial fishing activities (i.e. docking, unloading of catches, refuelling, etc.).</p> <p>Offal loading and disposal will occur at or adjacent to commercial fish processing facilities designed for these types of activities. Disposal is simply one component of the overall fish processing operation that cannot be distinguished from other components. Impacts on commercial activities are not expected.</p>	
	Transporting	Transporting may disturb commercial activities (fishing, water transportation, etc).	<ul style="list-style-type: none"> • Commercial activity areas have been avoided or taken into account in establishing permit conditions (i.e. time restraints).
	Immersion and Presence	Fish offal fouling of fixed fishing or aquacultural gear.	<ul style="list-style-type: none"> • Commercial activities have been avoided or taken into account in establishing permit conditions. Fishing grounds have been avoided.
Aesthetic and Scenic Resources	Immersion and Presence	The presence of fish waste floating on the surface and washed up on shore, and the attraction of scavengers, the proliferation of bacteria and parasites, as well as the odours associated with waste decomposition will likely distract from the aesthetic value of the area.	Disposal site has been selected to promote dispersal and assimilation of the waste (i.e. prevailing currents are offshore, which promote dispersal of the waste and prevent it from being carried back to shore) in accordance with CEPA. Adhere to the ocean disposal protocol and permit conditions. Including:

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

Valued Environmental or Socio-Economic Component (VEC/VSC)	Project Phase	Potential Effect (s)	Mitigation Required
			<ul style="list-style-type: none"> ▪ For large quantities of waste, dump over a larger area or use a second site to avoid accumulation; • Dump fish waste while the vessel is moving to promote dispersal; when discharging from barges with more than one pocket, dumping should be carried out one pocket at a time, with a pause of several minutes between pockets to promote dispersal.
Quality of Life	Loading and Transporting	The loading and transportation of fish offal are likely to have an impact on the quality of life of nearby residents, due to the noise of the vehicles and the odours and scavengers (gulls) associated with the waste.	<p>Minimize the duration of storage at loading areas in accordance with CEPA permitting requirements. Including:</p> <ul style="list-style-type: none"> ▪ Cover offal with a net to prevent access by gulls.
	Immersion and Presence	The decomposition of fish waste washed up on shore could have impacts on quality of life, including odour problems, aesthetic problems and poor sanitary conditions at the site as well as the proliferation of bacteria and parasites and the attraction of rodents and scavenger birds (gulls).	<p>Minimize the quantities of floating waste as per CEPA permitting requirements. Including:</p> <ul style="list-style-type: none"> ▪ dispose of fish waste within 24 hours of catching to minimize bloating of the swim bladder (phenomenon which causes fish waste to float); ▪ where fish cannot be disposed of quickly after catching, store it in a manner which prevents or reduces bloating and decomposition (i.e. by grinding).

4.4 EVALUATION OF RESIDUAL ENVIRONMENTAL EFFECTS

Following the application of mitigation measures, residual environmental effects are not significant based on the criteria used to determine significance described in Section 4.5 above. As shown in Table 4.3 and discussed below, the majority of criteria are negligible for each project activity and associated VEC.

4.5.1 MARINE MAMMALS

The transportation of fish offal to the disposal site could disturb marine mammals (i.e. whales or seals in the area). However, given that marine mammals can avoid disturbed areas and the trips made for transporting fish waste are infrequent (1 or 2 trips per day on a seasonal basis), this impact will generally be negligible.

4.5.2 FISH AND MARINE HABITAT

The accumulation of fish offal in non-dispersive environments does have the potential to impact fish and marine habitat caused by smothering and the reduction in macrofauna distribution. However, given the CEPA site selection process that avoids sensitive or critical habitat and ensures the selection of a dispersive environment, with the implementation of the required disposal protocol any residual impacts will be of short duration, small magnitude and highly reversible. Therefore, residual impacts on fish and marine habitat are considered to be non-significant.

4.5.3 MARINE BIRDS

Ensuring fish offal is covered and inaccessible to marine birds during all project phases and given that disposal sites were selected to avoid important gathering areas and critical coastal habitat the residual impacts to marine birds are considered non-significant with the implementation of the required permitting conditions (i.e. time constraints).

4.5.4 COASTAL HABITAT

Any impacts as a result of offal washing up on shore will be localized, of short duration and highly reversible, therefore the impacts on coastal habitat is considered non-significant.

4.5.5 HYDRODYNAMICS, ICE, AND SEDIMENTOLOGY

The accumulation of fish offal in non-dispersive environments does have the potential to change the bathymetric conditions in the vicinity of the dump site. However, in accordance with CEPA, disposal sites have been selected to promote dispersal and assimilation of the waste (i.e. prevailing currents are offshore, which promote dispersal of the waste and prevent it from being carried back to shore). Adhere to the ocean disposal protocol and permit conditions (i.e. depth monitoring) will ensure the impacts of fish offal disposal on hydrodynamic conditions are non-significant.

4.5.6 RECREATIONAL ACTIVITIES

The impact of fish offal loading and transporting on recreational activities will be minor even negligible considering activities will occur at commercial facilities designated for these activities.

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

Recreational use of the facilities and surrounding areas are limited. The CEPA site selection process has avoided areas of recreational activities. This in conjunction with the implementation of the offal disposal protocol and permitting conditions will ensure any impact on recreational activities as a result of floating wastes, and associated odours, gulls, etc. are localized, of short duration, and highly reversible, and therefore non-significant.

4.5.7 COMMERCIAL ACTIVITIES

The impact of fish offal loading activities will be negligible considering activities will occur at commercial processing facilities designed for these types of activities. Disposal is simply one component of the overall fish processing operation that cannot be distinguished from other components. The CEPA site selection process and permitting requirements will ensure commercial activities are avoided with any residual impacts being non-significant. The CEPA site selection process that ensures a dispersal environment and the subsequent disposal protocol will ensure that any residual impacts as a result of fish offal fouling fishing or aquaculture gear is localized and reversible and as a result non-significant.

4.5.8 AESTHETIC AND SCENIC RESOURCES

The impact of loading and transporting fish off on aesthetic and scenic resources will be negligible. The CEPA site selection and disposal protocol will ensure will ensure any residual impacts on aesthetic and scenic resources as a result of floating wastes, and associated odours, gulls, etc. are localized, of short duration, and reversible, and as a result considered non-significant

4.5.9 QUALITY OF LIFE

The CEPA permitting requirement that minimizes the duration of storage at loading areas will ensure that the impact of loading and transporting fish offal on quality of life will be negligible. The CEPA site selection process and disposal protocol that ensures dispersion will ensure potential impacts of waste washing up on shore as a result are localized and of short duration. The residual impacts are considered to be insignificant.

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

Table 6: Residual Environmental Effects Across all Project Phases for each Valued Environmental Component (VEC) and Valued Socio-Economic Component (VSC) Following the Application of Mitigation Measures

VEC/VSC	Project Phase	Residual Environmental Effect	M	GE	F	R	D	S/NS
Marine Mammals	Transporting	None						
Fish and Marine Habitat	Disposal	Minor, localized, disruption of habitat (i.e. decline in macrofauna)	2	1	N/A	R	3	NS
	Malfunctions and Accidental Events	None						
Marine Birds	Loading	None						
	Transporting	Disturbance to marine birds	1	1	3	R	1	NS
	Disposal	None						
	Malfunctions and Accidental Events	None						
Coastal Habitat	Disposal	Temporary destruction of coastal habitat	1	2	1	R	2	NS
	Malfunctions and Accidental Events	None						
Hydrodynamics, Ice and Sedimentology	Disposal	Minor changes in bathymetric conditions	1	1	N/A	R	2	NS
Recreational Activities	Loading	None						
	Transporting	None						
	Disposal	Potential for some temporary destruction of recreational areas (i.e. beaches)	2	2	1	R	2	NS
Commercial Activities	Loading	None						
	Transporting	None	1	1	1	R	1	NS
	Disposal	Potential for minor fouling of fishing gear	1	1	1	R	1	NS
Aesthetic and Scenic Resources	Disposal	Potential for some minor distraction from the aesthetic value of an area	1	1	1	R	1	NS
Quality of Life	Loading	None						
	Transporting	None						
	Disposal	Potential for some minor disturbance to quality of life	1	1	1	R	1	NS

M = Magnitude; GE = Geographic Extent; F = Frequency; R = Reversibility; D = Duration of Effect; and S/NS = Significant/Non-Significant

4.5 EFFECTS OF THE ENVIRONMENT ON THE PROJECT

Potential effects of the environment on project activities are weather related. Heavy winds or abnormal wind directions could result in fish offal being directed onshore with potential impacts on coastal environments, recreational activities, and quality of life. In accordance with CEPA permit conditions weather conditions are to be assessed on a daily basis to determine the potential risk of climate on disposal activities. The proponent is also required to consult EC's local forecast at <http://www.weatheroffice.ec.gc.ca/> so that the disposal activities can be scheduled at an appropriate time. With regard to storm surges, advisory and warning bulletins are now being issued by EC when there is a potential for or likelihood of heavy snowfall and high wind events. Such bulletins will typically include a meteorological description of the event, information on areas most likely to be affected, a discussion of complicating factors such as wind, amount of snow, and an assessment of the severity of the event. Wind, fog, snow, ice, etc. may also prevent barges and transportation equipment from accessing the disposal site. The proponent is required to develop a contingency plan in the event that weather conditions prevent access to disposal sites for an extended period. Since interactions between the VECs/VSCs and environment are minimal and easily mitigable, it is unlikely that a period of unfavourable weather conditions will result in residual environmental effects.

4.7 CUMULATIVE EFFECTS

CEAA requires that the assessment of potential environmental effects also consider the potential of cumulative environmental effects. Cumulative environmental effects are defined as “changes to the environment that are caused by an action in combination with other past, present and future human activities” (*CEAA*, 1999). Cumulative effects can occur when environmental effects take place so frequently in time or so densely in space that the effects of individual impacts cannot be assimilated. For example, an impact considered minor within the framework of a project might become more significant if the analysis of the other activities indicates that the VEC/VSC is already affected, or could be affected, in different ways.

Under *CEAA*, the identification of likely future projects takes into consideration projects that are certain (i.e. approved, under regulatory review, or officially announced to regulatory agencies) and reasonably foreseeable (i.e. identified in a development plan that is approved or under review, or conditional upon approval of a development plan that is under review)(*CEAA* 1999). Hypothetical actions (i.e. conjectural or discussed on a conceptual basis) are not considered (*CEAA* 1999).

Many of the potential effects associated with disposal of fish offal at sea are short-lived, localized, and reversible. Their capacity to act in cumulative manner is minimal. Also disposal at sea activities are controlled under permit so there is no interaction with other activities that could produce a cumulative effect (i.e. located/scheduled outside navigational channels, fishing areas, etc. where interactions could otherwise occur). However, with routinely scheduled disposal of fish offal at approved disposal sites (annual permits issued year after year) the potential for fish waste to accumulate merits attention given potential effects on birds, fish and marine habitat. Although feasible alternative uses of fish offal (i.e. fish meal, etc) continue to be investigated and promoted and it is expected that the need for disposal of fish offal at sea will decrease over time.

If fish offal is not dispersed or assimilated by the ecosystem, the consequence could be smothering, a decline in macrofauna and a degradation of habitat. Fish offal accumulation also slows the rate of decomposition, resulting in the formation of a black ooze and the destruction of aquatic habitats, as

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

described in Section 4.4.2 above. However, accumulations of fish offal are not expected to occur based on permit conditions and implementation of mitigation measures described in the RCSR. In addition, the seasonal natural of the disposal activities allows time for the sites to recover. For these reasons, the adverse cumulative environmental effects on fish and marine habitats are not expected to be significant.

Seabirds (i.e. gulls) are estimated to consume about half of all fish offal disposed at sea. This material provides a source of food for scavenging seabirds and is a likely cause of some population increases. This population increase results in competition with other species. A decline in the tern population in eastern North America is due in part to competition with gulls. Fish offal accounts for less than 10% of food consumed by scavenging species and is unlikely to lead to larger populations of scavenging species. As a result the adverse cumulative environmental effects on bird populations are not significant.

4.8 MONITORING

In the case of fish offal disposal at sea, project-specific follow-up programs are not typically required nor conducted. In general, fish offal disposal site monitoring is used to verify that permit conditions have been satisfied and that scientific assumptions made during the permit review and site selection process were correct and sufficient to protect the environment. The impact hypothesis derived during the CEPA permitting process constitute the logical foundation for any subsequent monitoring. An unfavorable result can result in the disposal site being moved.

Monitoring activities focused on an evaluation of dissolved oxygen levels, sediment quality, macrofauna distribution and abundance, as well as contaminant levels in sediments have been undertaken at a number of disposal sites (i.e. Fogo, Witless Bay, Anchor Point, Little Bay Islands, and Fleur de Lys) over the past number of years. A Fogo Harbour study conducted in 1996 (JWEL 1996) concluded that offal dumping has had relatively minor effects concentrated within a small area. Particularly, offal disposal was reported to have had a smothering effect that had eliminated algal cover and sessile filter feeders such as *P. magenanicus*, *M. edulis*, and *M. Modiolus*. As a result of this conclusion it was decided to move the site farther north and closer to the harbour mouth, where dispersion effects would be more pronounced. The results of a 1996 study (LGL 1997) conducted at disposal sites in Witless Bay, Anchor Point, Little Bay Islands, and Fleur de Lys revealed all four sites are effective in dispersing offal and no impacts were observed. Organic carbon, inorganic carbon, and volatile solids levels were low (< 1%) and concentrations of heavy metals, arsenic, total PCBs, and total PAHs were all below Canadian Sediment Quality Guidelines for the Protection of Aquatic Life. Dissolved oxygen levels in sampled bottom water were all above 11 mg/l, indicating well-oxygenated conditions. However, study revealed suspected illegal dumping at Anchor Point and Witless Bay. Appropriate action has been taken.

5.0 ROLES AND RESPONSIBILITIES

Environment Canada is the sole responsible authority involved in the RCSR. Federal authorities are Department of Fisheries and Oceans and Transport Canada. Environment Canada will be responsible for determining whether a project fits within the class and for recording the number of assessments conducted under the RCSR and updating the CEAR as described in Section 1.5. Environment Canada will provide a list of the mitigation required under the RCSR to the proponent. The proponent will be responsible for implementing the described mitigation as outlined in the disposal permit. Environment

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

Canada will be responsible for reviewing and amending the report as described in Section 6. Environment Canada will also continue to conduct periodic inspections and monitoring of disposal at sea activities in accordance with CEPA, and ensure that environmental protection objectives are being respected. The CEPA assessment process remains in effect and EC will continue to consult the Regional Ocean Disposal Advisory Committee (RODAC) as appropriate prior to the issuance of every permit. Any emerging issues not addressed in the RCSR will result in the project being 'kicked out' of the class and a project-specific CEAA screening will ensue.

5.1 PROCEDURES FOR AMENDING THE REPLACEMENT CLASS SCREENING REPORT

The purpose of an amending procedure is to allow the modification of the RCSR after experience has been gained with its operation and effectiveness. The reasons for such modification may include:

- clarification of ambiguous areas of document and procedures;
- streamlining or modifying the planning process in areas where problems may have arisen;
- minor modifications and revisions to the scope of assessment to reflect new or changed regulatory requirements, policies or standards; and
- new procedures and environmental mitigation practices that have been developed over time.

The responsible authority will notify the Agency in writing of its interest to amend the RCSR. It will discuss the proposed amendments with the Agency and affected federal government departments and may invite comment from stakeholders and the public on the proposed changes. The responsible authority will then submit the amended RCSR to the Agency, along with a request that the Agency amend the RCSR and a statement providing a rationale for the amendment.

The Agency may amend the RCSR without changing the declaration period if the changes:

- are minor;
- represent editorial changes intended to clarify or improve the screening process;
- do not materially alter the scope of the assessment required for these projects;
- include a new site that has been previously assessed under CEAA and CEPA prior to inclusion in the RCSR; and
- do not reflect new or changed regulatory requirements, policies or standards.

The Agency may initiate a new declaration for the RCSR for the remaining balance of the original declaration period or for a new declaration period if the changes:

- are considered to be substantial; or
- represent modifications or the scope of the assessment required for these projects.

Disposal of Fish Offal at Sea – Replacement Class Screening Report (Third Draft)

6.0 REFERENCES

Andrews, Shelley and Wadman, Rick. (2001). *Alternative Uses of Fish Discards in Newfoundland and Labrador*. Environment Canada, Environmental Protection Services, 37 p + appendices.

Barrie, John D. (1985). *Study of fish offal dumping site in Fogo Harbour, Newfoundland*. Unpublished report by LGL Limited Environmental Research Associates, for Environmental Protection Services, St. John's, NL, 30 p. + appendices.

Chevrier, A. and Topping, P.A. (1998). *National Guidelines for Monitoring Dredged and Excavated Material at Ocean Disposal Sites*. Environment Canada, Marine Environment Division, 27 p.

Fudge, S. and Associates Limited (1989). *Assessment of the impact of two fish offal marine disposal sites in Newfoundland*. For Environment Canada, Conservation and Protection, St. John's, NL, 28 p.

Jacques Whitford Environment Limited (JWEL). (1996). *Monitoring Report for Gurry Ground Survey Fogo Harbour, NF*. For Environment Canada, Environmental Protection Branch, St. John's, NL, 37 p + appendices.

Massaro, M., J.W. Chardine, I.L. Jones and G.J Robertson. 2000. *Delayed capelin (*Mallotus villosus*) availability influences large predatory gull behaviour on black-legged kittiwakes (*Rissa tridactyla*) causing a reduction in breeding success*. Canadian Journal of Zoology 78: 1588-1596.

McIver, A. and D. Aggett (1988). *Issues and concerns surrounding the ocean disposal of fish processing wastes and a case study*. Environment Canada: Proceedings: 7th International Ocean Disposal Symposium, 21-25 September, 1987. Wolfville, Nova Scotia, Canada.

Messieh, Dr. Shoukry (1991). *Fish offal disposal in Atlantic Canada*. Habitat Ecology Division. Bedford Institute of Oceanography. A Discussion paper prepared for MASSH, 7 p + appendix.


Stenhouse, I. J., G.J. Robertson and W.A. Montevecchi. 2000. *Herring Gull (*Larus argentatus*) predation on Leach's Storm Petrels (*Ocranodroma leucorhoa*) breeding on Great Island, Newfoundland*. Atlantic Seabirds 2: 35-44.

APPENDIX A: SITE SPECIFIC INFORMATION

LEGEND

SHORELINE SEGMENTS () Backshore Form

-  anthropomorphic breakwater
-  anthropomorphic bridge
-  anthropomorphic causeway
-  anthropomorphic road
-  anthropomorphic dyke
-  anthropomorphic pier/jetty
-  anthropomorphic wharf
-  anthropomorphic railway
-  anthropomorphic seawall
-  barrier beach
-  beach
-  cliff
-  dune
-  flat
-  peat bog
-  platform
-  salt marsh
-  spit
-  wetland bog
-  delta

-  Building
-  School
-  Church
-  Water Treatment Plant
-  Electric Power Station
-  Camp
-  Marina
-  Point of Interest
-  Lookout
-  Picnic Site

-  Segments Boundaries
-  Coastal Seabirds
-  Pelagic Seabirds
-  Waterfowl
-  Atlantic Salmon Fishing Rivers
-  DFO Fishing Zones Gulf Region
-  Lobster Fishing Districts
-  American Lobster
-  Snow Crab
-  Fish Processing Plant
-  Fish Weir and Trap
-  Lobster Pound
-  NL Aquaculture Sites Points
-  Marinas
-  Recreational Beach
-  Scuba Diving Site
-  Fisheries Waste-active
-  Offal Disposal Site

EC Shellfish Classification

-  Approved
-  Canadian Heritage Rivers
-  Ducks Unlimited Site
-  Ecological Reserve
-  Environmentally Sensitive Area
-  First Nation
-  Historical Site
-  Important Vascular Plant Area
-  Marine Protected Areas
-  Migratory Bird Sanctuary
-  National Park
-  National Wildlife Area
-  Nature Protection Areas
-  Provincial Park
-  RAMSAR Sites
-  World Heritage Site
-  Ferry Route
-  Navigation light

**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

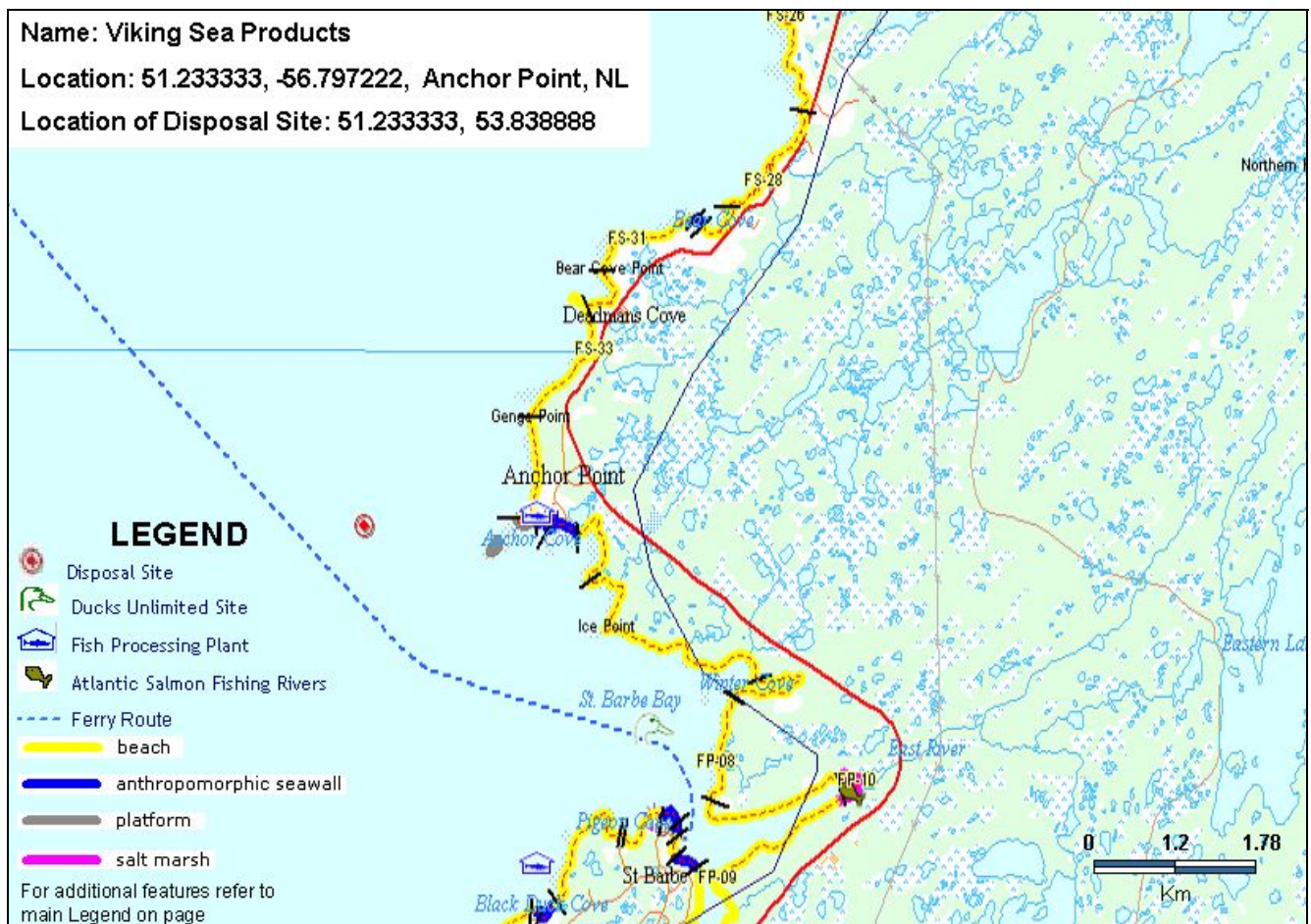
Name of Site:	Viking Sea Products, Anchor Point, Newfoundland
Location of Loading Site:	51° 14.00' N, 56° 47.50' W, Anchor Point, Newfoundland
Location of Disposal Site:	51° 14.00' N, 56° 49.80' W, with an approximate depth of 30m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • There are no alternatives for the disposal of offal • Ocean dumping disposal permits have been issued annually to Viking Sea Products since August 2001 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	Over wintering area for water fowl
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in this area include: boulder beach, bedrock, pebble-cobble beach, and man made wharves • Some beaches in the area are spawning grounds for capelin
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site

Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Pelagic and ground species • Lobster fishing areas just off shore • No aquaculture
Tourism & Recreation:	Recreational beaches and boat tours in the area
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 320 • Adjacent communities include: Deadmans Cove and St. Barbe
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 1400 tonnes/year • 8-10 tonnes/trip • 1-2 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Where depth of the disposal site is less then 35m, measurements of depth must be obtained and reported near the time of the first disposal and then every two months during the disposal activity. This is to ensure that the normal water depth is maintained
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Viking Sea Products

Location: 51.233333, -56.797222, Anchor Point, NL

Location of Disposal Site: 51.233333, 53.838888



**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

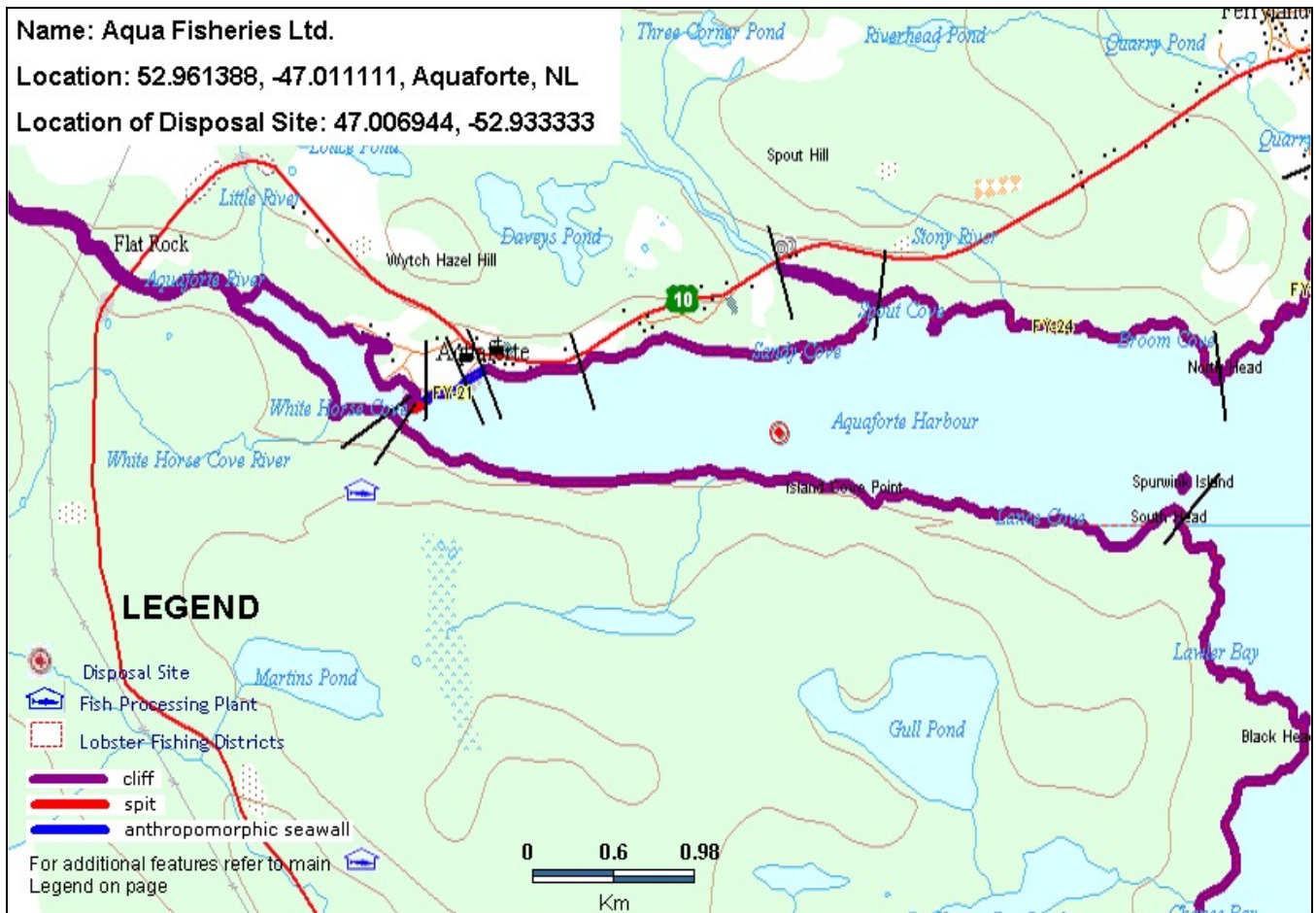
Name of Site:	Aqua Fisheries Limited, Ferryland, Newfoundland & Labrador
Location of Loading Site:	47° 00.40' N, 52° 57.41' W, Aquaforte, Newfoundland
Location of Disposal Site:	47° 00.25' N, 52° 56.00' W, with an approximate depth of 21m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there are no alternatives to ocean disposal • Ocean dumping disposal permits have been issued annually to Aqua Fisheries Limited since May 11, 1990 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	Waterfowl migration stopover point
Shoreline:	<ul style="list-style-type: none"> • The shoreline types in the area bedrock, pebble-cobble beach and man made wharves • Some beaches in the area are spawning grounds for capelin
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • Offal is loaded onto a barge by a water driven chute. The barge is self-propelled or towed to the approved dump site where the offal is discharged from the barge while steaming within 300m of the site. • The offal will be covered by a net to prevent access by gulls • Radar reflecting devices must be displayed at all times
Ocean Bed Uses:	No other uses for the ocean bed near disposal site

Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Snow crab and cod fish • No aquaculture
Tourism and Recreation:	Recreational beaches in the area
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 133 • Adjacent communities include: Ferryland and Fermeuse
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 800 tonnes/year • 2 trips day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Where depth of the disposal site is less then 35m, measurements of depth must be obtained and reported near the time of the first disposal and then every two months during the disposal activity. This is to ensure that the normal water depth is maintained.
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Aqua Fisheries Ltd.

Location: 52.961388, -47.011111, Aquaforte, NL

Location of Disposal Site: 47.006944, -52.933333



**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

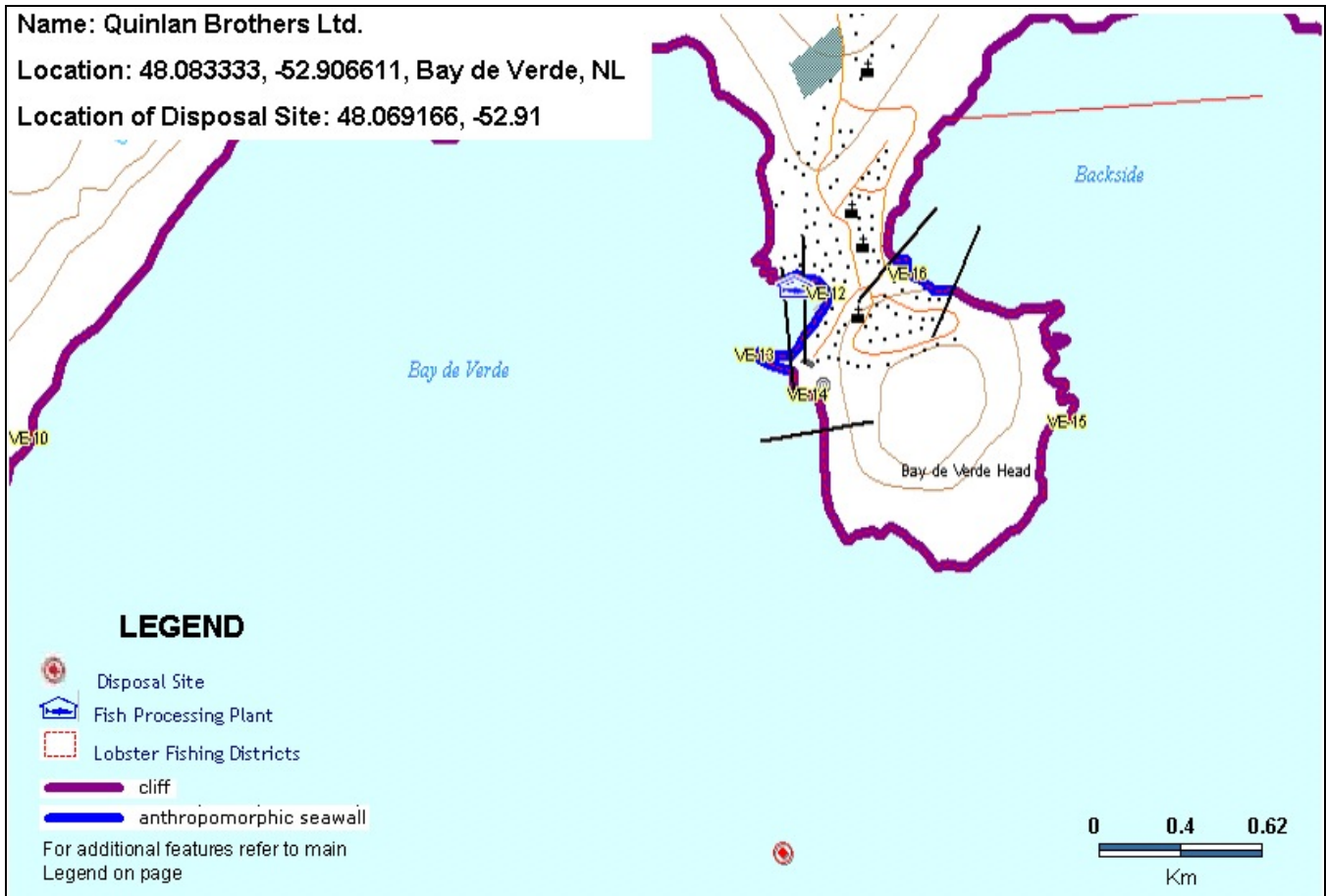
Name of Site:	Quinlan Brothers Limited, Bay de Verde, Newfoundland
Location of Loading Site:	48° 05.00' N, 52° 53.91' W, Bay de Verde, Newfoundland
Location of Disposal Site:	48° 04.09' N, 52° 53.96' W, with an approximate depth of 90m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there are no alternatives for the disposal of offal • However, previous history indicates that fish offal was trucked to a meal plant in Carbonear and to a dump site in Bay de Verde where it was used as landfill. • Ocean dumping disposal permits have been issued to Quinlan Brothers Limited for the years of 1997, 1998, 1999, 2000, 2001, 2002
Air Quality:	Disposal process has no impact on air quality
Marine Environment:	Dispersive
Seabirds, Shorebirds, & Waterfowl:	<p>BACCALIEU ISLAND</p> <ul style="list-style-type: none"> -Northern Fulmars -Leaches Storm Petrels -Northern Gannets -Black-legged Kittiwakes -Common Murres -Thick-billed Murres -Black Guillemots -Razorbills -Atlantic Puffins <ul style="list-style-type: none"> • Also, the Bay de Verde shoreline is an over wintering area for waterfowl
Shoreline:	<ul style="list-style-type: none"> • The type of shoreline in this area is bedrock • Residential properties are located along the shore
Marine Protected Areas:	Baccalieu Island located 8 kilometres of disposal site

Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • A 45 ft scow, barge or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • The offal will be covered by a net to prevent access by gulls and discharged from the barge while steaming within 100m of the approved site. • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for the ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Fish, snow crab and shrimp. • No aquaculture
Tourism & Recreation:	Recreational beaches are located in the area
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 1,492 • Adjacent communities include: Red Head Cove and Long Point
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 3000 tonnes/year • 16 tonnes/trip • 1 trip/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	From mid September to mid October disposal of offal should be restricted to daylight hours to minimize the effects on Leach's Storm Petrels.
Additional Information:	None

Name: Quinlan Brothers Ltd.

Location: 48.083333, -52.906611, Bay de Verde, NL

Location of Disposal Site: 48.069166, -52.91



**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

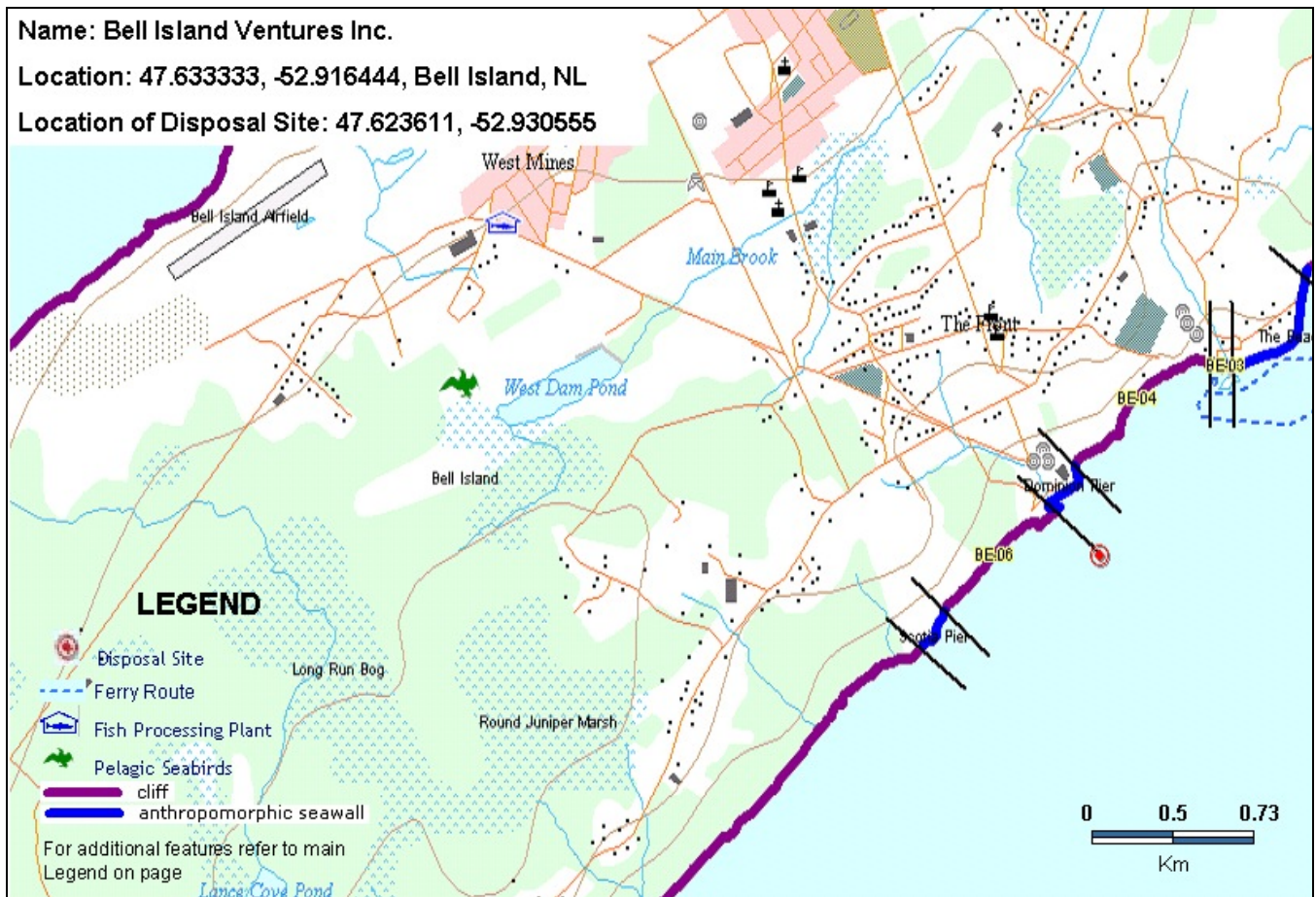
Name of Site:	Bell Island Ventures Inc., Bell Island, Newfoundland
Location of Loading Site:	47° 37.75' N, 52° 55.50' W, Bell Island Newfoundland
Location of Disposal Site:	47° 37.60' N, 52° 55.10' W, with an approximate depth of 95m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there are no alternative for the disposal of offal • However, previous history indicates the fish offal and crab shells are used as fertilizer in the farms of local farmers and gardeners, and disposed of in an approved landfill site • Ocean dumping disposal permits have been issued to Bell Island Ventures for the years of 1998-1999, 1999-2000
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in this area include: pebble-cobble beach, boulder beach and bedrock • Some beaches in the area are spawning grounds for capelin
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • A barge or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • Offal is collected into large fish tubs and transported by forklift to the wharf where it is emptied into a barge. The barge is self propelled or towed to the approved dump site where it is discharged from the barge while steaming within 100m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times

Ocean Bed Uses:	No other uses for the ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Snow crab and cod fish • No aquaculture
Tourism & Recreation:	Recreational beaches are located in the area
Residents & Communities:	<ul style="list-style-type: none"> • Population – no available information • Adjacent communities include: Portugal Cove
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 200 tonnes/year • 1.5 tones/trip • 2 trips/week
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Bell Island Ventures Inc.

Location: 47.633333, -52.916444, Bell Island, NL

Location of Disposal Site: 47.623611, -52.930555



**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Fishery Products International Ltd., Bonavista, Newfoundland
Location of Loading Site:	48° 38.90' N, 53° 06.90' W, Bonavista, Newfoundland
Location of Disposal Site:	48° 40.67' N, 53° 14.00' W, with an approximate depth of 137m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there are no alternatives for the disposal of offal • Ocean dumping disposal permits have been issued annually to Aqua Fisheries Limited since 1983 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	Seabirds/shore birds found in the area include the Atlantic Puffin and the Black Guillemot
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in this area include: bedrock, pebble-cobble beach, boulder beach, and mixed sand gravel beach • Residential properties are located along the shore
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto a barge from offal containers. The barge is self propelled or towed to the approved dump site where the offal is discharged from the barge while steaming within 100m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site

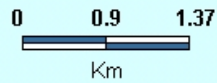
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Crab and fish • No aquaculture
Tourism & Recreation:	Recreational beaches are located in the area
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 4,021 • Adjacent communities include: Lance Cove and Spillars Cove
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	National Historic site along shore
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 900 tonnes/year • 7 tonnes/trip • 1 trip/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Fishery Products International Ltd.
Location: 48.658333, -53.125, Bonavista, NL
Location of Disposal Site: 48.685277, -53.233333

LEGEND

-  Disposal Site
-  Fish Processing Plant
-  National Historic Site
-  Lobster Fishing Districts
-  platform
-  anthropomorphic seawall
-  beach
-  cliff

For additional features refer to main Legend on page



Burns Head

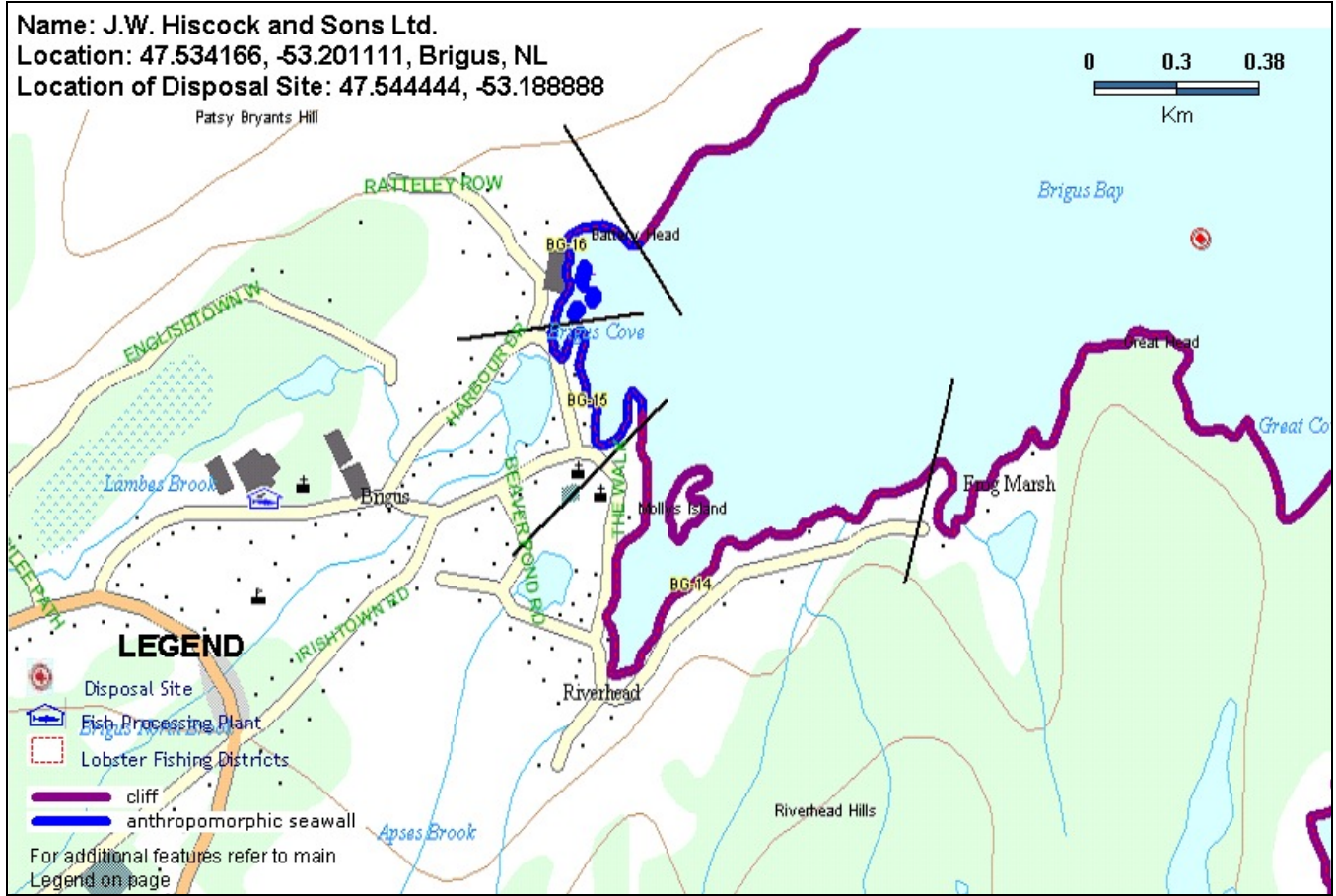
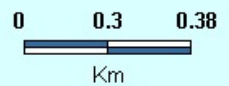


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	J.W. Hiscock and Sons Ltd., Brigus, Newfoundland
Location of Loading Site:	47° 32.3' N, 53° 12.4' W, Brigus, Newfoundland
Location of Disposal Site:	47° 32.40' N, 53° 11.20' W, with an approximate depth of 75m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there are no alternatives for the disposal of offal However, previous history indicates that crab shells and fish offal have been use has fertilizer for a farm in Butlerville • A previous ocean dumping disposal permit was been issued to J.W. Hiscock and Sons Ltd. for the year 2004-2005
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	<ul style="list-style-type: none"> • Types of shoreline in the area include: bedrock and pebble cobble beach • Some beaches in the area are spawning grounds for capelin
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto a barge from offal containers. • The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times

Ocean Bed Uses:	No other uses for the ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Snow crab and fish • No aquaculture
Tourism & Recreation:	Recreational beaches are located in the area
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 784 • Adjacent communities include: Cupids and Georgetown
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 500 tonnes/year • 10 tonnes/trip • 1 trip/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not Applicable
Additional Information:	None

Name: J.W. Hiscock and Sons Ltd.
 Location: 47.534166, -53.201111, Brigus, NL
 Location of Disposal Site: 47.544444, -53.188888



LEGEND

- Disposal Site
 - Fish Processing Plant
 - Lobster Fishing Districts
 - cliff
 - anthropomorphic seawall
- For additional features refer to main Legend on page

**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Cape Broyle Sea Products Ltd., Cape Broyle, Newfoundland
Location of Loading Site:	47° 05.73' N, 52° 57.20' W, Cape Broyle, Newfoundland
Location of Disposal Site:	47° 05.22' N, 52° 54.23' W, with an approximate depth of 30m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations particularly snow crab and cod fish. • Currently there is no alternative for the disposal of offal. Previous history indicates that during the years from 1995-1997 the offal was disposed of at Cape Broyle Composting. • Ocean dumping disposal permits have been issued to Cape Broyle Sea Products Ltd. during the years of 1990, 1991, 1992, 1993, 1994, and from June 1998-June 1999.
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	Waterfowl migration stopover area
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline located in the area include: bedrock, pebble cobble beach, and mixed sand-gravel beach • Residential properties are located along the shore • Some beaches in the area are spawning grounds for capelin
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto a barge from offal containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 100m of the site. • The offal is be covered by a net to prevent access by gulls

	<ul style="list-style-type: none"> • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Snow crab and cod fish • No aquaculture
Tourism & Recreation:	Recreational beaches are located in the area
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 568 • Adjacent communities include: Admirals Cove, Shores Cove, and Island Cove
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 1000 tonnes/year • 5 tonnes/trip • 2 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Where depth of the disposal site is less then 35m, measurements of depth must be obtained and reported near the time of the first disposal and then every two months during the disposal activity. This is to ensure that the normal water depth is maintained.
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Cape Broyle Sea Products Ltd.
Location: 47.103611, -52.955555, Cape Broyle, NL
Location of Disposal Site: 47.089444, -52.906388

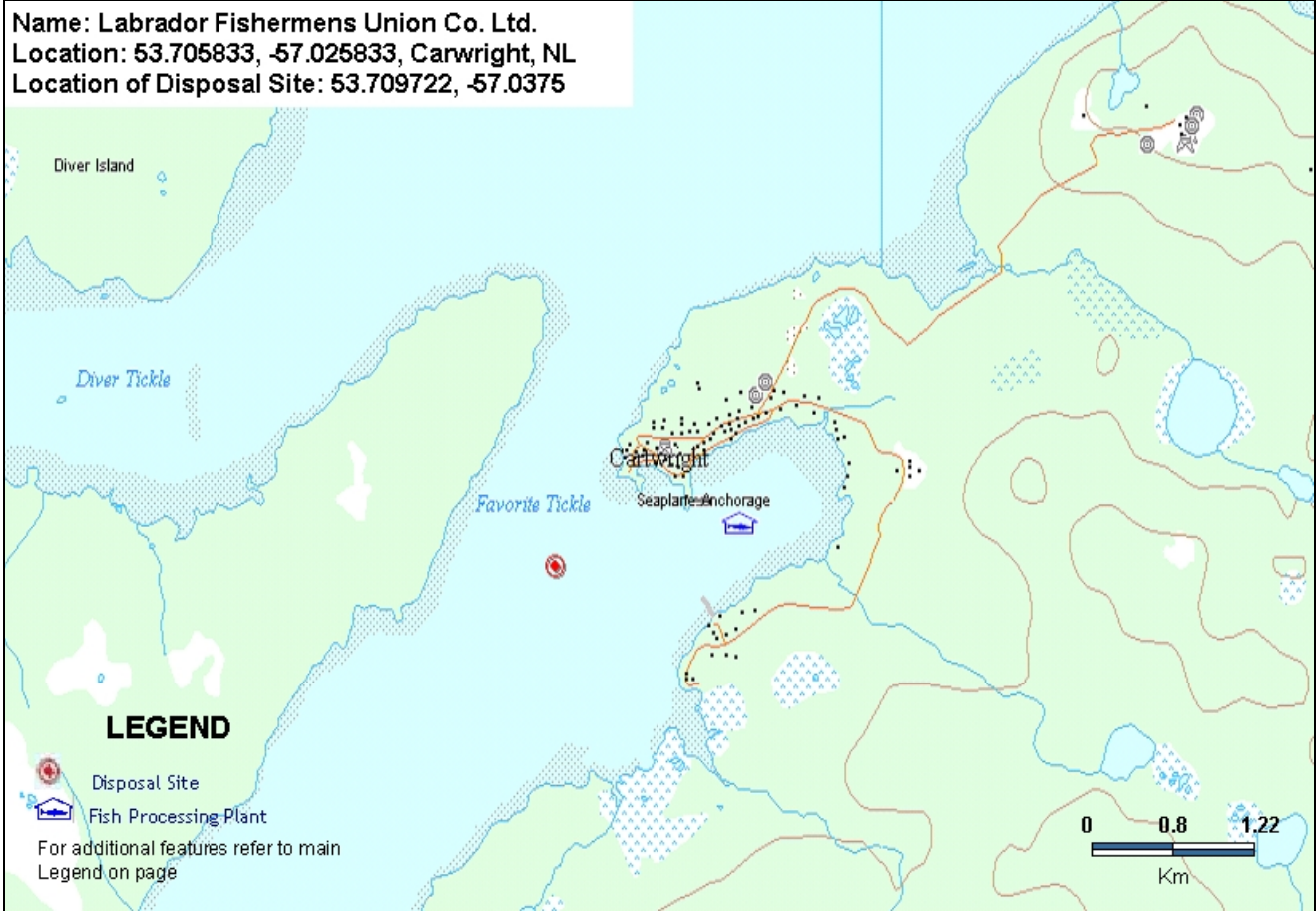


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Labrador Fishermens Union Shrimp Co. Ltd., Labrador
Location of Loading Site:	53° 42.21' N, 57° 01.33' W, Cartwright, Labrador
Location of Disposal Site:	53° 41.95' N, 57° 02.15' W, with an approximate depth of 20m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • There are no alternatives for the disposal of offal • Ocean dumping disposal permits have been issued annually to Labrador Fishermens Union Shrimp Co. Ltd. since 1990 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	No available information
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A conveyor belt is used to move offal from the processing plant onto a barge. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is be covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site

Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Fish and shellfish • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 629 • Adjacent communities include: None
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 700 tonnes/year • 1-2 tonnes/trip • 5-6 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Where depth of the disposal site is less then 35m, measurements of depth must be obtained and reported near the time of the first disposal and then every two months during the disposal activity. This is to ensure that the normal water depth is maintained.
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Labrador Fishermens Union Co. Ltd.
Location: 53.705833, -57.025833, Carwright, NL
Location of Disposal Site: 53.709722, -57.0375

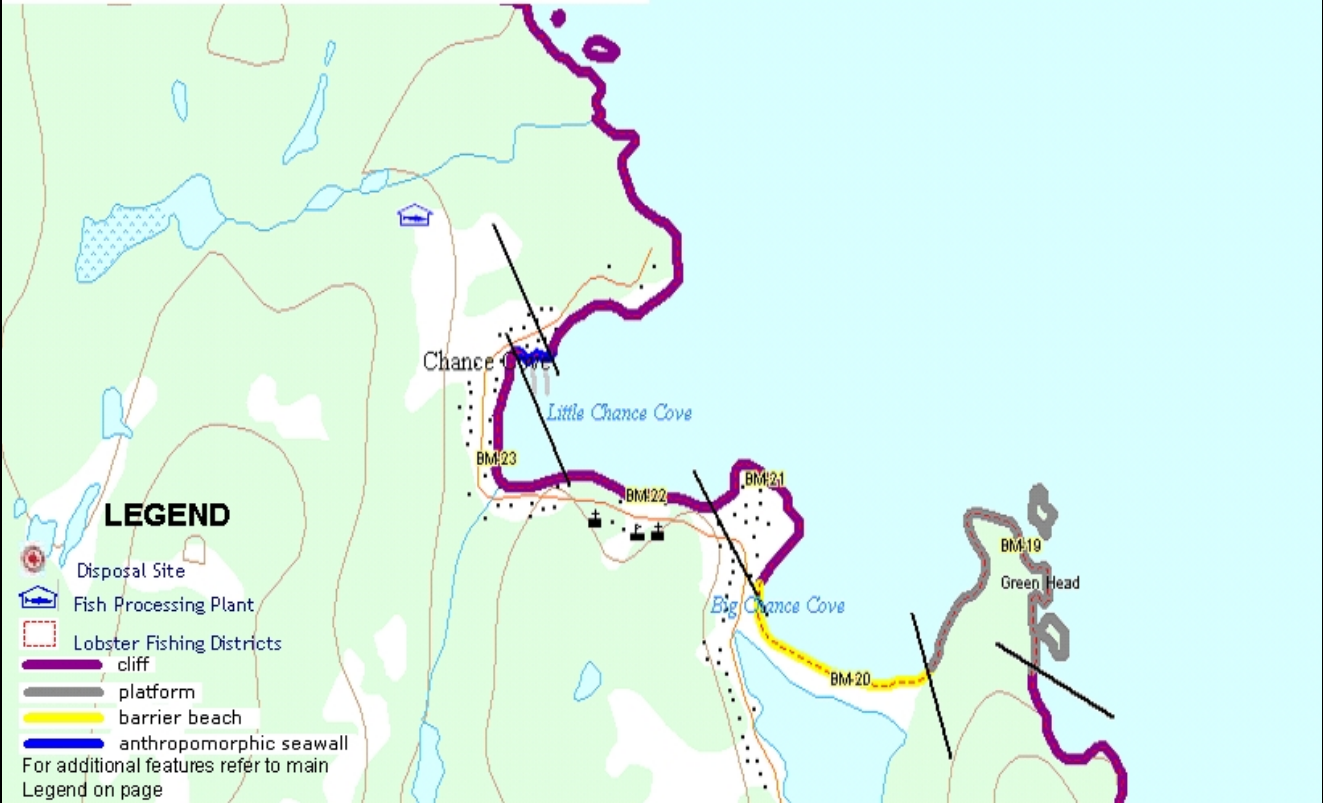
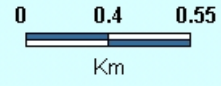


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Smith Seafood Ltd., Chance Cove, Newfoundland
Location of Loading Site:	47° 40.80' N, 53° 49.50' W, Chance Cove, Newfoundland
Location of Disposal Site:	47° 41.50' N, 53° 49.00' W, with an approximate depth of 45m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there is no alternative for the disposal of offal. But, previous history indicates that the offal was sent to Earle's Proteins in Carbonear, Newfoundland • Ocean dumping disposal permits have been issued to Smith Seafood Ltd. during the years of 1990, 1991, 1992, 1993, 1994, 1995, 1996, and 1998.
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in the area include: pebble-cobble beach, bedrock, and pebble-cobble/barrier beach • Residential properties are located along the shore • Some beaches in the area are spawning grounds for capelin
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A conveyor belt is used to move offal from the processing plant onto a barge. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 100m of the site. • The offal will is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times

Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Capelin, herring, and squid • No aquaculture
Tourism & Recreation:	Recreational beaches are located in the area
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 339 • Adjacent communities include: Bellevue and Bellevue Beach
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 1000 tonnes/year • 7 tonnes/trip • 2 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Smith Seafoods Ltd.
Location: 47.688888, -53.830555, Chance Cove, NL
Location of Disposal Site: 47.697222, -53.816666

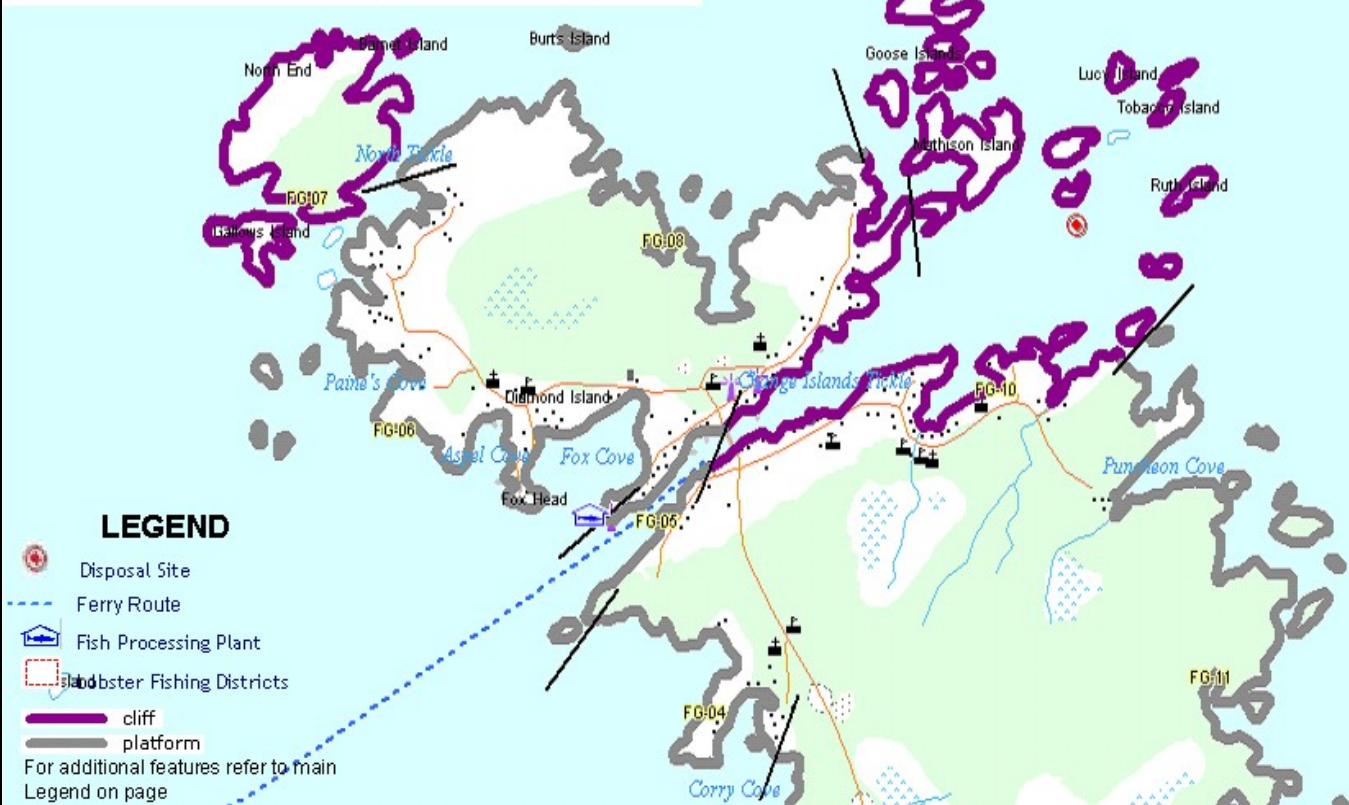
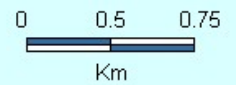


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Fogo Island Co-Operative Society Ltd., Seldom, Newfoundland
Location of Loading Site:	49° 40.35' N, 54° 24.14' W, Change Islands, Newfoundland
Location of Disposal Site:	49° 40.69' N, 54° 23.2' W, with an approximate depth of 17m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • There are no alternatives for the disposal of offal • Ocean dumping disposal permits have been issued to Fogo Island Co-Operative Society Ltd. for the following time periods: September 2000-September 2001, October 2001-October 2002, and October 2002-October 2003
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in the area include: bedrock and boulder beach • Residential properties are located along the shore
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • Offal is dumped onto a scow from fish containers and the scow is towed to the approved disposal site by an outboard motor vessel. It is then discharged from the scow while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times

Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Turbot, herring, capelin, mackerel, squid, and sea cucumber • No aquaculture
Tourism & Recreation:	Recreational beaches in the area
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 360 • Adjacent communities include: Fogo Island and Farewell
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 1000 tonnes/year • 2 tonnes/trip • 1 trip/bi-weekly
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Where depth of the disposal site is less then 35m, measurements of depth must be obtained and reported near the time of the first disposal and then every two months during the disposal activity. This is to ensure that the normal water depth is maintained.
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Fogo Island Co-Operative Society Ltd.
 Location: 49.676388, -54.403888, Change Islands, NL
 Location of Disposal Site: 49.685833, -54.388888



LEGEND

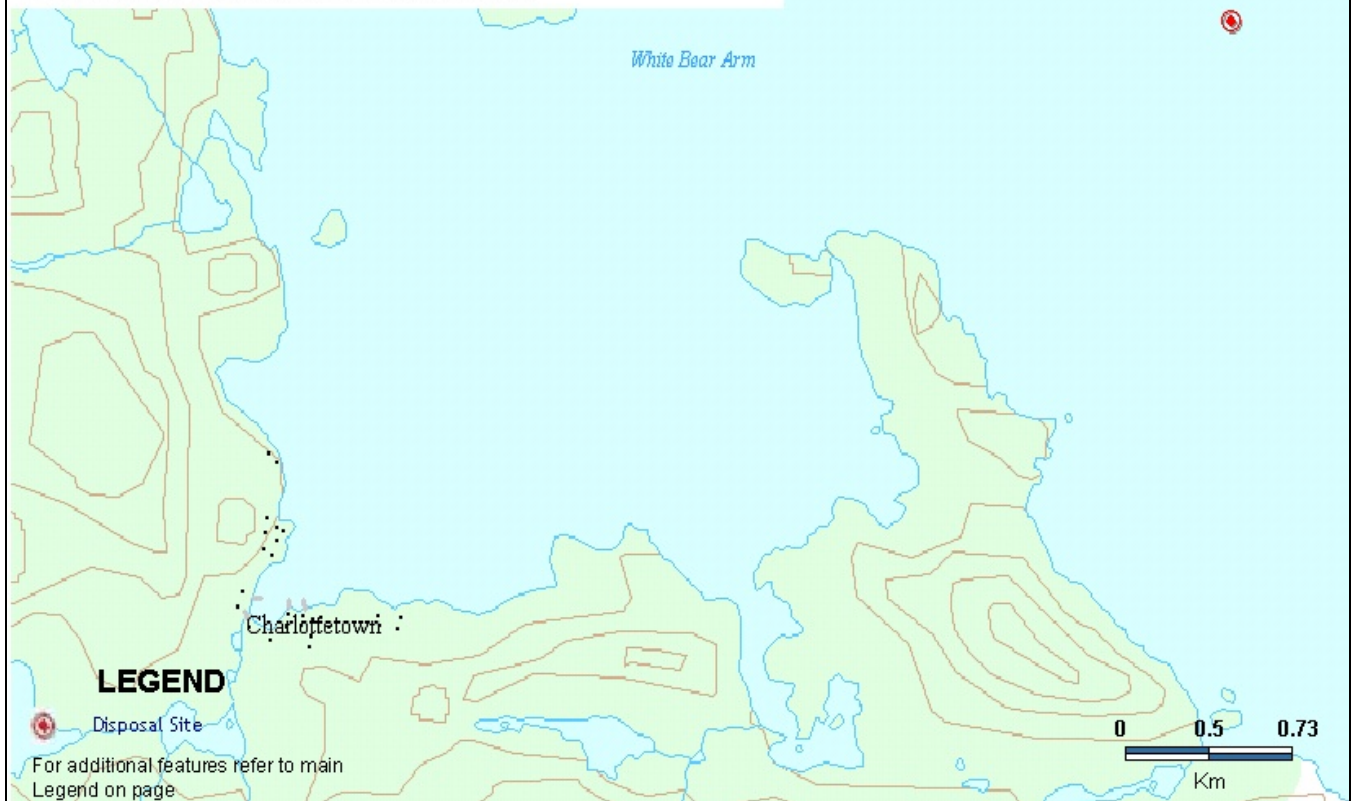
- Disposal Site
 - Ferry Route
 - Fish Processing Plant
 - Stobster Fishing Districts
 - cliff
 - platform
- For additional features refer to main Legend on page

**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Labrador Choice Seafoods Ltd, Charlottetown, Labrador
Location of Loading Site:	52° 46.35' N, 56° 07.04' W, Charlottetown, Labrador
Location of Disposal Site:	52° 47.60' N, 56° 03.56' W, with an approximate depth of 50m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • There are no alternatives the for disposal of offal • Ocean dumping disposal permits have been issued annually to Labrador Choice Seafoods Ltd since June 2001 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in the area include: mixed sand-gravel beach, pebble-cobble beach, and bedrock • Residential properties are located along the shore
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • Offal is dumped onto a scow from fish containers. The scow is towed to the approved disposal site by an outboard motor vessel where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site

Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Shrimp • No aquaculture
Tourism & Recreation:	Recreational beaches are located in the area
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 364 • Adjacent communities include: None
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 1400 tonnes/year • 8-10 tonnes/trip • 1-2 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Labrador Choice Seafoods Ltd.
Location: 52.776388, -56.117777, Charlottetown, Labrador
Location of Disposal Site: 52.8, -56.065555

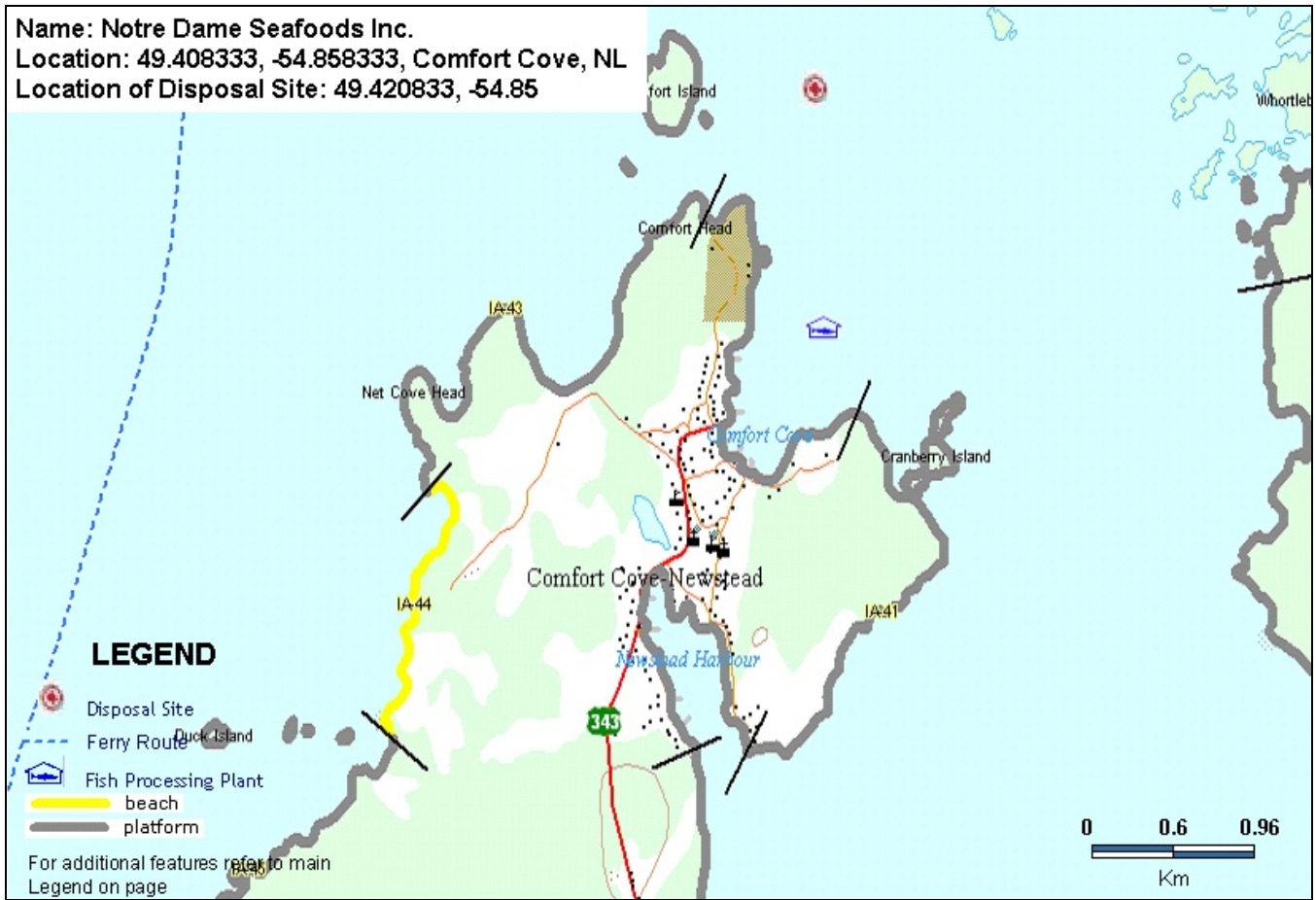


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Notre Dame Seafoods Inc., Comfort Cove, Newfoundland
Location of Loading Site:	49° 24.30' N, 54° 51.30' W, Comfort Cove, Newfoundland
Location of Disposal Site:	47° 24.75' N, 54° 50.40' W, with an approximate depth of 60m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • There are no alternatives for the disposal of offal • Ocean dumping disposal permits have been issued annually to Notre Dame Seafoods Inc. since August 2000 to present date • An emergency disposal permit was issued to the site for June 2000-August 2000. The permit was issued because the company did not have a valid disposal site to dispose of any offal even though they had a provincial license to process crab and other species.
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in the area include: mixed sand-gravel beach and bedrock • Residential properties are located along the shore
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A conveyor belt is used to move offal from the processing plant onto a barge. The barge is self propelled or towed to the approved dump site where the offal is discharged barge while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls

	<ul style="list-style-type: none"> • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Crab, capelin, turbot, cod, and lumpfish • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 510 • Adjacent communities include: Newstead, Campbellton, Loon Bay
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	Archaeological sites are located along the shore
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 750 tonnes/year • 10 tonnes/trip • 5 trips/week
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Notre Dame Seafoods Inc.
Location: 49.408333, -54.858333, Comfort Cove, NL
Location of Disposal Site: 49.420833, -54.85

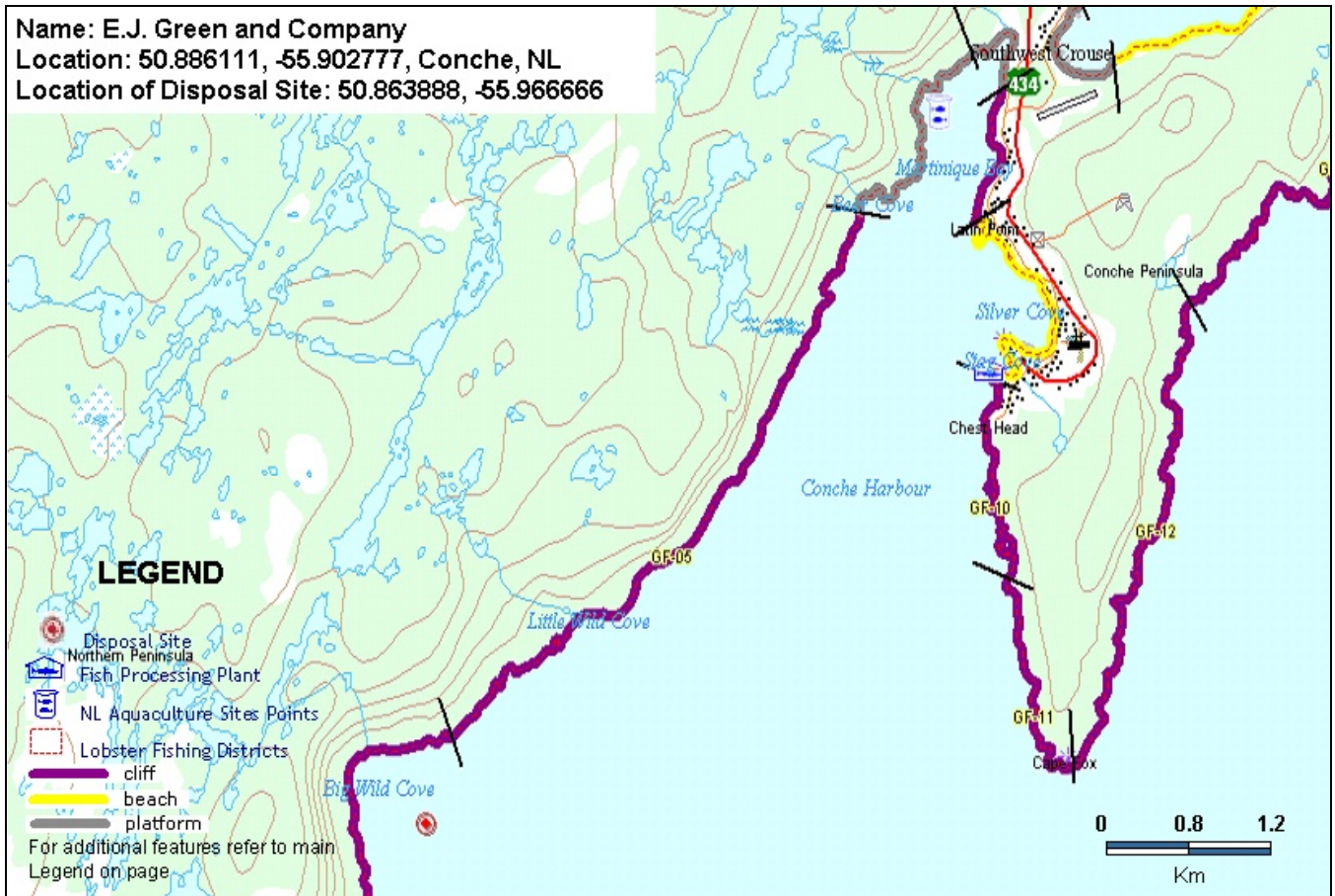


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	E.J. Green and Company, Conche, Newfoundland
Location of Loading Site:	50° 53.10' N, 55° 53.70' W, Conche, Newfoundland
Location of Disposal Site:	50° 51.50' N, 55° 58.00' W, with an approximate depth of 40m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there are no alternatives for the disposal of offal. However, some offal is use to be processed as pet food. • Ocean dumping disposal permits have been issued to E.J. Green and Company since 1989 to present date.
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in the area include: bedrock, sand beach, and pebble-cobble beach • Residential properties are located along the shore
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site

Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Capelin, cod, groundfish, and whelk • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 263 • Adjacent communities include: Roddickton and Crouse
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	Archaeological sites are located along the shore
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 200 tonne/year • 10 tonne/trip • 2 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Disposal site has a strong current which prevents the accumulation of offal
Applicable Timing Restrictions:	Not applicable
Additional Information:	Some of the beaches are sites of cod trap berths

Name: E.J. Green and Company
Location: 50.886111, -55.902777, Conche, NL
Location of Disposal Site: 50.863888, -55.966666

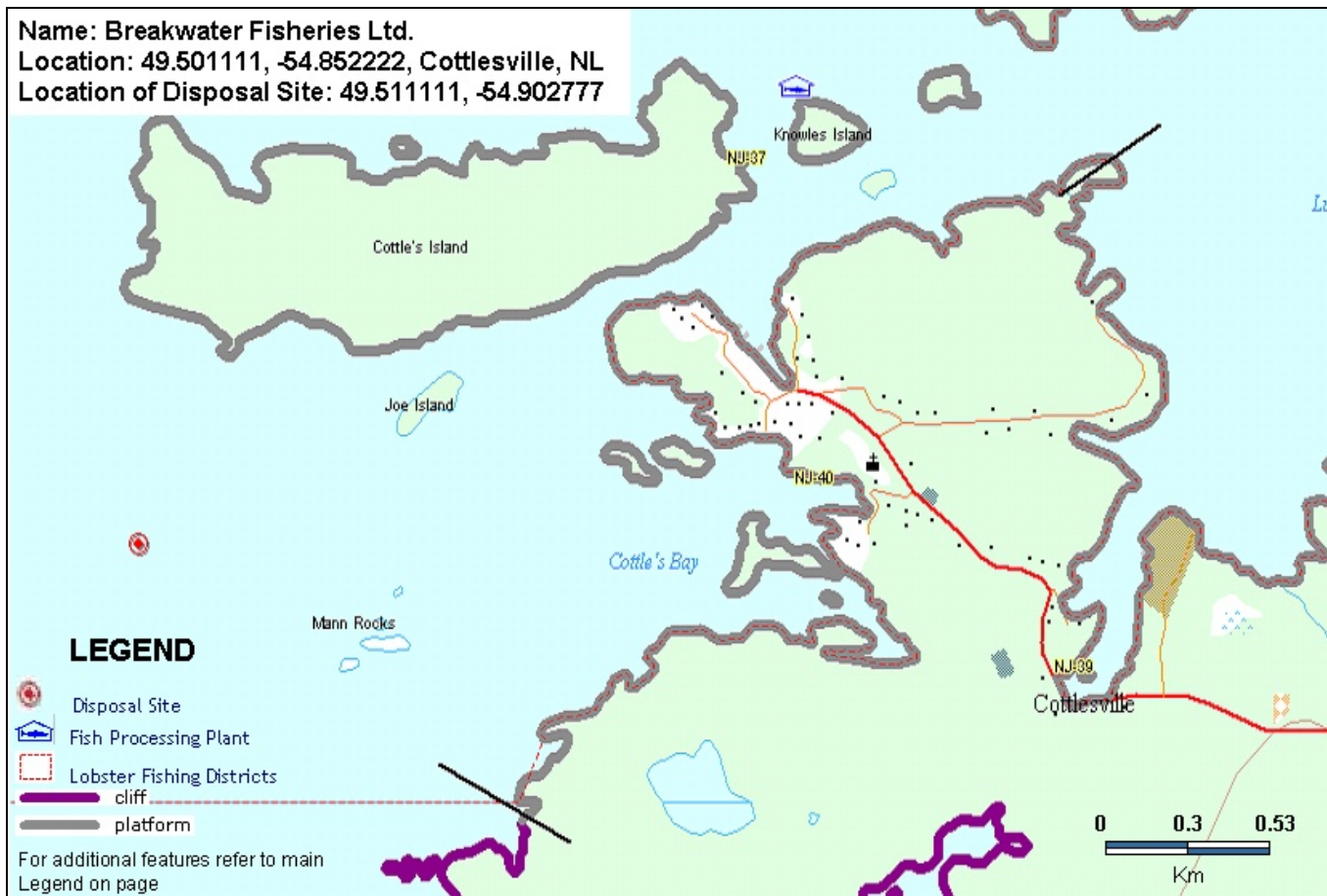


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Breakwater Fisheries Ltd., Cottlesville, Newfoundland
Location of Loading Site:	49° 30.4' N, 54° 51.8' W, Cottlesville, Newfoundland
Location of Disposal Site:	49° 30.4' N, 54° 53.7' W, with an approximate depth of 236m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • There are no alternatives for the disposal of offal • Ocean dumping disposal permits have been issued to Smith Seafood Ltd. during the years of October 2001-October 2002, October 2002-October 2003, and November 2003-November 2004
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	The type of shoreline in the area is bedrock
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A conveyor belt is used to move offal from the processing plant onto a barge. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site

Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Crab, shrimp, lobster, squid, pelagics, groundfish, etc... • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 297 • Adjacent communities include: Luke 's Arm and Cottle's Island
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 1500 tonnes/year • 7-9 tonnes/trip • 2-3 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Breakwater Fisheries Ltd.
Location: 49.501111, -54.852222, Cottlesville, NL
Location of Disposal Site: 49.511111, -54.902777



LEGEND

- Disposal Site
- Fish Processing Plant
- Lobster Fishing Districts
- cliff
- platform

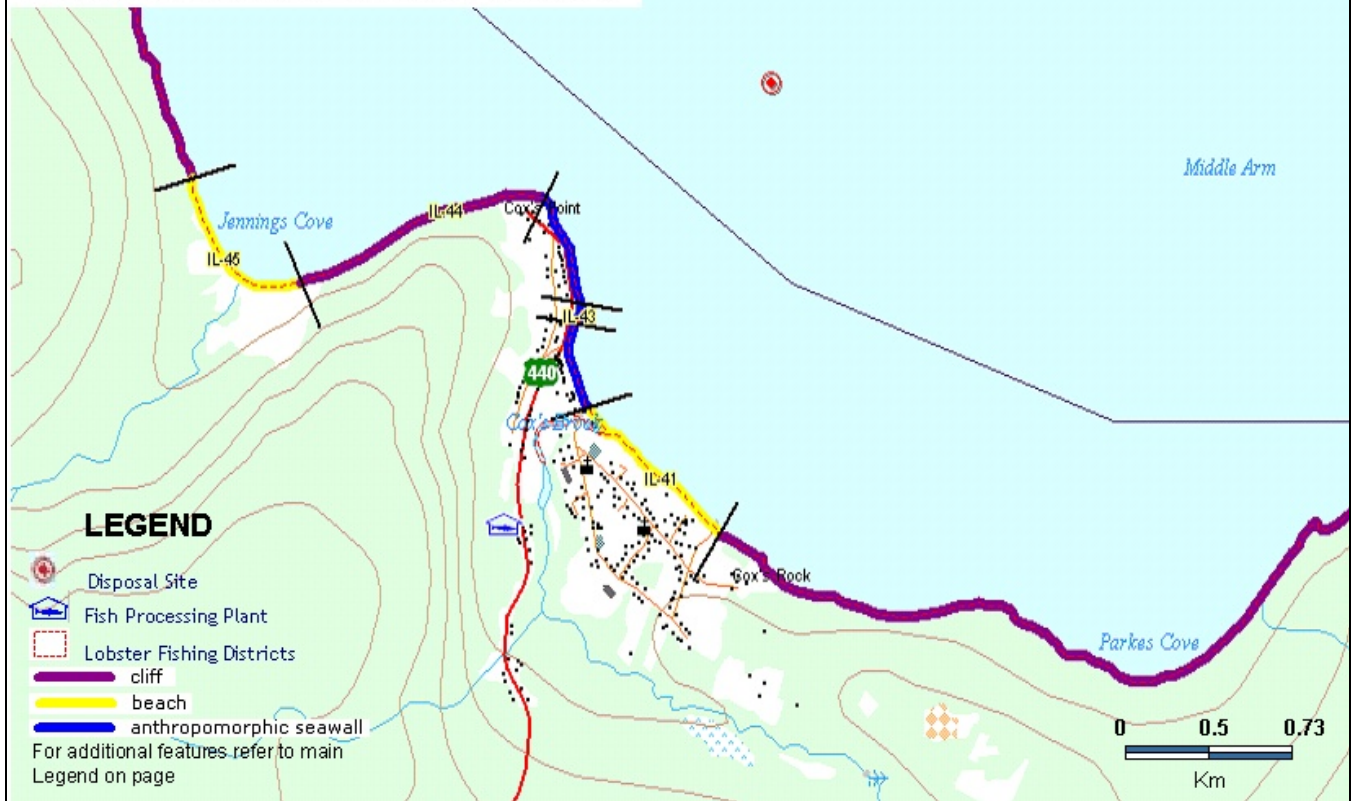
For additional features refer to main Legend on page

**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	T & H Fisheries Inc., Cox's Cove, Newfoundland
Location of Loading Site:	49° 07.10' N, 58° 04.20' W, Cox's Cove, Newfoundland
Location of Disposal Site:	49° 08.00' N, 58° 04.00' W, with an approximate depth of 190m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • T & H Fisheries Inc. sends most of their fish offal to a meal plant in Burgeo and male capelin is frozen for human consumption and pet food • Ocean dumping disposal permits have been issued annually to T & H Fisheries Inc. since 1992 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in the area include: mixed sand-gravel beach, pebble-cobble beach, and bedrock • Residential properties are located along the shore • Some beaches in the area are spawning grounds for capelin
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A conveyor belt or forklift and fish containers are used to move offal from the processing plant onto a barge. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times

Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Capelin, herring, mackerel, scallop, and ocean perch • No aquaculture
Tourism & Recreation:	Recreational beaches are located in the area
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 719 • Adjacent communities include: McIvers and Woods Island
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 2000 tonnes/year • 5 tonnes/trip • Max. 5 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: T & H Fisheries Inc.
Location: 49.119444, -58.072222, Cox's Cove, NL
Location of Disposal Site: 48.133333, -58.066666



**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Quin Sea Fisheries, Old Perlican, Newfoundland
Location of Loading Site:	47° 32.90' N, 53° 14.10' W, Cupids, Newfoundland
Location of Disposal Site:	47° 34.23' N, 53° 13.60' W, with an approximate depth of 134m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing • There are no alternatives for the disposal of offal • Ocean dumping disposal permits have been issued to Quin Sea Fisheries during the years of 1991, 1993, 1994, 1996, 1998, 2002, 2003, and 2004
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in the area include: bedrock and pebble-cobble beach • Residential properties are located along the shore • Some beaches in the area are spawning grounds for capelin
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times

Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Capelin, herring, squid, monkfish, mackerel, and groundfish • No aquaculture
Tourism & Recreation:	Recreational beaches are located in the area
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 775 • Adjacent communities include: Brigus, South River and Georgetown
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 1500 tonnes/year • 16 tonnes/trip • 2 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Quin Sea Fisheries
Location: 47.558333, -53.236111, Cupids, NL
Location of Disposal Site: 47.573055, -53.233333



LEGEND

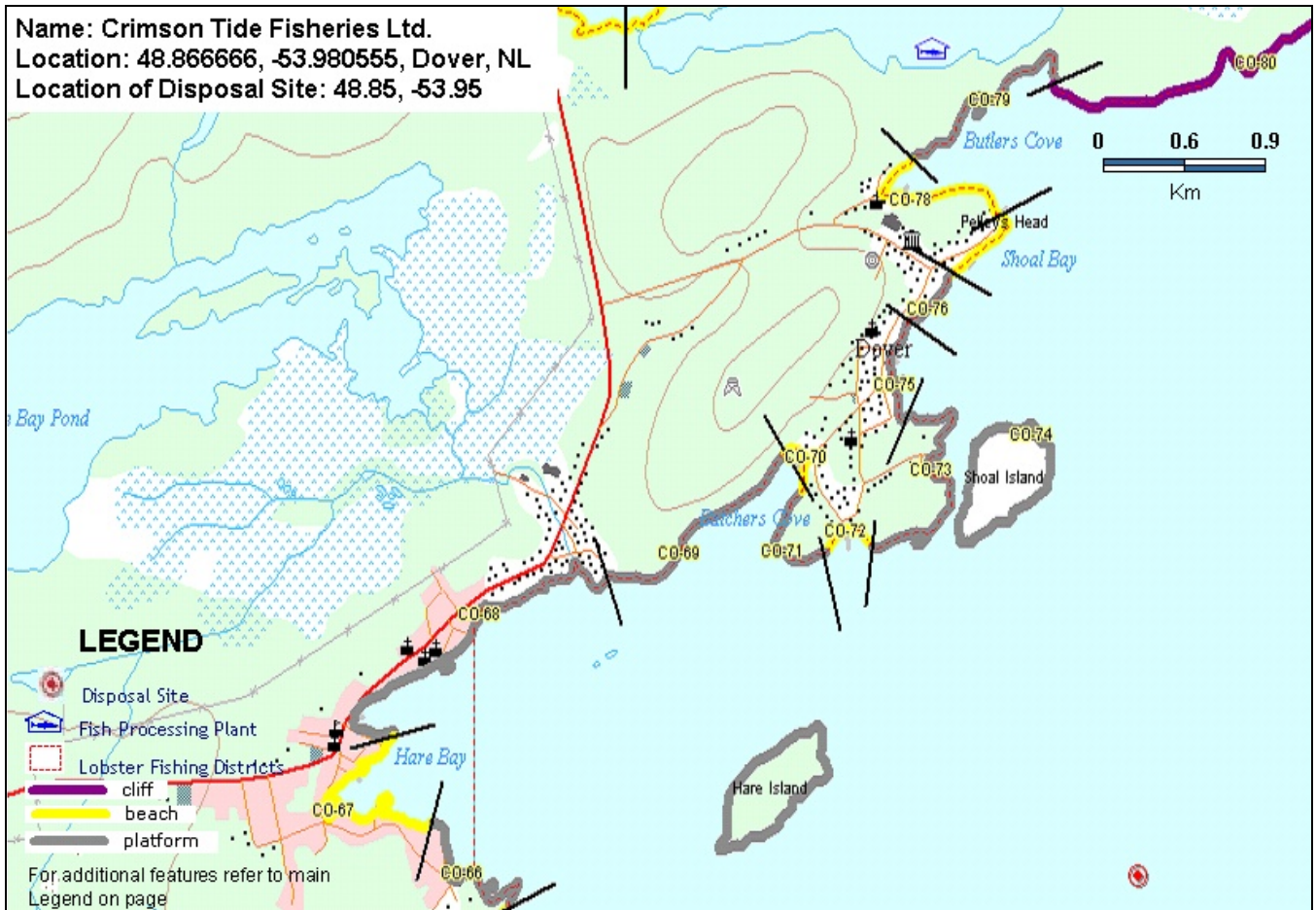
- Disposal Site
- Fish Processing Plant
- Lobster Fishing Districts
- National Historic Site
- cliff
- barrier beach
- anthropomorphic seawall
- For additional features refer to main Legend on page

**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Crimson Tide Fisheries Ltd., Dover, Newfoundland
Location of Loading Site:	48° 52.00' N, 53° 58.50' W, Dover, Newfoundland
Location of Disposal Site:	48° 51.00' N, 53° 57.00' W, with an approximate depth of 90m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • There is no alternative for the disposal of offal. Previous history indicates that most of the offal was sent to a mink farm in Nova Scotia and some to a meal plant in Burgeo, Newfoundland • Ocean dumping disposal permits have been issued to Crimson Tide Fisheries Ltd. since 1986 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in the area include: bedrock, pebble-cobble beach, mixed sand-gravel beach, and boulder beach • Residential properties are located along the shore
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times

Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Capelin, herring, mackerel, seal and ground fish • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 730 • Adjacent communities include: Hare Bay
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 200 tonnes • 5 tonnes/trip • 1 trip/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Crimson Tide Fisheries Ltd.
Location: 48.866666, -53.980555, Dover, NL
Location of Disposal Site: 48.85, -53.95



FOR REPLACEMENT CLASS SCREENING

Name of Site:	Englee Seafood Ltd., Englee, Newfoundland
Location of Loading Site:	50° 44.00' N, 56° 06.50' W, Englee, Newfoundland
Location of Disposal Site:	50° 44.40' N, 56° 06.90' W, with an approximate depth of 65m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • There are no alternatives for the disposal of offal • Ocean dumping disposal permits have been issued annually to Englee Seafood Ltd. since 1990 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	SHEPPERD ISLAND -Common Eider breeding sites
Shoreline:	The types of shoreline in the area include: bedrock and pebble-cobble beach
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site

Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Fish • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 694 • Adjacent communities include: Bide Arm
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	Archaeological sites are located along the shore
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 800 tonnes/year • 8-10 tonnes/trip • 1-2 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	Sections of the shoreline are sites of cod trap berths

Name: Englee Seafoods Ltd.
 Location: 50.733333, -56.113888, Englee, NL
 Location of Disposal Site: 50.744444, -56.125

LEGEND

-  Disposal Site
-  Ferry Route
-  Fish Processing Plant
-  Lobster Fishing Districts
-  cliff
-  platform

For additional features refer to main Legend on page

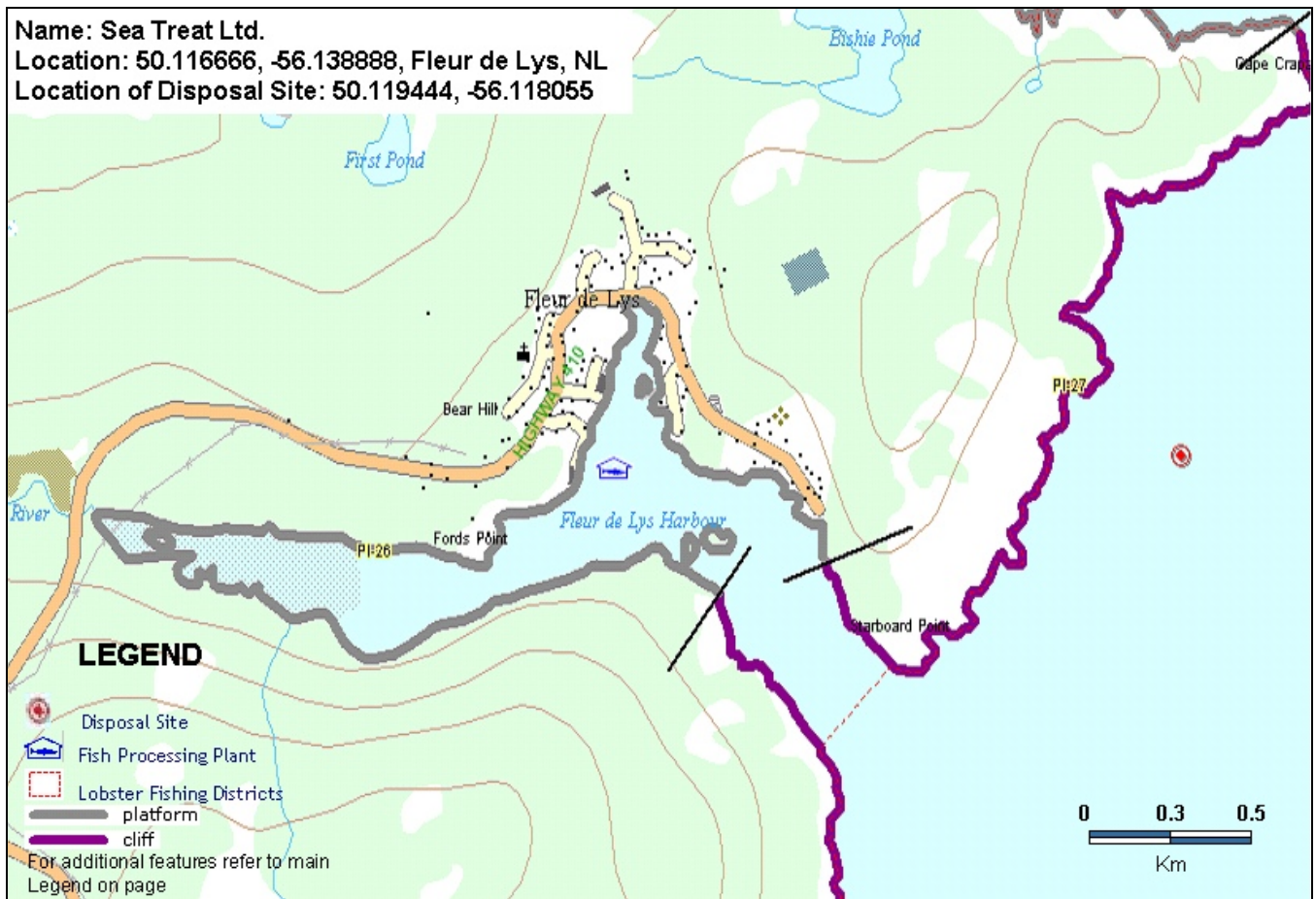


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Sea Treat Ltd., Fleur de Lys, Newfoundland
Location of Loading Site:	50° 07.00' N, 56° 08.20' W, Fleur de Lys, Newfoundland
Location of Disposal Site:	50° 06.70' N, 56° 07.50' W, with an approximate depth of 18m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • There is no alternative to the disposal of offal • Ocean dumping disposal permits have been issued to Sea Treat Ltd. during the time periods of July 2001-July2002 and July 2002-July 2003.
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	The types of shoreline in the area include: bedrock and pebble-cobble beach
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site

Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Fish • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 348 • Adjacent communities include: Coachmans Cove
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 1400 tonnes/year • Max. 8-10 tonnes/trip • 1 trip/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Where depth of the disposal site is less then 35m, measurements of depth must be obtained and reported near the time of the first disposal and then every two months during the disposal activity. This is to ensure that the normal water depth is maintained.
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Sea Treat Ltd.
Location: 50.116666, -56.138888, Fleur de Lys, NL
Location of Disposal Site: 50.119444, -56.118055



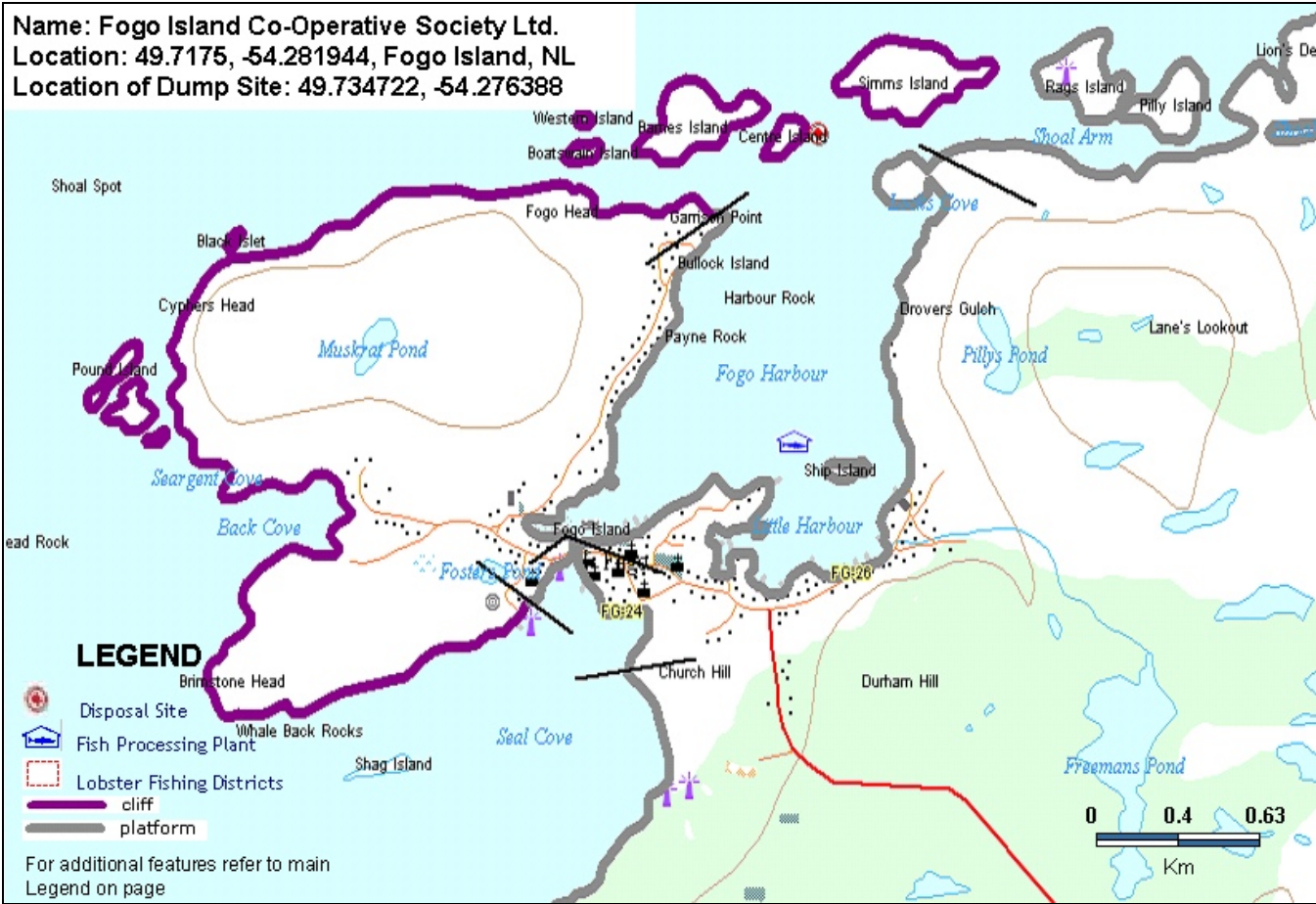
**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Fogo Island Co-Operative Society Ltd, Seldom, Newfoundland
Location of Loading Site:	49° 43.03' N, 54° 16.55' W, Fogo Island, Newfoundland
Location of Disposal Site:	49° 43.65' N, 54° 16.35' W, with an approximate depth of 12m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • There has been no alternatives for the disposal of offal except freezing the offal for bait • Ocean dumping disposal permits have been issued annually to Fogo Island Co-Operative Society Ltd. since 1990 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	<p>GAPPY ISLAND -Black Guillemots</p> <p>SEALS NEST ISLAND -Black Guillemots -Common Terns -Leach's Storm Petrels</p> <p>STONEHOUSE ISLETS -Atlantic Puffins -Black Guillemots -Leach's Storm Petrels -Black-legged Kittiwakes</p> <p>TURR ISLETS -Black-legged Kittiwakes -Black Guillemots</p> <p>LITTLE FOGO ISLAND -Common Terns -Leach's Storm Petrels -Black-legged Kittiwakes -Atlantic Puffins</p>

	-Black Guillemots
Shoreline:	<ul style="list-style-type: none"> • The type of shore line in the area is bedrock • Residential properties are located along the shore
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • Offal is dumped onto a scow from fish containers. The scow is towed to the approved disposal site by an outboard motor vessel where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Capelin, herring, mackerel, squid and crab • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 803 • Adjacent communities include: Change Islands and Farewell
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 1000 tonnes/year • 2 tonnes/trip • Max. 8 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Where depth of the disposal site is less then 35m, measurements of depth must be obtained and reported near the time of the first disposal and then every two months during the disposal activity. This is to ensure that the normal water depth is maintained.
Applicable Timing Restrictions:	Not applicable

Additional Information:

None

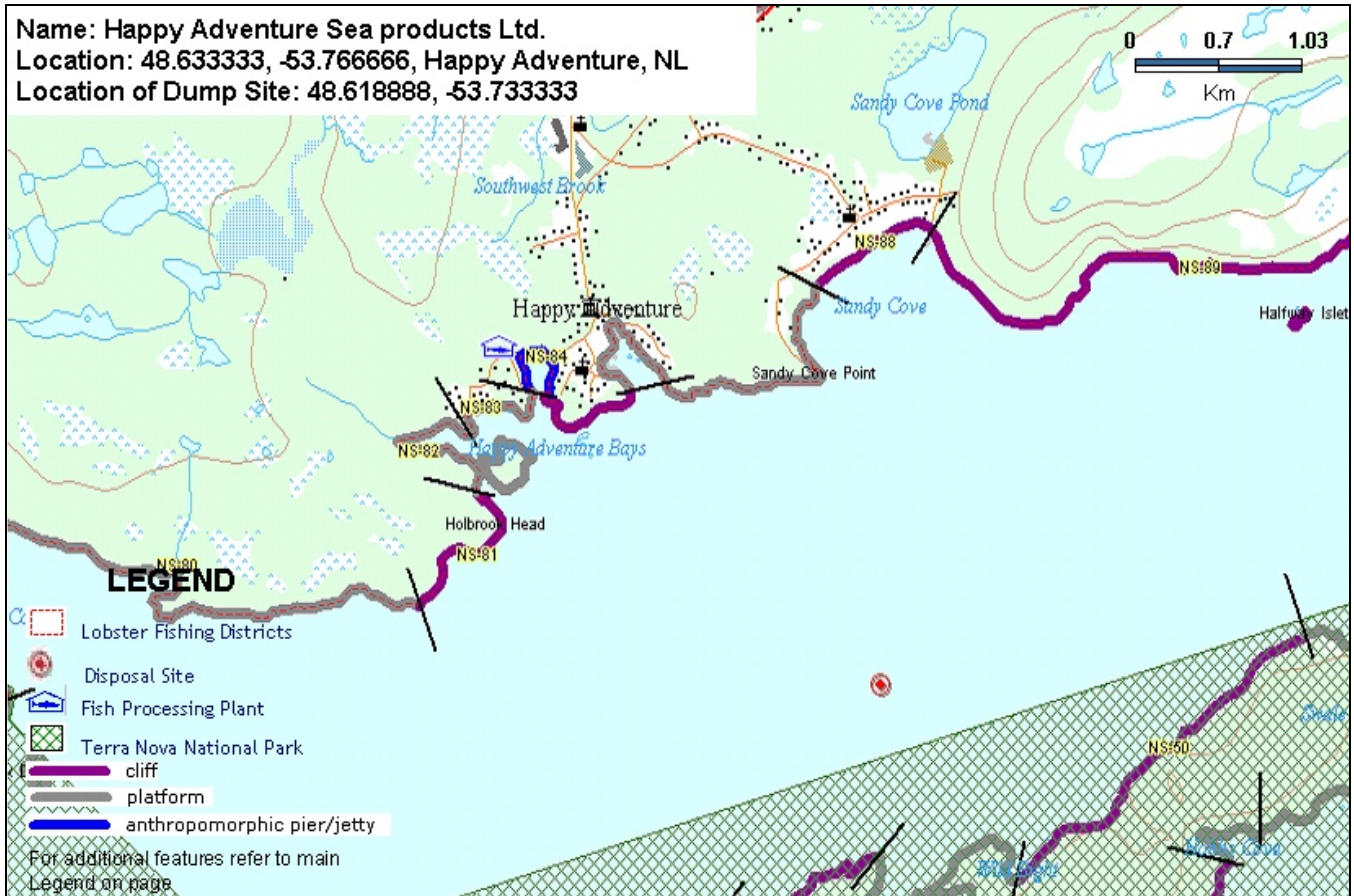


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Happy Adventure Sea Products Ltd., Happy Adventure, Newfoundland
Location of Loading Site:	48° 38.00' N, 53° 46.00' W, Happy Adventure, Newfoundland
Location of Disposal Site:	48° 37.08' N, 53° 44.00' W, with an approximate depth of 150m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Previous history indicates that in the years 1999 and 2000 the offal was given to local farmers and a portion of it was froze and sent to a meal plant. Currently there are no alternatives for the disposal of offal • Ocean dumping disposal permits have been issued annually to Happy Adventure Sea Products Ltd. since 1990 to present date.
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in the area include: pebble-cobble beach, sand beach and bedrock • Residential properties are located along the shore
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times

Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Fish • No aquaculture
Tourism & Recreation:	Terra Nova National Park Sandy Cove Beach
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 245 • Adjacent communities include: Eastport and Sandy Cove
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 500 tonnes/year • 10 tonnes/day • Max. 2-3 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Happy Adventure Sea products Ltd.
Location: 48.633333, -53.766666, Happy Adventure, NL
Location of Dump Site: 48.618888, -53.733333



LEGEND

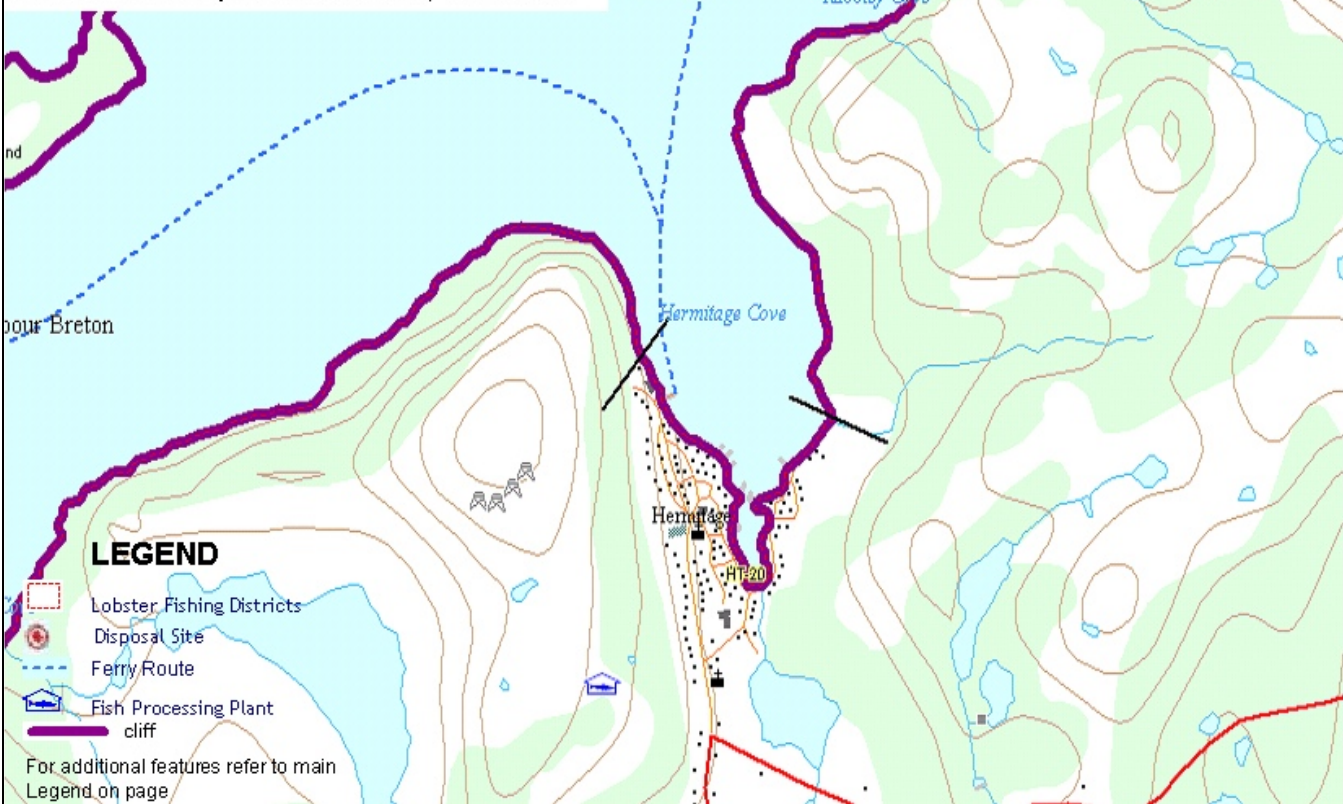
- Lobster Fishing Districts
 - Disposal Site
 - Fish Processing Plant
 - Terra Nova National Park
 - cliff
 - platform
 - anthropomorphic pier/jetty
- For additional features refer to main Legend on page

**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Seacrest Corporation of Canada Ltd., Hermitage, Newfoundland
Location of Loading Site:	47° 33.63' N, 55° 55.88' W, Hermitage, Newfoundland
Location of Disposal Site:	47° 34.40' N, 55° 55.80' W, with an approximate depth of 90m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there are no alternatives for the disposal of offal. However, previous history indicates that offal was shipped to Long Island Seafoods meal plant when possible. Also, a market was found for redfish and perch waste, which is approximately 30-50% of the offal created at Seacrest Corporation of Canada Ltd. • Ocean dumping disposal permits have been issued to Seacrest Corporation of Canada Ltd. for the years of 1991, 1992, 1993, 1994 and have been issued annually since June 1998 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	During the summer season there are small concentrations of pelagic seabirds along the shore
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in the area include: Bedrock and pebble-cobble beach • Residential properties are located along the shore
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site

	<p>where the offal is discharged while steaming within 300m of the site.</p> <ul style="list-style-type: none"> • The offal will be covered by a net to prevent access by gulls • Radar reflecting devices must be displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Ground fish • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 602 • Adjacent communities include: Dawsons Cove and Seal Cove
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 500 tonnes/year • 4 tonnes/trip • 1-2 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Seacrest Corporation of Canada Ltd.
Location: 47.5675, -55.941111, Hermitage, NL
Location of Dump Site: 47.577777, -55.938888



LEGEND

-  Lobster Fishing Districts
-  Disposal Site
-  Ferry Route
-  Fish Processing Plant
-  cliff

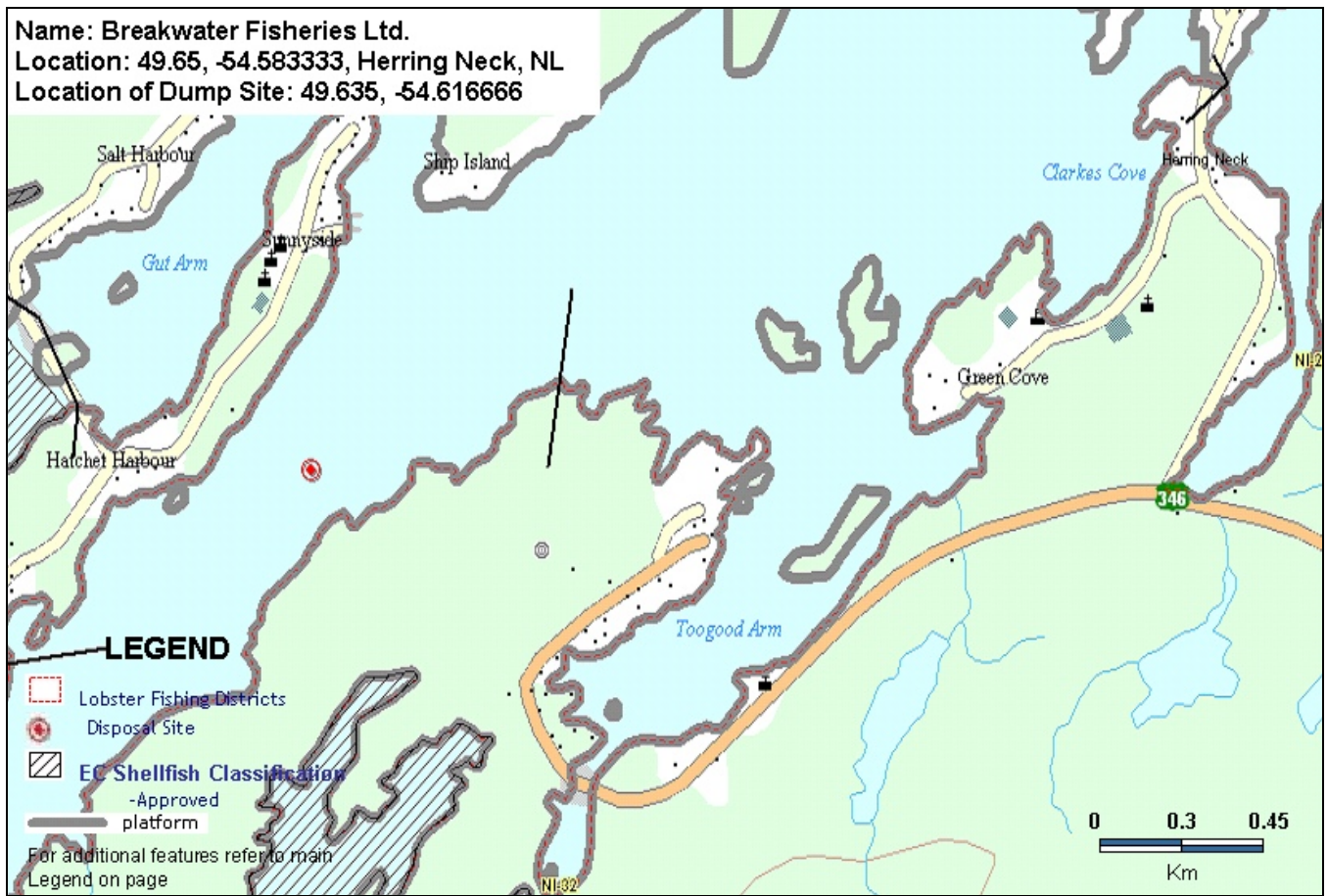
For additional features refer to main Legend on page

**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Breakwater Fisheries Ltd., St. Johns, Newfoundland
Location of Loading Site:	49° 38.60' N, 54° 35.00' W, Herring Neck, Newfoundland
Location of Disposal Site:	49° 38.06' N, 54° 37.00' W, with an approximate depth of 75m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • There are no alternatives for the disposal of offal. However, capelin offal is converted into animal food and turbot heads and tails are packaged to be sold • Ocean dumping disposal permits have been issued to Breakwater Fisheries Ltd. for the time periods of April 2003-April 2004 and April 2004-April 2005
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in the area is bedrock • Residential properties are located along the shore
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A drainage chute is used to move offal from the processing plant onto a barge. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 100m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times

Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Pelagic, ground fish species, squid, crab, shrimp, and lobster • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately • Adjacent communities include: Merritts Harbour and Hatchet Harbour
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 1000 tonnes/year • 9 tonnes/trip • 1 trip/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Breakwater Fisheries Ltd.
Location: 49.65, -54.583333, Herring Neck, NL
Location of Dump Site: 49.635, -54.616666



**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Torngat Fish Producers Co-Operative Society, Happy Valley Goose Bay, Labrador
Location of Loading Site:	55° 27.50' N, 60° 12.90' W, Hopedale, Labrador
Location of Disposal Site:	55° 27.20' N, 60° 12.35' W, with an approximate depth of 40 m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • There are no alternatives for the disposal of offal • An ocean dumping disposal permit has been issued to Torngat Fish Producers Co-Operative Society for the time period of October 2003-October 2004. An emergency permit for Torngat Fish Producers Co-Operative Society was issued for August 2000-October 2000 for the disposal of offal. The permit was issued because the company failed to apply soon enough for an ocean disposal permit to cover the current season.
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	No available information
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times

Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Turbot and char • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 559 • Adjacent communities include: Mud Lake and Sheshatshui
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 500 tonnes/year • 10 tonnes/trip • 1 trip/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Torngat Fish Producers Co-Operative Society
Location: 55.463888, -60.225, Hopedale, Labrador
Location of Dump Site: 55.455555, -60.209722

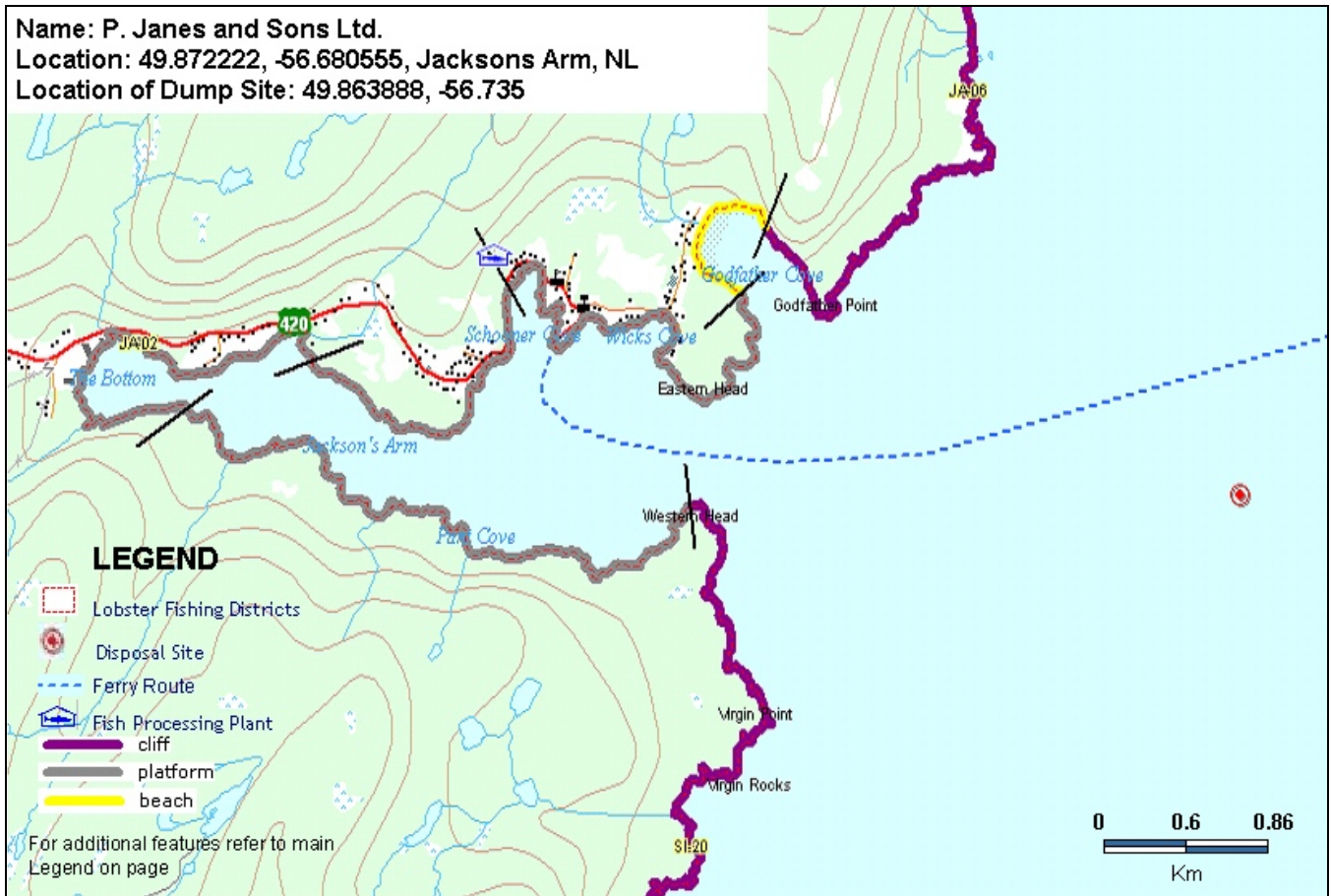


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	P. Janes and Sons Ltd., Jacksons Arm, Newfoundland
Location of Loading Site:	49° 51.80' N, 56° 40.50' W, Jacksons Arm, Newfoundland
Location of Disposal Site:	49° 51.50' N, 56° 43.66' W, with an approximate depth of 90m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations particularly fish and shellfish offal • Previous history indicates that a landfill site was used to dispose of offal but begin to pose problems in the area. Currently there are no alternatives for the disposal of offal • Ocean dumping disposal permits have been issued annually to P. Janes and Sons Ltd. since 1990 to present date.
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in the area include: bedrock, pebble-cobble beach and mixed sand-gravel beach • Residential properties are located along the shore
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A conveyor belt is used to move offal from the processing plant onto a 52' longliner. The longliner travels to the approved dump site where the offal is discharged while steaming within 300m of the approved site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times

Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Ground fish and crab • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 420 • Adjacent communities include: Sop’s Arm and Pollards Point
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	An archaeological site is located along the shore
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 1500 tonnes/year • 10 tonnes/trip • Max. 5 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: P. Janes and Sons Ltd.
Location: 49.872222, -56.680555, Jacksons Arm, NL
Location of Dump Site: 49.863888, -56.735



**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

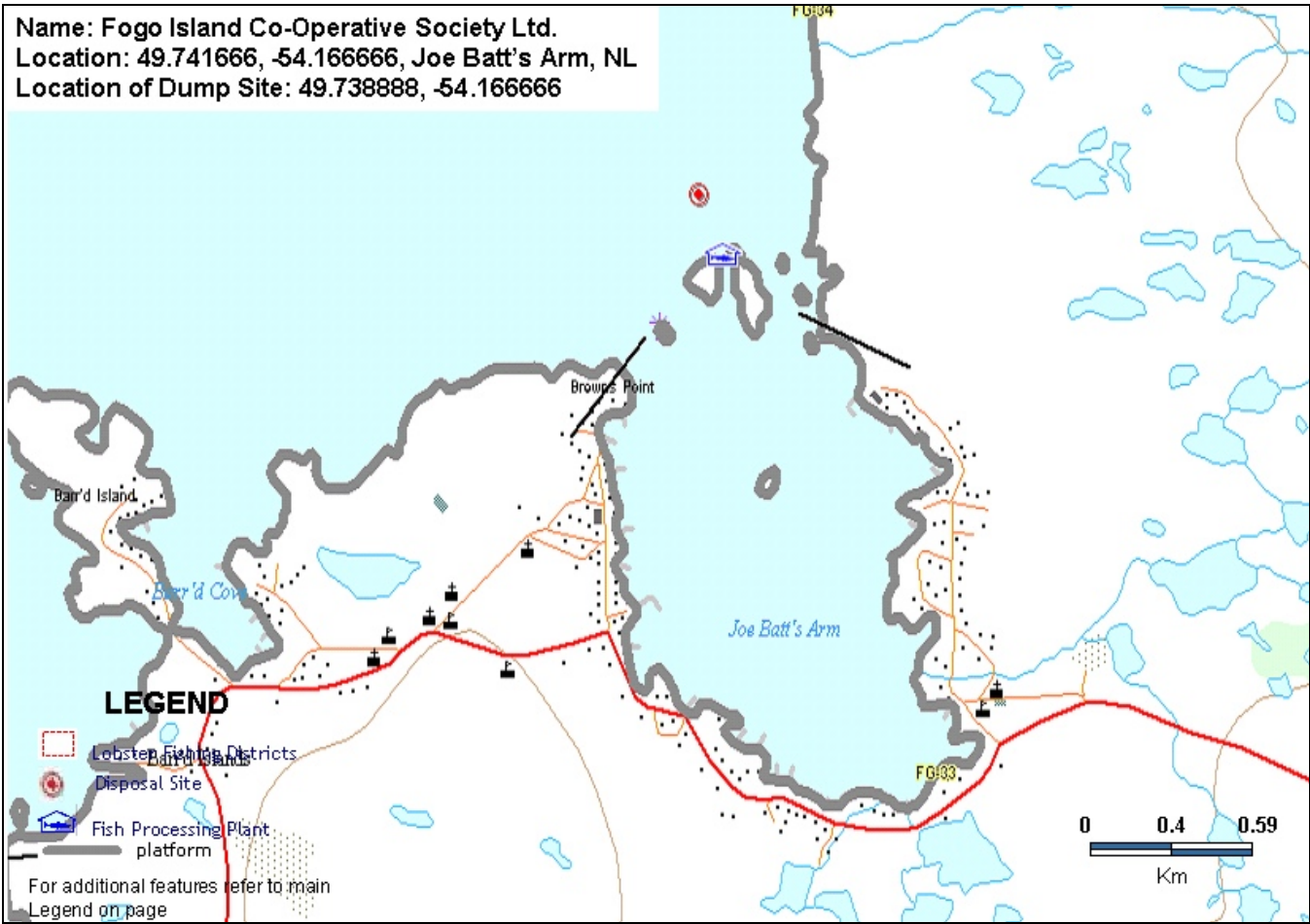
Name of Site:	Fogo Island Co-Operative Society Ltd., Seldom, Newfoundland
Location of Loading Site:	49° 43.90' N, 54° 09.60' W, Joe Batts Arm, Newfoundland
Location of Disposal Site:	49° 44.20' N, 54° 10.00' W, with an approximate depth of 16m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • There are no alternatives for the disposal of offal except that some of the offal is frozen to be used as bait • Ocean dumping disposal permits have been issued annually to Fogo Island Co-Operative Society Ltd. since 1990 to present date.
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	<p>GAPPY ISLAND -Black Guillemots</p> <p>SEALS NEST ISLAND -Black Guillemots -Common Terns -Leach's Storm Petrels</p> <p>STONEHOUSE ISLETS -Atlantic Puffins -Black Guillemots -Leach's Storm Petrels -Black-legged Kittiwakes</p> <p>TURR ISLETS -Black-legged Kittiwakes -Black Guillemots</p> <p>LITTLE FOGO ISLAND -Common Terns -Leach's Storm Petrels -Black-legged Kittiwakes -Atlantic Puffins</p>

	-Black Guillemots
Shoreline:	The types of shoreline in the area include: bedrock and boulder beach
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • Offal is dumped onto a scow from fish containers. The scow is towed to the approved disposal site by an outboard motor vessel where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Pelagic and ground fish species • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 889 • Adjacent communities include: Barr'd Islands, Sandy Cove, Tilting and Shoal Bay
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 1000 tonnes/year • 7 tonnes/trip • Max. 3 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Where depth of the disposal site is less then 35m, measurements of depth must be obtained and reported near the time of the first disposal and then every two months during the disposal activity. This is to ensure that the normal water depth is maintained
Applicable Timing Restrictions:	Not applicable

Additional Information:

None

Name: Fogo Island Co-Operative Society Ltd.
Location: 49.741666, -54.166666, Joe Batt's Arm, NL
Location of Dump Site: 49.738888, -54.166666

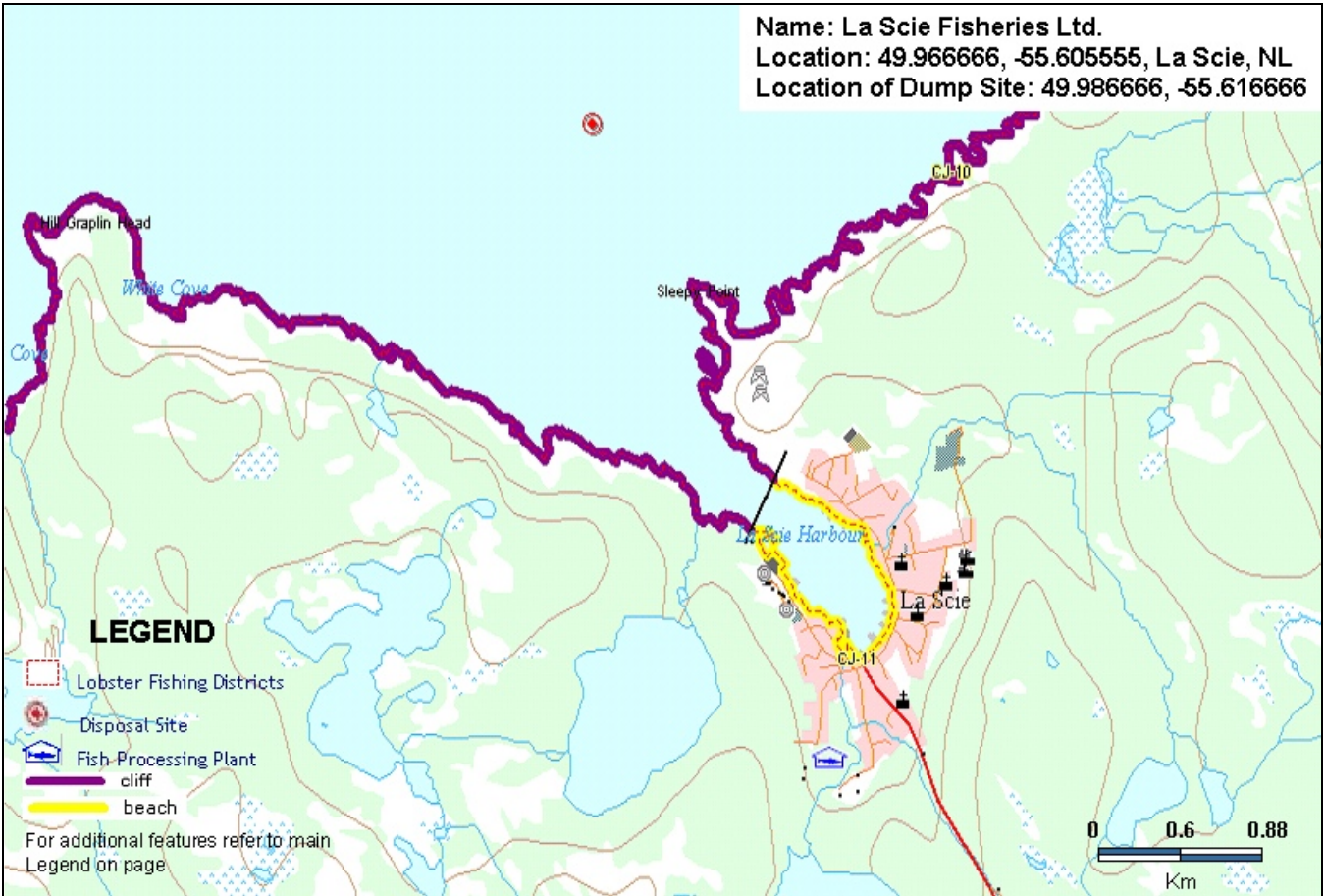


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	La Scie Fisheries Ltd., La Scie, Newfoundland
Location of Loading Site:	49° 57.60' N, 55° 36.20' W, La Scie, Newfoundland
Location of Disposal Site:	49° 58.72' N, 55° 37.00' W, with an approximate depth of 65m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • There are no alternatives for the disposal of offal • Ocean dumping disposal permits have been issued annually to La Scie Fisheries Ltd. since July 2001 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	The types of shoreline in the area include: bedrock and pebble cobble beach
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site

Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Fish • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 1063 • Adjacent communities include: Shoe Cove
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	An archaeological site is located along the shore
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 1400 tonnes/year • 8-10 tonnes/trip • 1-2 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: La Scie Fisheries Ltd.
Location: 49.966666, -55.605555, La Scie, NL
Location of Dump Site: 49.986666, -55.616666

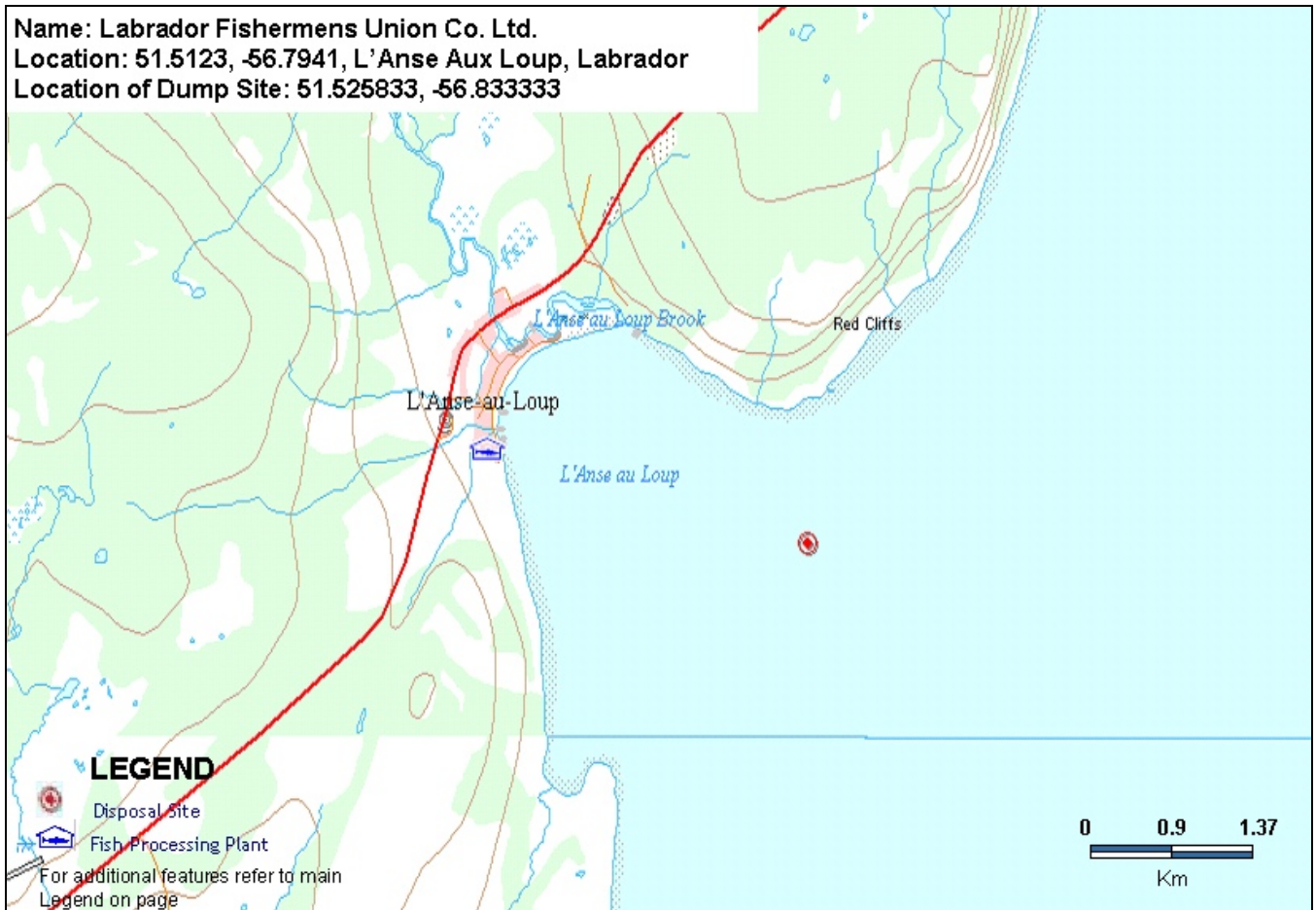


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Labrador Fishermens Union Shrimp Company Ltd., Labrador
Location of Loading Site:	51° 31.30' N, 56° 49.60' W, L'Anse au Loup, Labrador
Location of Disposal Site:	51° 31.33' N, 56° 49.60' W, with an approximate depth of 6m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • There are no alternatives for the disposal of offal • Ocean dumping disposal permits have been issued annually to Labrador Fishermen's Union Shrimp Company Ltd. since 1990 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	No available information
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	Main disposal site for L'Anse au Loup is located at the end of the main wharf, 350m from the main door of the fish plant. The offal in a vat is dumped over the edge of the wharf.
Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Ground fish • No aquaculture
Tourism & Recreation:	None

Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 635 • Adjacent communities include: Capstan Island and L’Anse-Amour
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 1000 tonnes/year • 2000 lbs/vat • 25 vats/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Where depth of the disposal site is less then 35m, measurements of depth must be obtained and reported near the time of the first disposal and then every two months during the disposal activity. This is to ensure that the normal water depth is maintained.
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Labrador Fishermens Union Co. Ltd.
Location: 51.5123, -56.7941, L'Anse Aux Loup, Labrador
Location of Dump Site: 51.525833, -56.833333

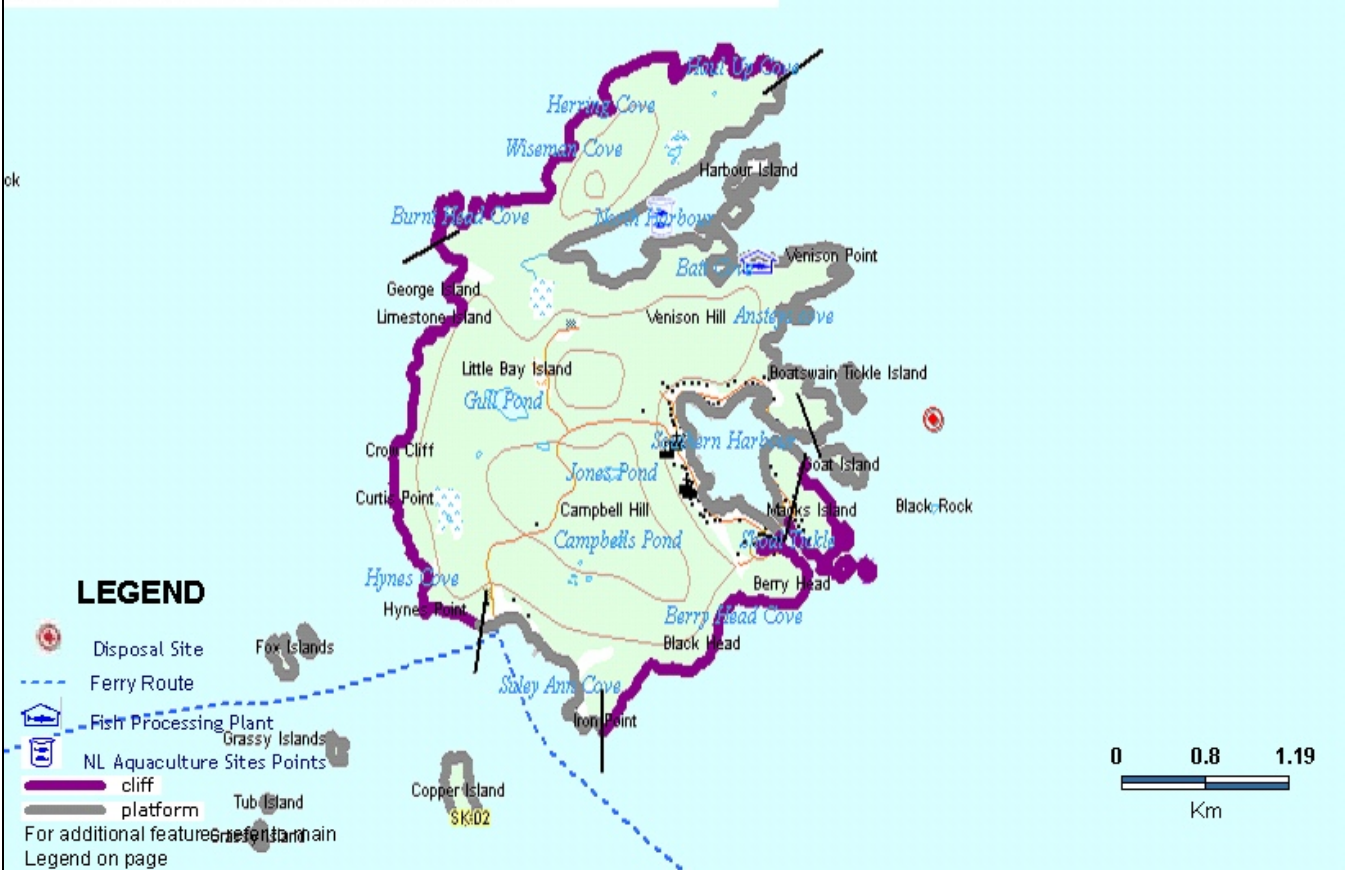


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Eveleigh's Seafoods Ltd., Little Bay Islands, Newfoundland
Location of Loading Site:	49° 38.50' N, 55° 46.50' W, Little Bay Islands, Newfoundland
Location of Disposal Site:	49° 38.60' N, 55° 45.90' W, with an approximate depth of 30m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there are no alternatives for the disposal of offal. • Ocean dumping disposal permits have been issued annually to Eveleigh's Seafoods Ltd. since May 2001 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	The types of shoreline in the area include: bedrock, pebble-cobble beach, and mixed sand-gravel beach
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site

Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Snow crab • Aquaculture site – blue mussels
Tourism & Recreation:	Ferry docking facilities
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 176 • Adjacent communities include: Suley Ann’s Cove
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	Archaeological site located along the shore
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 1000 tonnes/ year • 2500 lbs/trip • 2 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Where depth of the disposal site is less then 35m, measurements of depth must be obtained and reported near the time of the first disposal and then every two months during the disposal activity. This is to ensure that the normal water depth is maintained.
Applicable Timing Restrictions:	Not applicable
Additional Information:	Cod trap berths are located along the shore

Name: Eveleigh's Seafoods Ltd.
Location: 49.647222, -55.780555, Little Bay Islands, NL
Location of Dump Site: 49.65, -55.841666

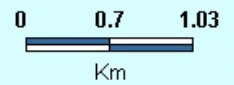


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Dorset Fisheries Ltd., Long Cove, Newfoundland
Location of Loading Site:	47° 34.50' N, 53° 40.00' W, Long Cove, Newfoundland
Location of Disposal Site:	47° 36.00' N, 53° 39.00' W, with an approximate depth of 100m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there are no alternatives for the disposal of offal • Previous history indicates that offal use to be shipped to the meal plant in Marystown, Newfoundland when it was in operation • Ocean dumping disposal permits have been issued annually to Dorset Fisheries Ltd. since March 1998 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in the area include: pebbles-cobble beach, spit/pebble-cobble beach and bedrock • Residential properties are located along the shore • Some beaches in the area are spawning grounds for capelin
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times

Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Pelagic and ground fish species • No aquaculture
Tourism & Recreation:	Recreational beaches are located in the area
Residents & Communities:	<ul style="list-style-type: none"> • Population – No available information • Adjacent communities include: Normans Cove and Thornlea
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 1500 tonnes/year • 16 tonnes/trip • 1 trip a day during peak season
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Dorset Fisheries Ltd.
Location: 47.579222, -53.666666, Long Cove, NL
Location of Dump Site: 47.6, -53.65

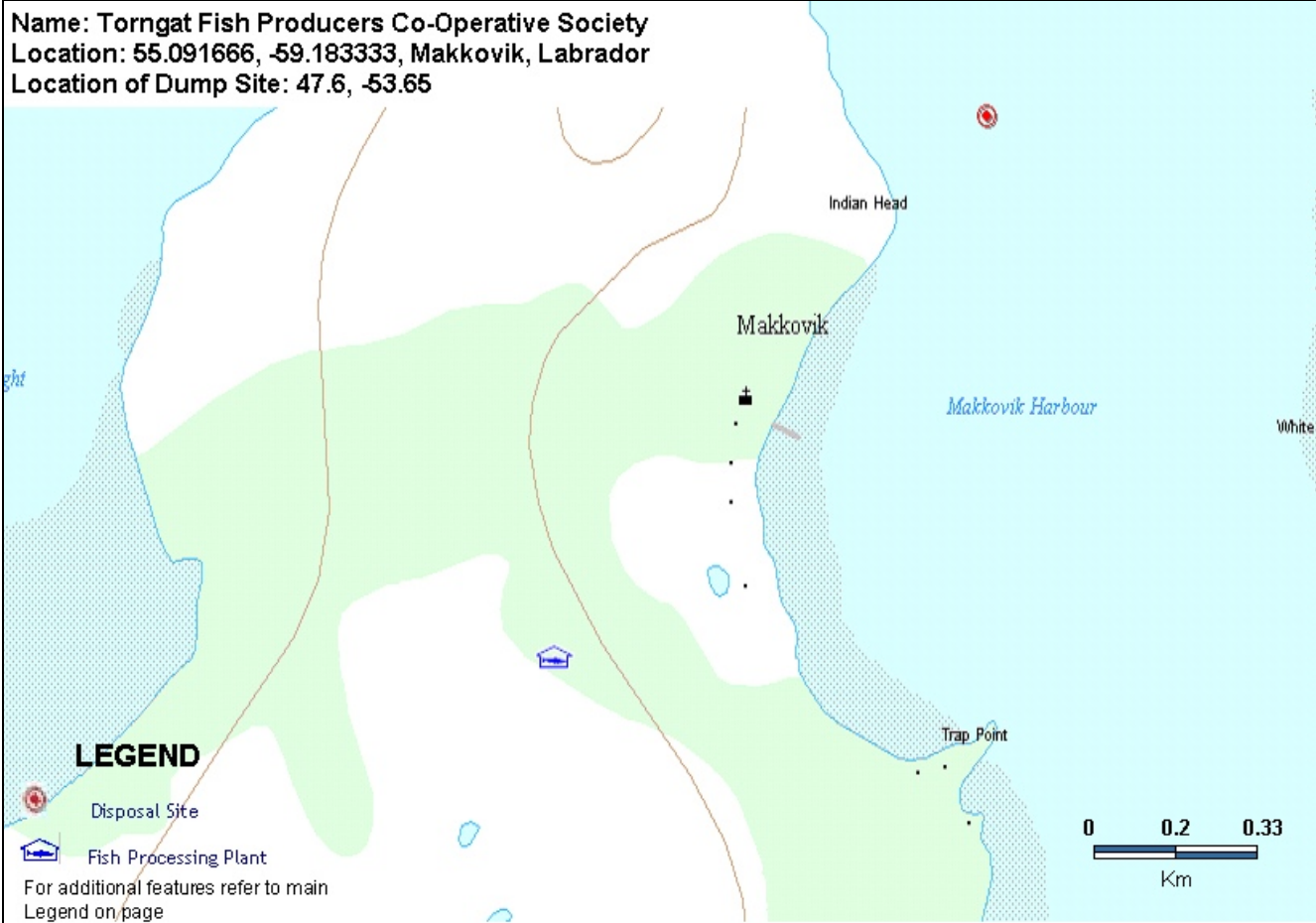


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Tornгат Fisheries Producers Co-Operative Society, Happy Valley-Goose Bay, Labrador
Location of Loading Site:	55° 05.30' N, 59° 10.60' W, Makkovik, Labrador
Location of Disposal Site:	55° 05.60' N, 59° 10.20' W, with an approximate depth of 37m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there are no alternatives for the disposal of offal. • Ocean dumping disposal permits have been issued annually to Tornгат Fisheries Producers Co-Operative Society since July 1998 to present date • An emergency permit for the disposal of offal was issued to Tornгат Fisheries Producers Co-Operative Society for the Makkovik disposal site for the time period of August 2000-October 2000. This permit was issued because the company failed to apply for an ocean disposal permit soon enough to cover the current season
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	No available information
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged barge while steaming within 300m of the site.

	<ul style="list-style-type: none"> • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Turbot, grenadier, and snow crab • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 384 • Adjacent communities include: Postville
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 500 tonnes/year • 4 tonnes/trip • 1 trip/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Where depth of the disposal site is less then 35m, measurements of depth must be obtained and reported near the time of the first disposal and then every two months during the disposal activity. This is to ensure that the normal water depth is maintained.
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Torngat Fish Producers Co-Operative Society
Location: 55.091666, -59.183333, Makkovik, Labrador
Location of Dump Site: 47.6, -53.65

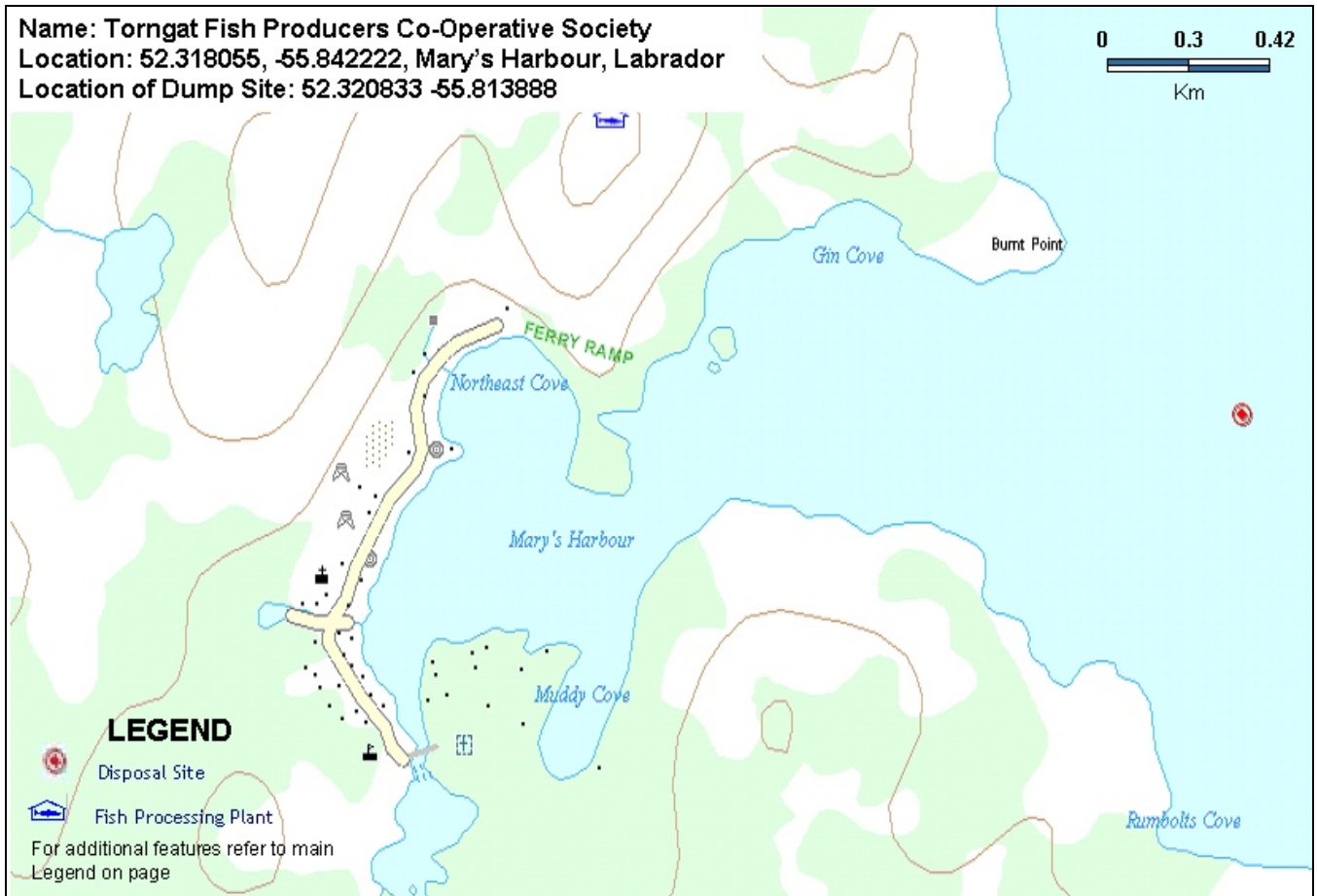
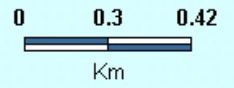


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Labrador Fishermens Union Shrimp Company Ltd., Labrador
Location of Loading Site:	52° 18.65' N, 55° 49.92' W, Mary's Harbour, Newfoundland
Location of Disposal Site:	52° 18.75' N, 55° 48.50' W, with an approximate depth of 66m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • There are no alternatives for the disposal of offal • Ocean dumping disposal permits have been issued annually to Labrador Fishermens Union Shrimp Company Ltd. since 1990 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	No available information
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • Offal is loaded on to a barge buy using a flume chute. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for the ocean bed near disposal site

Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Snow crab • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 450 • Adjacent communities include: Lodge Bay
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 700 tonnes/year • 1-2 tonnes/trip • Max. 5-6 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Torngat Fish Producers Co-Operative Society
Location: 52.318055, -55.842222, Mary's Harbour, Labrador
Location of Dump Site: 52.320833 -55.813888

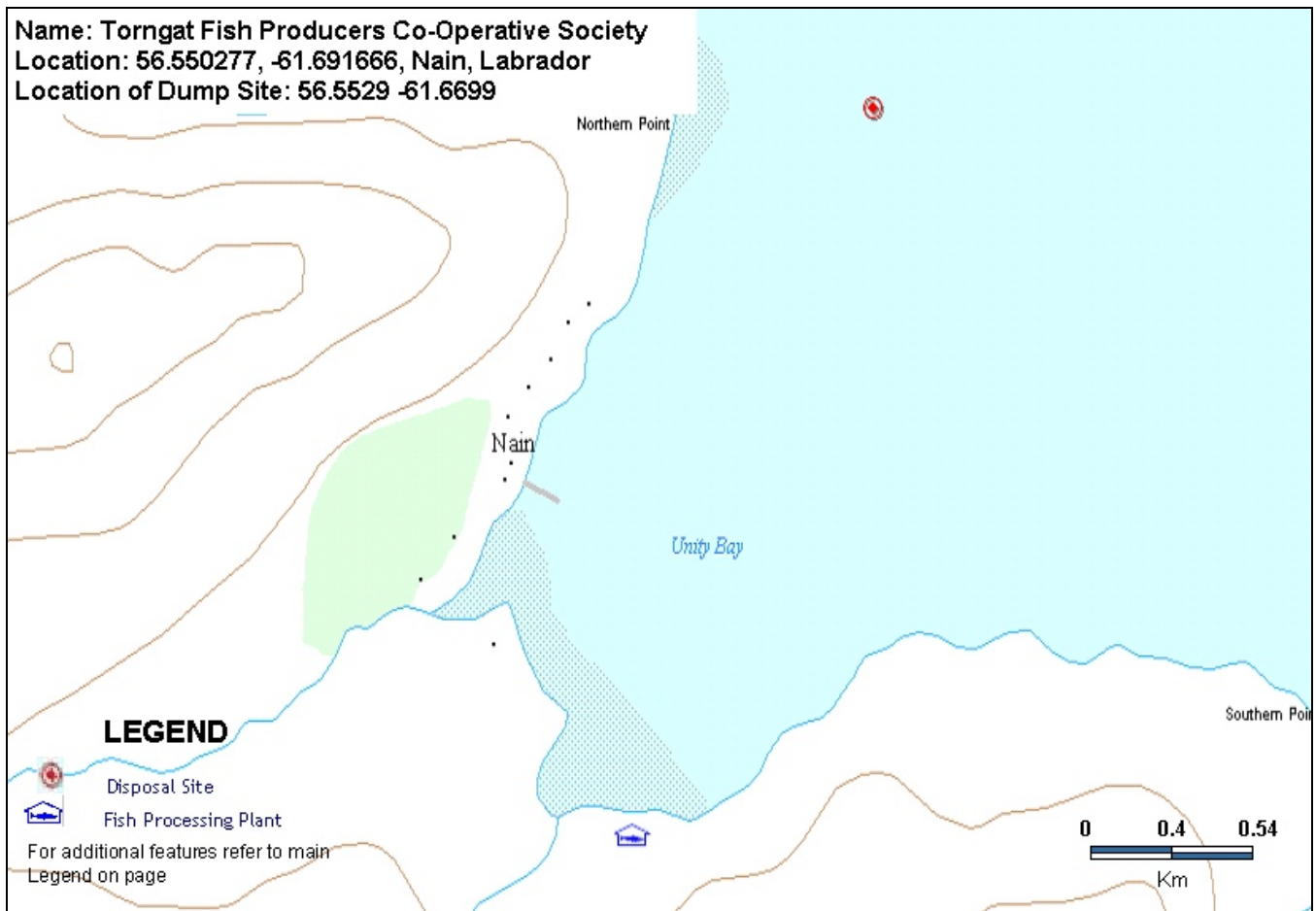


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Tornгат Fisheries Producers Co-Operative Society, Happy Valley-Goose Bay, Labrador
Location of Loading Site:	56° 32.61' N, 61° 41.30' W, Nain, Labrador
Location of Disposal Site:	56° 32.61' N, 61° 41.00' W, with an approximate depth of 17m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • There are no alternatives for the disposal of offal • Ocean dumping disposal permits have been issued annually to Tornгат Fisheries Producers Co-Operative Society since August 2000 to present date • An emergency permit for the disposal of offal was issued to Tornгат Fisheries Producers Co-Operative Society for the Nain disposal site for the time period of August 2000-October 2000. This permit was issued because the company failed to apply for an ocean disposal permit soon enough to cover the current season
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	No available information
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times

Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Turbot, char and scallop • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 1159 • Adjacent communities include: None
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 500 tonnes/year • 4 tonnes/trip • 1 trip/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Where depth of the disposal site is less then 35m, measurements of depth must be obtained and reported near the time of the first disposal and then every two months during the disposal activity. This is to ensure that the normal water depth is maintained.
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Torngat Fish Producers Co-Operative Society
Location: 56.550277, -61.691666, Nain, Labrador
Location of Dump Site: 56.5529 -61.6699









**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

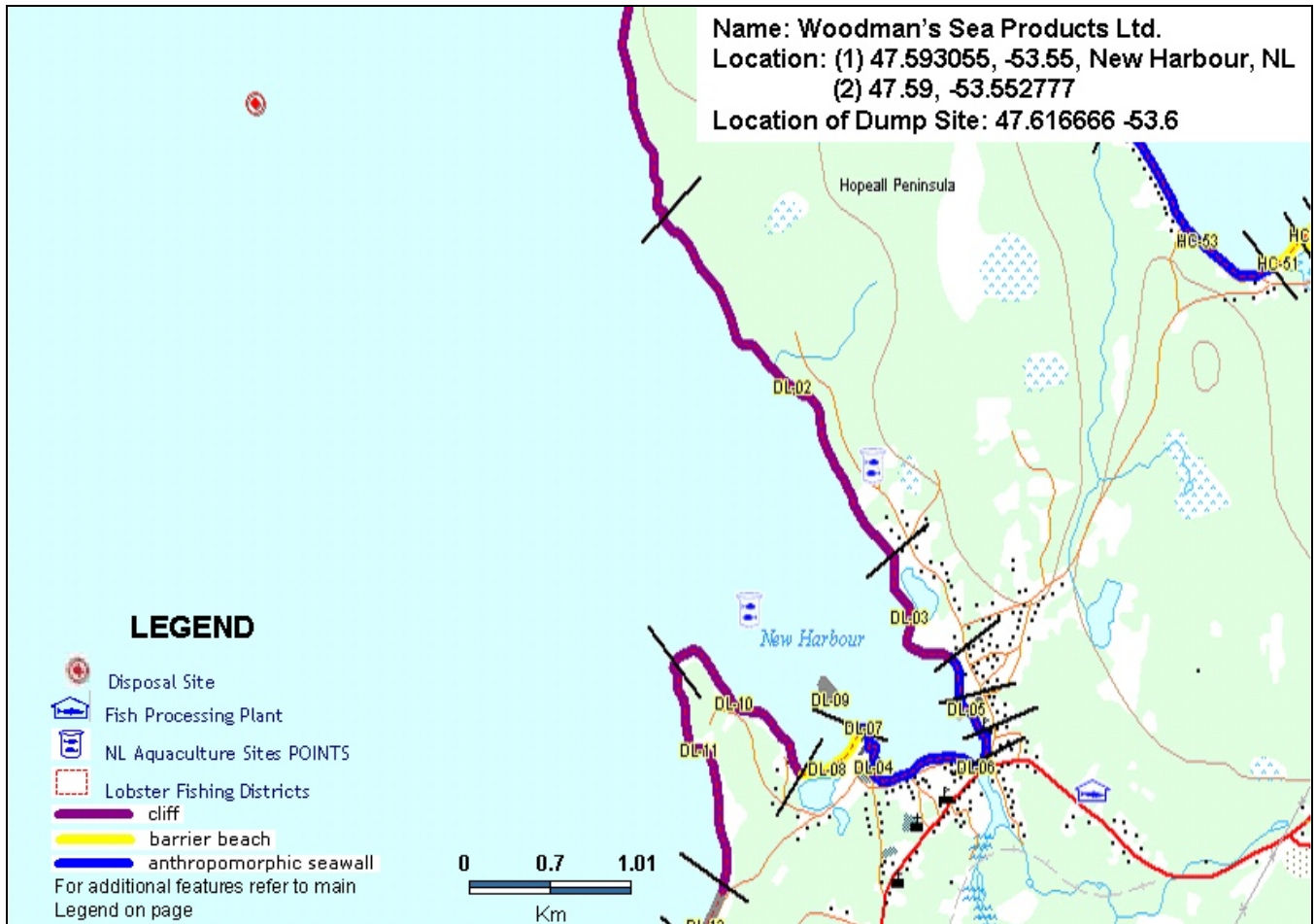
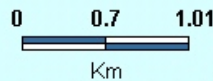
Name of Site:	Woodman's Sea Products Ltd., New Harbour, Newfoundland
Location of Loading Site:	47° 35.35' N, 53° 32.60' W, New Harbour, Newfoundland 47° 35.24' N, 53° 33.10' W, New Harbour, Newfoundland
Location of Disposal Site:	47° 37.00' N, 53° 36.00' W, with an approximate depth of 130m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there are no alternatives for the disposal of offal. • However, previous history indicates that all ground fish offal was frozen and packed for export to New Brunswick and Ontario where it was used as pet food and mink food supplement • Ocean dumping disposal permits have been issued annually to Woodman's Sea Products Ltd. since 1989 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in the area include: barrier/boulder beach, pebble-cobble beach and bedrock • Residential properties are located along the shore • Some beaches in the area are spawning grounds for capelin
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • Offal is loaded on to a barge buy using a flume chute along with fish containers and fork lift. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls

	<ul style="list-style-type: none"> • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Skate, turbot, monkfish, cod, seal, redfish, snow crab, and mussels • No aquaculture
Tourism & Recreation:	Recreational beaches are located in the area
Residents & Communities:	<ul style="list-style-type: none"> • Population – No available information • Adjacent communities include: Dildo
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 1000 tonnes/year • 15 tonnes/trip
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Woodman's Sea Products Ltd.
Location: (1) 47.593055, -53.55, New Harbour, NL
(2) 47.59, -53.552777
Location of Dump Site: 47.616666 -53.6

LEGEND

-  Disposal Site
 -  Fish Processing Plant
 -  NL Aquaculture Sites POINTS
 -  Lobster Fishing Districts
 -  cliff
 -  barrier beach
 -  anthropomorphic seawall
- For additional features refer to main Legend on page

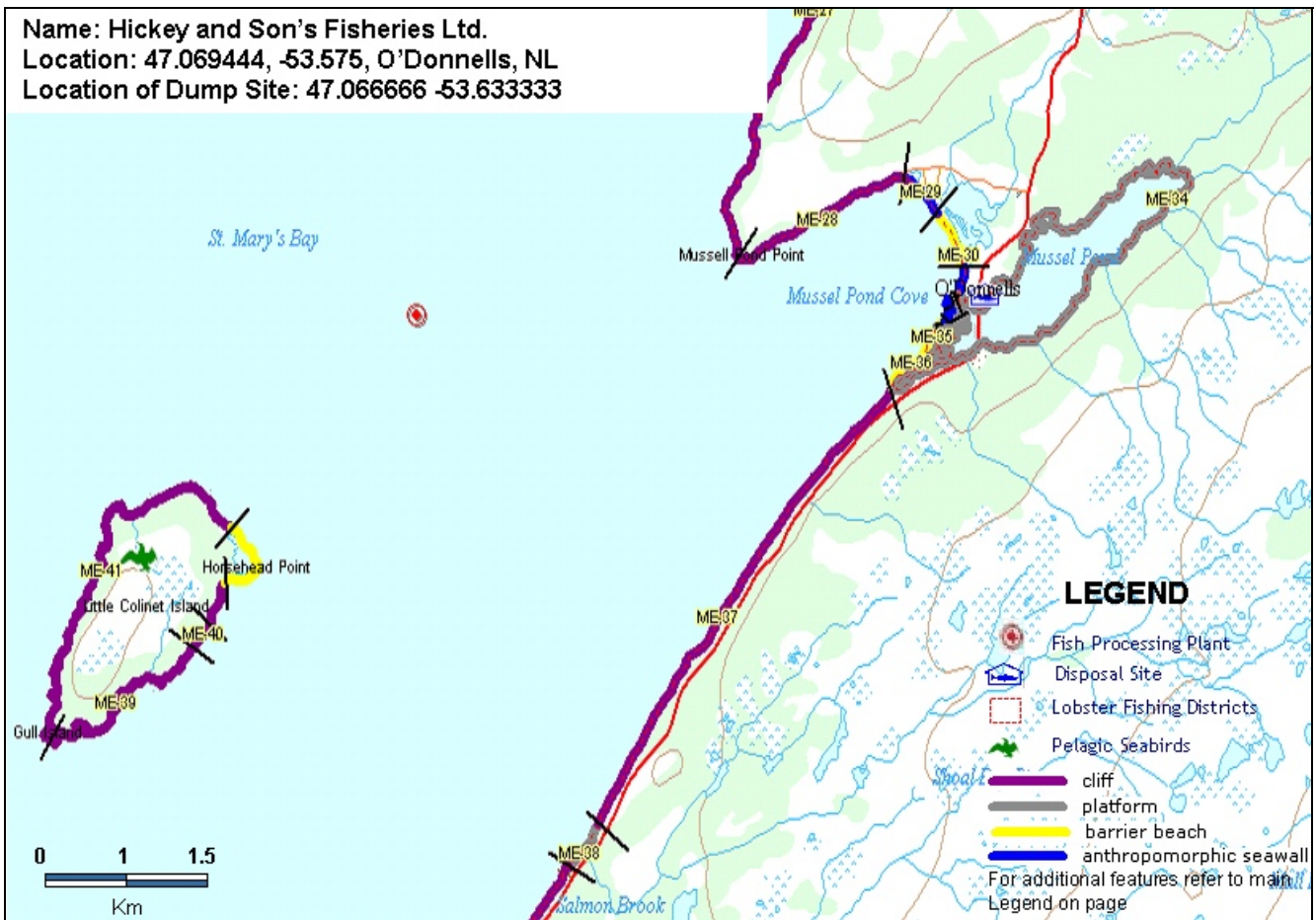


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Hickey & Sons Fisheries Ltd., St. John's, Newfoundland
Location of Loading Site:	47° 04.10' N, 53° 34.30' W, O'Donnells, Newfoundland
Location of Disposal Site:	47° 04.00' N, 5° 38.00' W, with an approximate depth of 50m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there are no alternatives for the disposal of offal. However, previous history indicates that some of the offal was taken to Cape Broyle Composting • Ocean dumping disposal permits have been issued annually to Hickey & Sons Fisheries Ltd. since November 2001 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	<p>LITTLE COLINET ISLAND -Black Guillemot</p> <ul style="list-style-type: none"> • This area is also migration stopover for waterfowl
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in the area include: pebble-cobble beach and barrier/pebble-cobble beach • Residential properties are located along the shore • Some beaches in the area are spawning grounds for capelin
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the

	<p>site.</p> <ul style="list-style-type: none"> • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Capelin, herring, redfish and sea urchins • No aquaculture
Tourism & Recreation:	Recreational beaches are located in the area
Residents & Communities:	<ul style="list-style-type: none"> • Population – No available information • Adjacent communities include: St. Josephs and Admirals Beach
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 250 tonnes/year • 15 tonnes/trip • 1 trip/week
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Hickey and Son's Fisheries Ltd.
 Location: 47.069444, -53.575, O'Donnells, NL
 Location of Dump Site: 47.066666 -53.633333

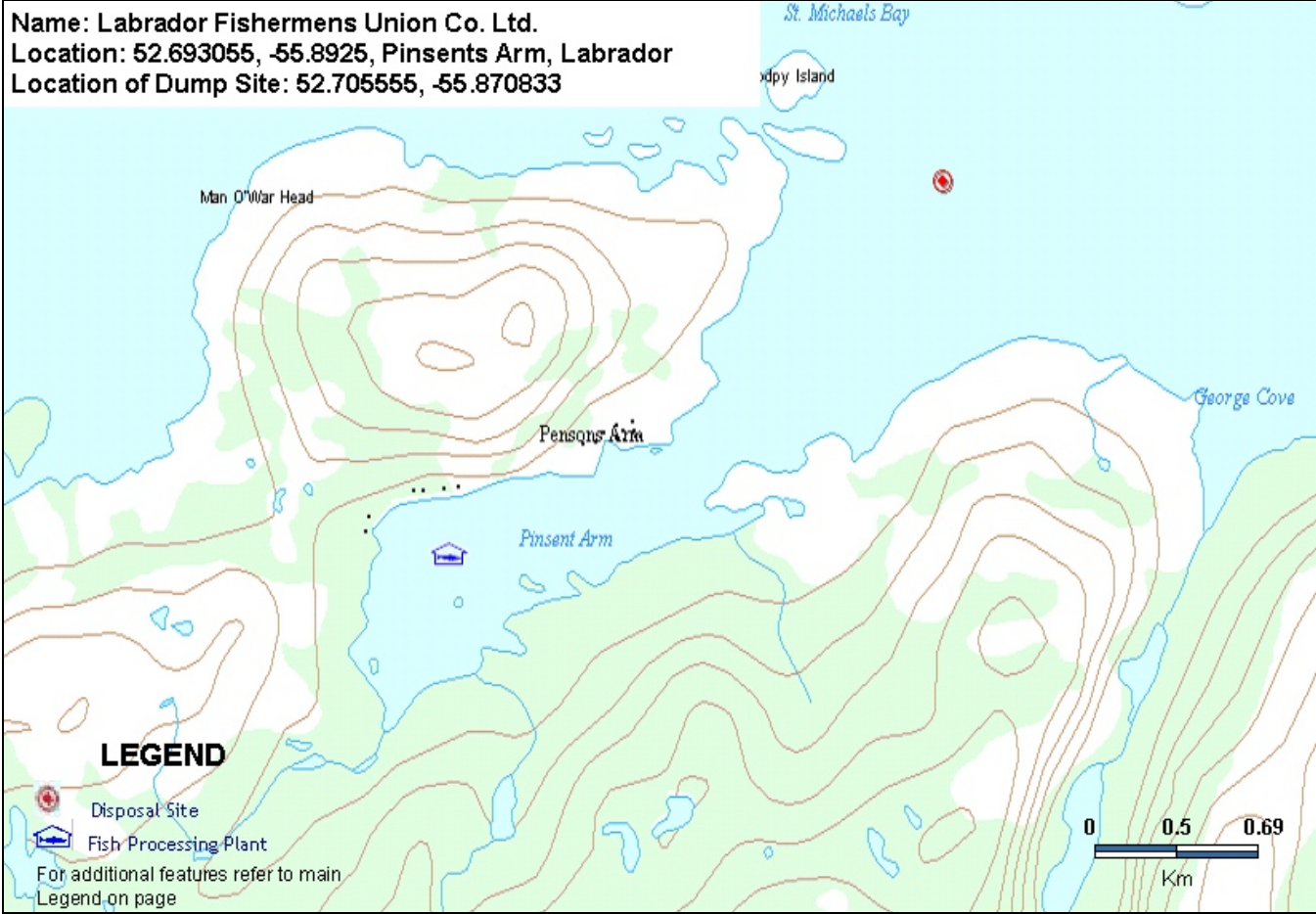


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Labrador Fisherman's Union Shrimp Co-Operative Ltd., L'Anse au Loup, Labrador
Location of Loading Site:	52° 41.35' N, 55° 53.33' W, Pinsent's Arm, Labrador
Location of Disposal Site:	52° 41.80' N, 55° 52.15' W, with an approximate depth of 30m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there are no alternatives for the disposal of offal. However, some offal is given to local farmers • Ocean dumping disposal permits have been issued annually to Labrador Fisherman's Union Shrimp Co-Operative Ltd. since June 1998 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline and Soils:	No available information
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are be displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site

Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Whelk • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – No available information • Adjacent communities include: Charlottetown
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 175 tonnes/year • 0.5-1 tonne/trip • 1-2 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Where depth of the disposal site is less then 35m, measurements of depth must be obtained and reported near the time of the first disposal and then every two months during the disposal activity. This is to ensure that the normal water depth is maintained.
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Labrador Fishermens Union Co. Ltd.
Location: 52.693055, -55.8925, Pinsents Arm, Labrador
Location of Dump Site: 52.705555, -55.870833

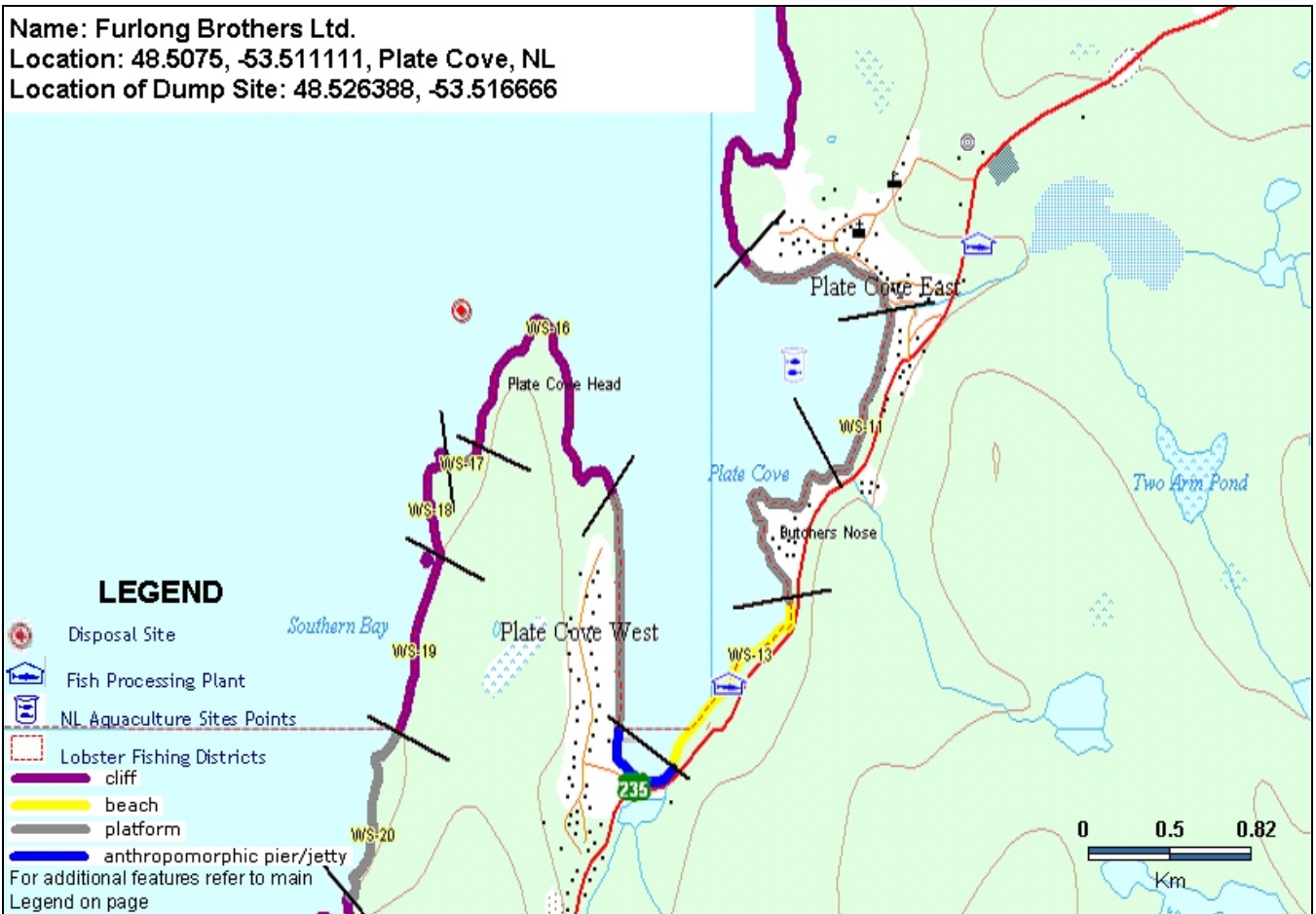


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Furlong Brothers Ltd., Plate Cove, Newfoundland
Location of Loading Site:	48° 29.87' N, 53° 30.40' W, Plate Cove, Newfoundland
Location of Disposal Site:	48° 30.95' N, 53° 31.00' W, with an approximate depth of 110m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there are no alternatives for the disposal of offal. From July 2003 to July 2004 offal was trucked to a composting site in Lethbridge, Newfoundland. The shipping of the offal ceased due to the shipping of meal from a local meal plant. As the meal plant became too busy it had to dispose of the offal at the composting site, which had priority over the Furlong Brothers Ltd. plant. Also, due to the 0% tolerance for leakage from trucks it became harder to transport the offal • Ocean dumping disposal permits have been issued annually to Furlong Brothers Ltd. since July 2002 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in the area include: bedrock, boulder beach, and pebble-cobble beach • Residential properties are located along the shore
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the

	<p>site.</p> <ul style="list-style-type: none"> • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Fish and shell fish • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 303 • Adjacent communities include: Plate Cove East, Plate Cove West and Summerville
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 600 tonnes/year • 15-20,000 lbs/trip • Disposal is done as required by normal operations
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Furlong Brothers Ltd.
 Location: 48.5075, -53.511111, Plate Cove, NL
 Location of Dump Site: 48.526388, -53.516666



**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Fishery Products International Ltd., Port Union, Newfoundland
Location of Loading Site:	48° 30.20' N, 53° 04.20' W, Port Union, Newfoundland
Location of Disposal Site:	48° 29.00' N, 52° 56.00' W, with an approximate depth of 130m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • There are no alternatives for the disposal of offal • Ocean dumping disposal permits have been issued annually to Fishery Products International Ltd. since August 1998 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in the area include: pebble-cobble beach and bedrock • Residential properties are located along the shore
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A conveyor belt along with a forklift and fish containers are used to dump offal onto barge. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site

Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Shrimp • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 486 • Adjacent communities include: Catalina and Melrose
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 7000 tonnes/year • 40 tonnes/trip • 1-3 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

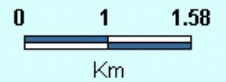
Name: Fishery Products International Ltd.
Location: 48.505555, -53.072222, Port Union, NL
Location of Dump Site: 48.483333, -53.933333



LEGEND

- Disposal Site
- Fish Processing Plant
- Lobster Fishing Districts
- cliff
- beach
- platform

For additional features refer to main Legend on page

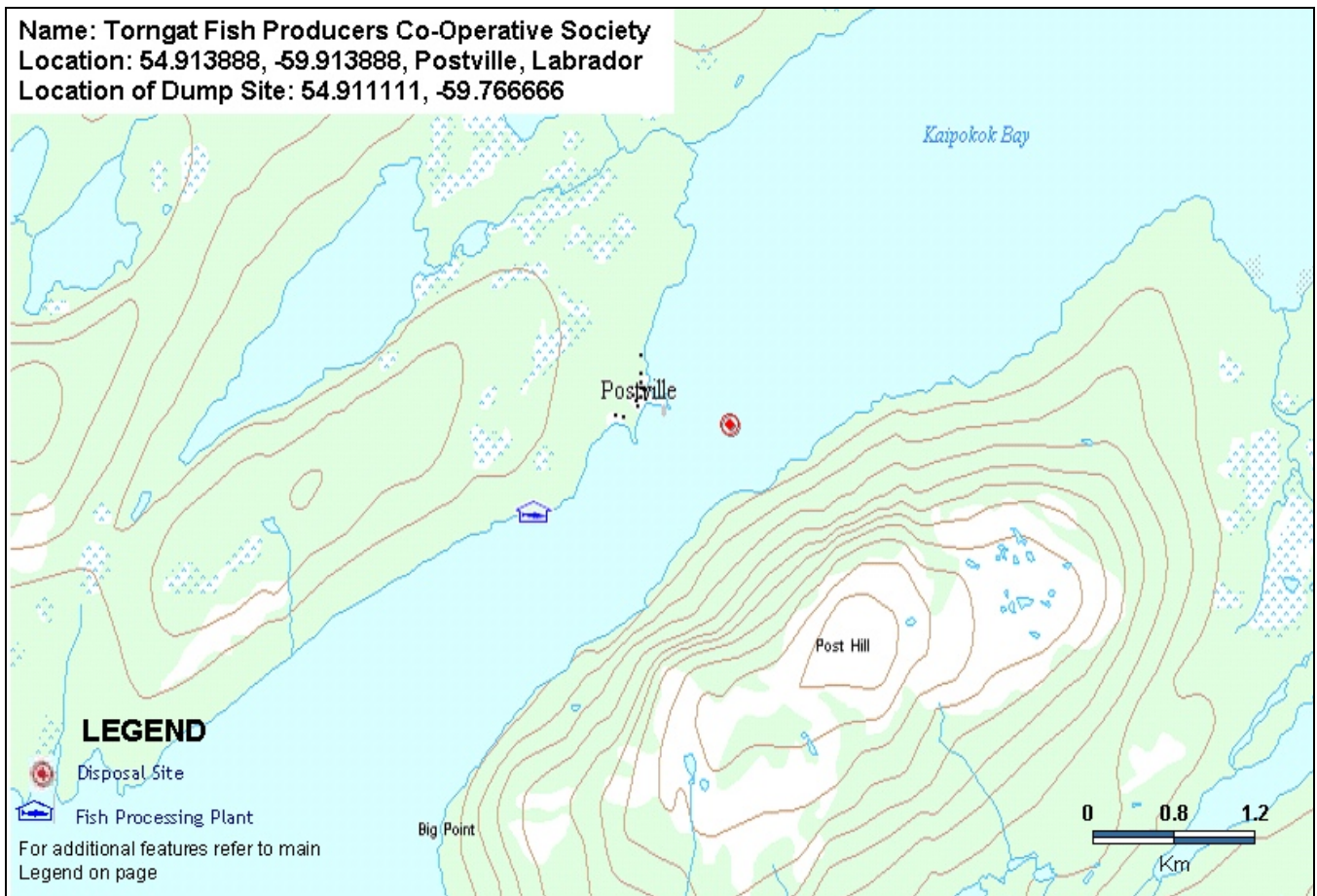


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Tornгат Fish Producers Co-Operative Society Ltd., Happy Valley-Goose Bay, Labrador
Location of Loading Site:	54° 54.50' N, 59° 46.10' W, Postville, Labrador
Location of Disposal Site:	54° 54.40' N, 59° 45.60' W, with an approximate depth of 55m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there are no alternatives for the disposal of offal. • Ocean dumping disposal permits have been issued annually to Tornгат Fish Producers Co-Operative Society Ltd. since July 1998 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	No available information
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • Offal is held and manually transported to a motorboat in fish pans. The motorboat then travels to the disposal site where the offal is disposed of while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site

Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Char and cod • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 215 • Adjacent communities include: None
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 100 tonnes/year • 40-544 lbs/trip • 1 trip/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Torngat Fish Producers Co-Operative Society
Location: 54.913888, -59.913888, Postville, Labrador
Location of Dump Site: 54.911111, -59.766666

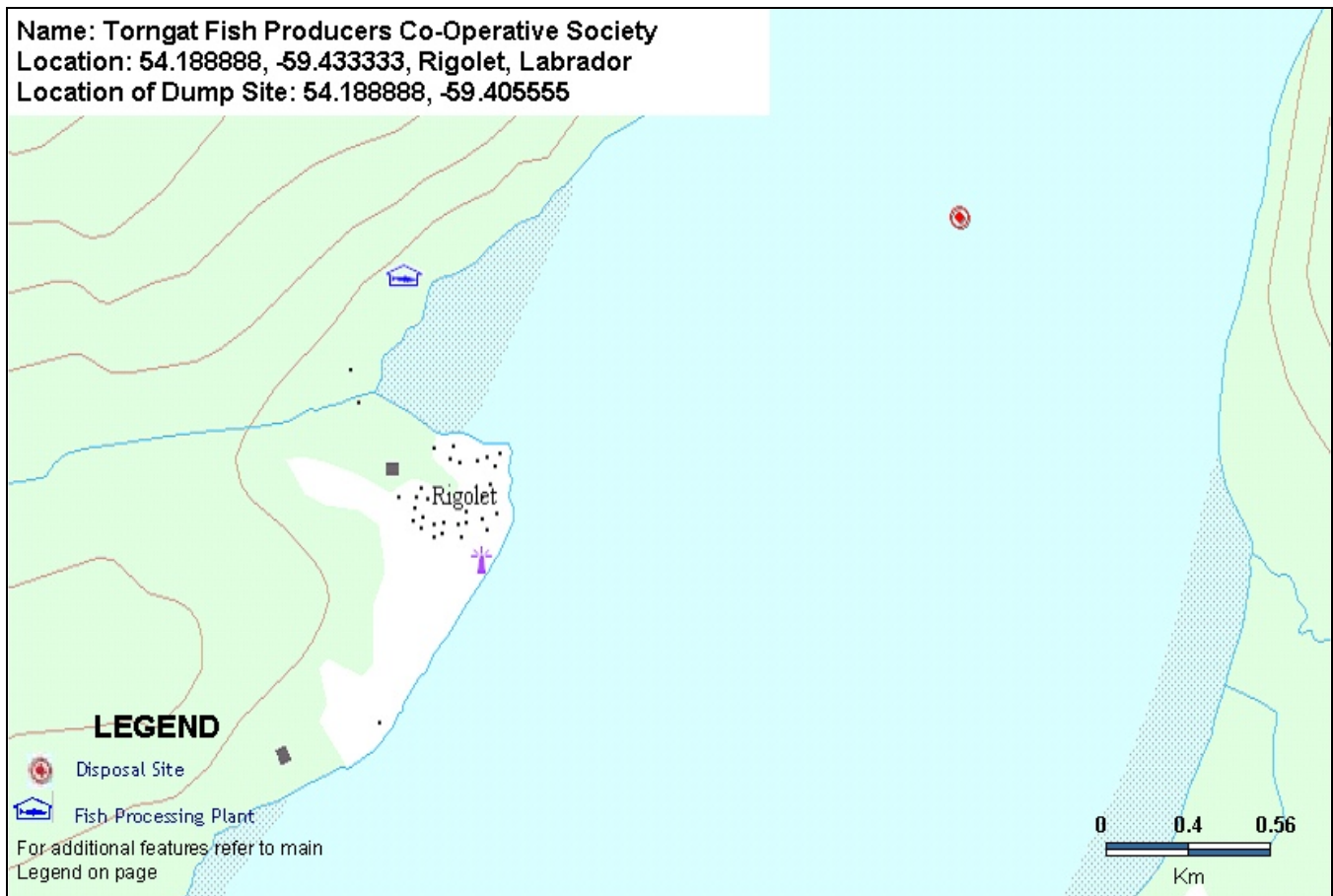


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Torngat Fish Producers Co-Operative Society, Happy Valley-Goose Bay, Labrador
Location of Loading Site:	54° 10.80' N, 5° 25.16 W, Rigolet, Labrador
Location of Disposal Site:	54° 11.20' N, 58° 24.20' W, with an approximate depth of 40m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • There are no alternatives for the disposal of offal • Ocean dumping disposal permits have been issued annually to Torngat Fish Producers Co-Operative Society since 1990 to present date • Addendums were issued to the permits for October 2001-October 2002 and October 2002-October 2003. They were issued to cease the process of fish because of renovations/construction of the Rigolet plant site
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	No available information
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • Offal is held in watertight fish containers and manually loaded on to a motorboat for disposal. The motorboat then travels to the approved dump site where the offal is discharged from the boat while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times

Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Char, trout, shrimp, scallops, and sea urchins • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 317 • Adjacent communities include: None
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 100 tonnes/year • 500 lbs/trip • 1 trip/ day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Torngat Fish Producers Co-Operative Society
Location: 54.188888, -59.433333, Rigolet, Labrador
Location of Dump Site: 54.188888, -59.405555

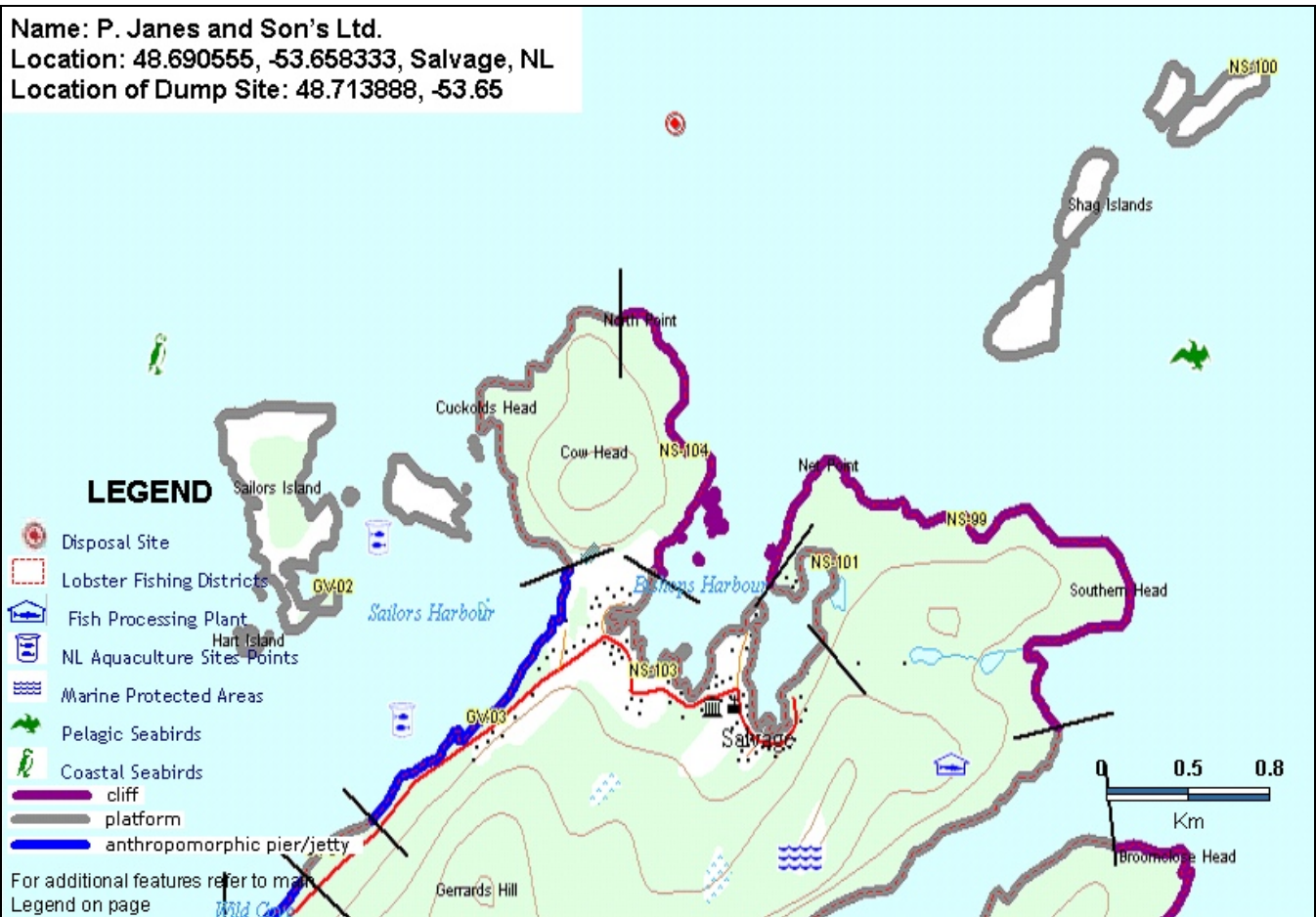


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	P. Janes & Sons Ltd., Salvage, Newfoundland
Location of Loading Site:	48° 41.26' N, 53° 39.30' W, Salvage, Newfoundland
Location of Disposal Site:	48° 42.50' N, 53° 39.00' W, with an approximate depth of 150m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • P. Janes & Sons Ltd. sends offal to Fishery Products Inc. to be disposed of but cannot dispose of all their offal in this manner • P. Janes & Sons Ltd. disposed of some of the offal in a local landfill site but it began to pose problems in the area • Ocean dumping disposal permits have been issued annually P. Janes & Sons Ltd. since 1996 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	<p>LITTLE DENIER ISLAND</p> <ul style="list-style-type: none"> -Black Guillemots -Leach's Storm Petrels <p>SHAG ISLAND</p> <ul style="list-style-type: none"> -Black Guillemots -Leach's Storm Petrels <p>SAILORS HARBOUR ISLAND</p> <ul style="list-style-type: none"> -Common Terns
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in the area include: bedrock, pebble-cobble beach, and boulder beach • Residential properties are located along the shore
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all

	<p>waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site.</p> <ul style="list-style-type: none"> • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Ground fish and pelagic species • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 203 • Adjacent communities include: Sandy Cove, Eastport and Happy Adventure
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	Archaeological site along shore
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 2000 tonnes/year • 10 tonnes/trip • 3 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	Cod trap berths are located on parts of the shoreline

Name: P. Janes and Son's Ltd.
 Location: 48.690555, -53.658333, Salvage, NL
 Location of Dump Site: 48.713888, -53.65

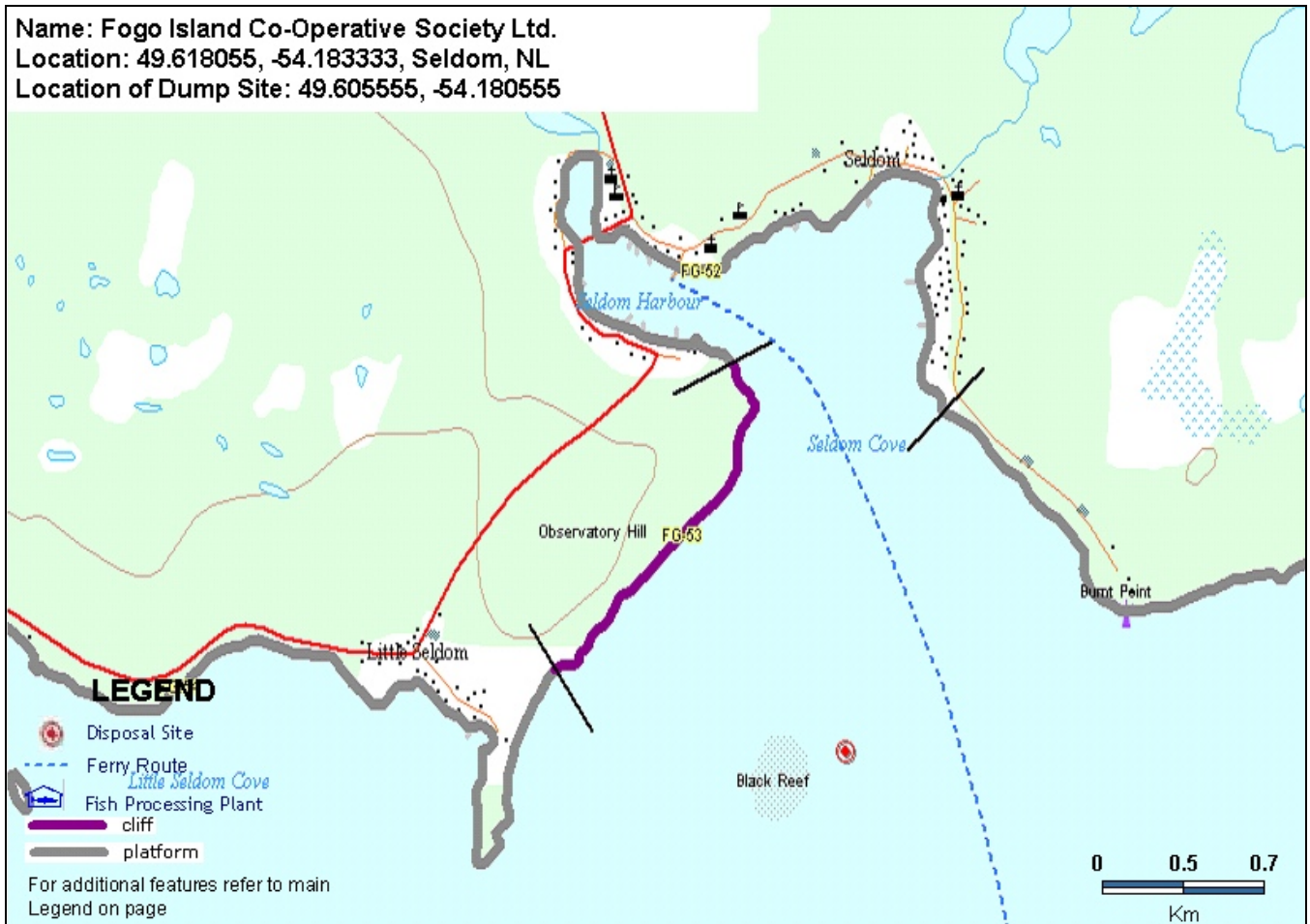


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Fogo Island Co-Operative Society Ltd., Seldom Newfoundland
Location of Loading Site:	49° 36.65' N, 54° 11.00' W, Seldom, Newfoundland
Location of Disposal Site:	49° 35.80' N, 54° 10.50' W, with an approximate depth of 27m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there are no alternatives for the disposal of offal • Ocean dumping disposal permits have been issued annually to Fogo Island Co-Operative Society Ltd. since 1989 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	<p>LITTLE GRANDFATHER ISLAND</p> <ul style="list-style-type: none"> -Arctic Terns -Black Guillemots <p>GRANDFATHER ISLAND</p> <ul style="list-style-type: none"> -Black Guillemots -Common Terns
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in this area include: boulder beach and bedrock • Residential properties are located along the shore
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • Offal is dumped onto a scow from fish containers and the scow is towed to the approved disposal site by an outboard motor vessel. It is then discharged from the scow while steaming within 300m of the site approved site.

	<ul style="list-style-type: none"> • The offal will be covered by a net to prevent access by gulls • Radar reflecting devices must be displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Fish and shell fish (shrimp) • No aquaculture
Tourism & Recreation:	<ul style="list-style-type: none"> • Recreational beaches are located in the area • Ferry docking facilities
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 477 • Adjacent communities include: Little Seldom and Stag Harbour
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 2000 tonnes/year • 5 tonnes/trip • Max. of 5 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Where depth of the disposal site is less then 35m, measurements of depth must be obtained and reported near the time of the first disposal and then every two months during the disposal activity. This is to ensure that the normal water depth is maintained.
Applicable Timing Restrictions:	Not applicable
Additional Information:	Cod trap berths are located along the shoreline

Name: Fogo Island Co-Operative Society Ltd.
Location: 49.618055, -54.183333, Seldom, NL
Location of Dump Site: 49.605555, -54.180555



**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

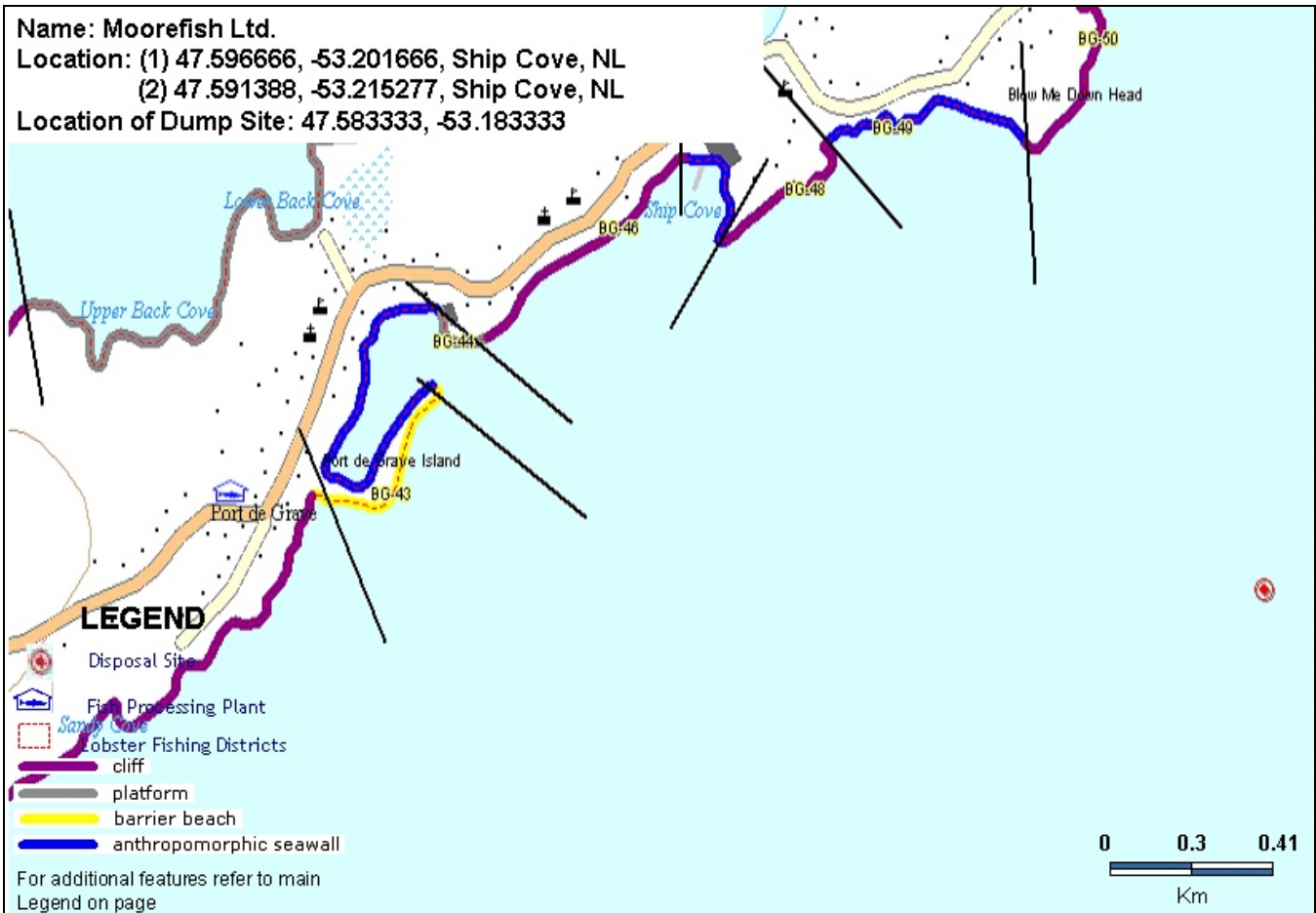
Name of Site:	Moorefish Ltd., Ship Cove, Newfoundland
Location of Loading Site:	47° 35.48' N, 53° 12.06' W, Ship Cove, Newfoundland 47° 35.29' N, 53° 12.55' W, Port de Grave, Newfoundland
Location of Disposal Site:	47° 35.00' N, 53° 11.00' W, with an approximate depth of 124m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there are no alternatives for the disposal of offal. • Prime Fisheries Ltd. requested permission to dispose of 20 tonnes of offal during the use of the following permits: August 2001-August 2002, August 2002-August 2003, and August 2003-August 2004. • Ocean dumping disposal permits have been issued annually to Moorefish Ltd. since 1987 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	Harlequin Duck over wintering area
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in this area include: mixed sand-gravel beach, pebble-cobble beach, and bedrock • Residential properties are located along the shore
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the approved site. • The offal is covered by a net to prevent access by gulls

	<ul style="list-style-type: none"> • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Fish and shell fish • No aquaculture
Tourism & Recreation:	Recreational beaches are located in the area
Residents & Communities:	<ul style="list-style-type: none"> • Population – No available information • Adjacent communities include: Great Barrasway and Gooseberry Cove
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 1400 tonnes/year • 8-10 tonnes/trip • 1-2 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Moorefish Ltd.

Location: (1) 47.596666, -53.201666, Ship Cove, NL
(2) 47.591388, -53.215277, Ship Cove, NL

Location of Dump Site: 47.583333, -53.183333

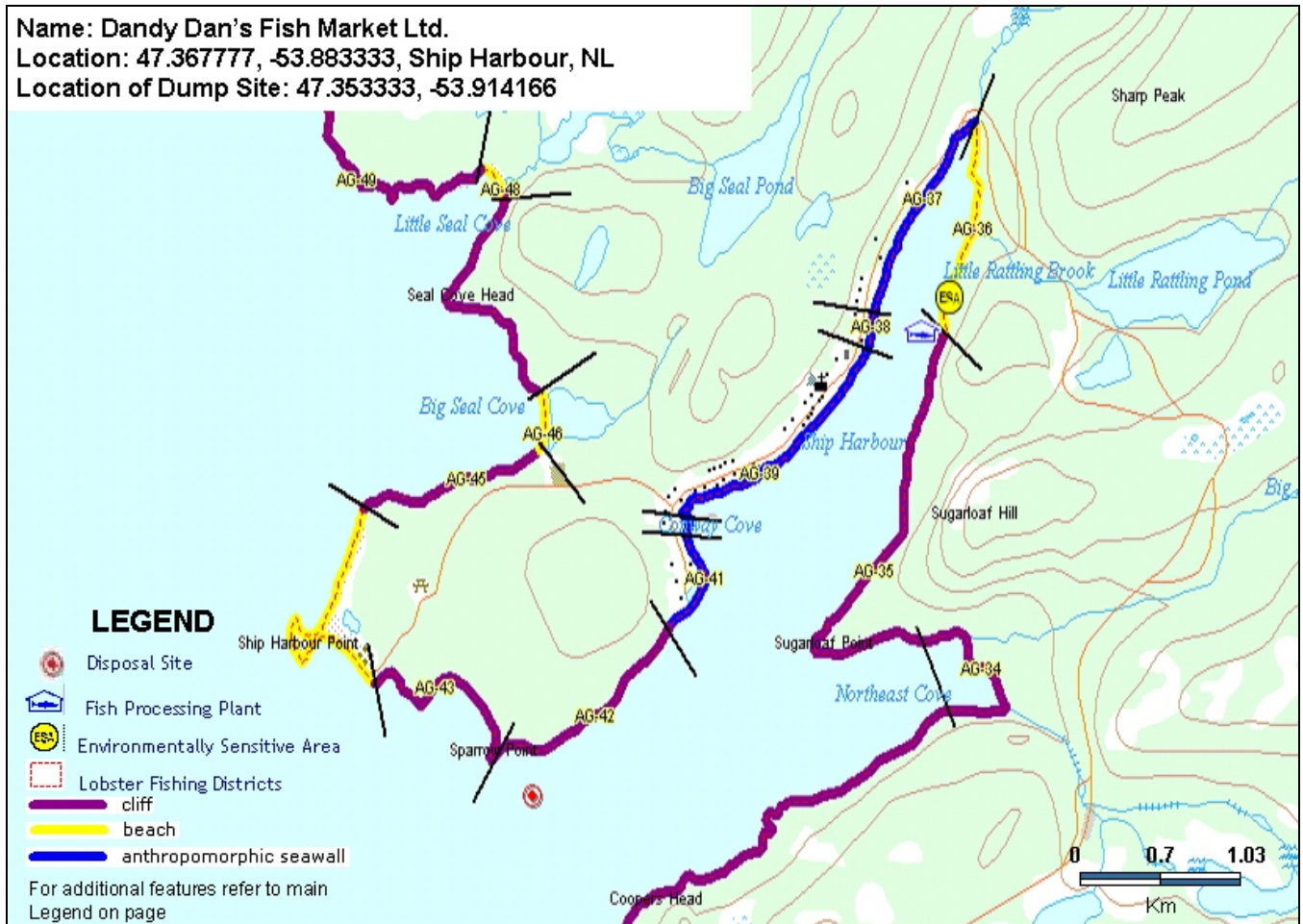


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Dandy Dan's Fish Market Ltd., Ship Harbour, Newfoundland
Location of Loading Site:	47° 22.04' N, 53° 53.00' W, Ship Harbour, Newfoundland
Location of Disposal Site:	47° 20.72' N, 53° 54.51' W, with an approximate depth of 40m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there are no alternatives for the disposal of offal • Previous history indicates that some of the offal produced was sent to several local fox farms in the area but these farms have now been closed for a number of years. Also, some of the offal produced was shipped to Woodman's Sea Products in New Harbour, Newfoundland where it was disposed of. • An ocean disposal permit was issued to Dandy Dan's Fish Market Ltd. for July 2004-July2005
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	Waterfowl migration stopover area
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in this area includes: pebble-cobble beach, boulder beach, and bedrock • Residential properties are located along the shore
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the approved site. • The offal is covered by a net to prevent access by gulls

	<ul style="list-style-type: none"> • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Ground fish, and lobster • No aquaculture
Tourism & Recreation:	Recreational beaches are located in the area
Residents & Communities:	<ul style="list-style-type: none"> • Population – No available information • Adjacent communities include: Fox Harbour
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 75 tonnes/year • 7 tonnes/trip • 2-3 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Dandy Dan's Fish Market Ltd.
 Location: 47.367777, -53.883333, Ship Harbour, NL
 Location of Dump Site: 47.353333, -53.914166



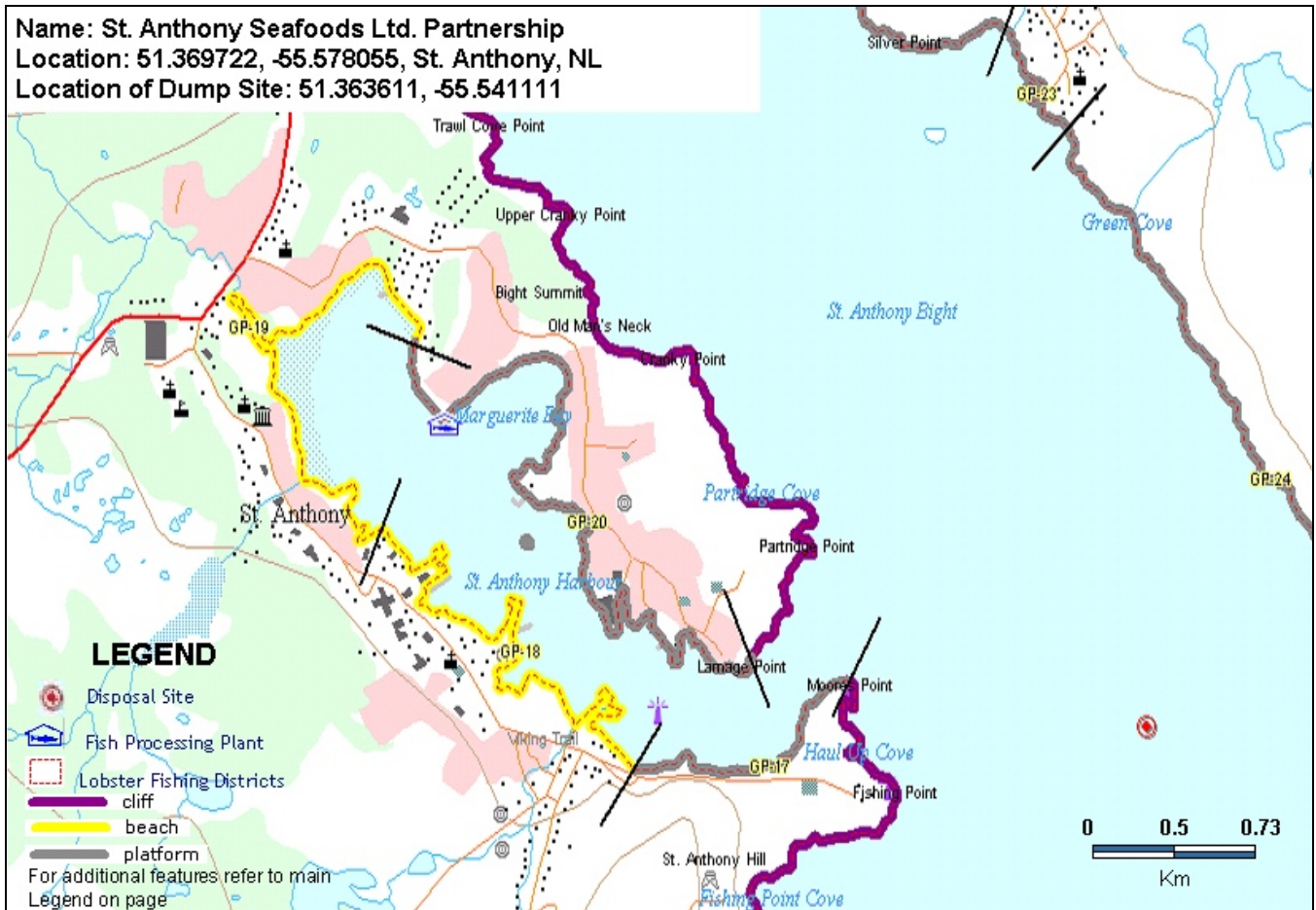
For additional features refer to main Legend on page

**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	St. Anthony Seafoods Ltd. Partnership, St. Anthony, Newfoundland
Location of Loading Site:	51° 21.71' N, 55° 34.41' W, St. Anthony, Newfoundland
Location OF Disposal Site:	51° 21.49' N, 55° 32.28' W, with an approximate depth of 80m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • There are no alternatives for the disposal of offal • From 1979 to 1990 offal was processed on site in a meal plant. Since then the equipment dismantled and the business has changed owners • Ocean disposal permits have been issued annually to St. Anthony Seafoods Ltd. since June 1998 to present date. • In July 2004, St. Anthony Seafoods Ltd. was issued a warning respecting an alleged violation. The warning was issued by an environmental officer which had reasonable grounds to believe that the company was in violation of subsection 124 (1)(B) Canadian Environmental Protection Act, 1999 (CEPA, 1999). • The barge carrying the waste had been overflowing with shrimp offal and was spilling into the surrounding harbour waters. This action was in violation of section 12.4 of the Canadian Permit (4543-2-0627) for ocean disposal.
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	The types of shoreline in this area include: bedrock, pebble-cobble beach, mud tidal flat, mixed sand-gravel beach, and boulder beach
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational

	<p>rules during loading and transit to approved disposal site.</p> <ul style="list-style-type: none"> • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are be displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Cod, whelk, shrimp, and snow crab • No aquaculture
Tourism & Recreation:	<ul style="list-style-type: none"> • Ferry docking facilities • Boat tours
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 2730 • Adjacent communities include: Goose Cove, St. Anthony Bight and St. Carols
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 2000 tonnes/year • 20 tonnes/trip • 1 trip/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Some offal may drift up to 500m with tides and then settle to the bottom as dispersed
Applicable Timing Restrictions:	Not applicable
Additional Information:	Cod trap berths are located along the shoreline

Name: St. Anthony Seafoods Ltd. Partnership
Location: 51.369722, -55.578055, St. Anthony, NL
Location of Dump Site: 51.363611, -55.541111

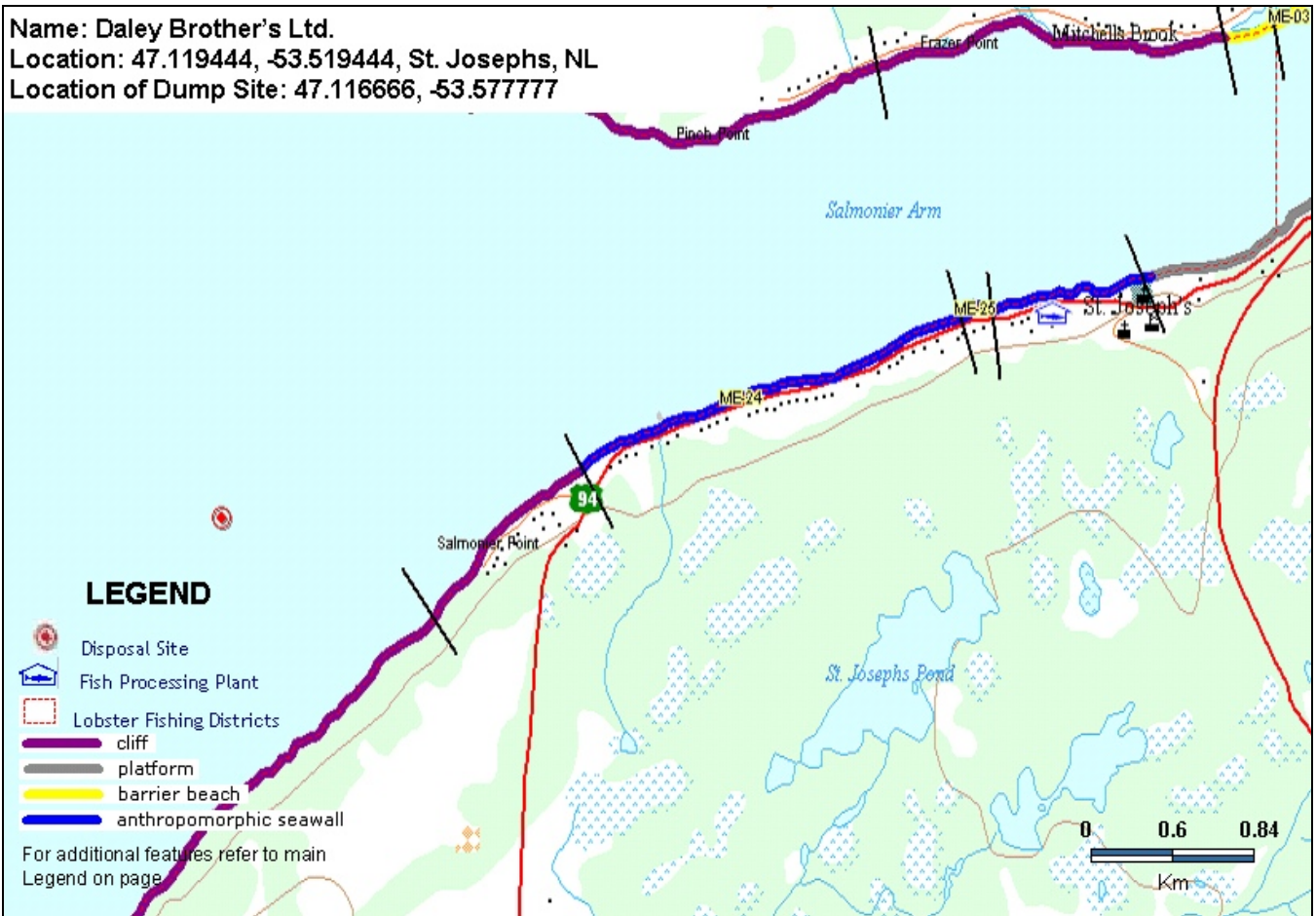


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Daley Brothers Ltd., St. Joseph's, Newfoundland
Location of Loading Site:	47° 07.10' N, 53° 31.20' W, St. Joseph's, Newfoundland
Location of Disposal Site:	47° 06.60' N, 53° 34.40' W, with an approximate depth of 70m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there are no alternatives for the disposal of offal. • Ocean dumping disposal permits have been issued annually to Daley Brothers Ltd. since 1990 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in this area include: pebble-cobble beach, and bedrock • Residential properties are located along the shore
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site

Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Herring • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 152 • Adjacent communities include: New Bridge, Mitchells Brook and Mount Carmel
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 1400 tonnes/year • 8-10 tonnes/trip • 1-2 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Daley Brother's Ltd.
Location: 47.119444, -53.519444, St. Josephs, NL
Location of Dump Site: 47.116666, -53.577777

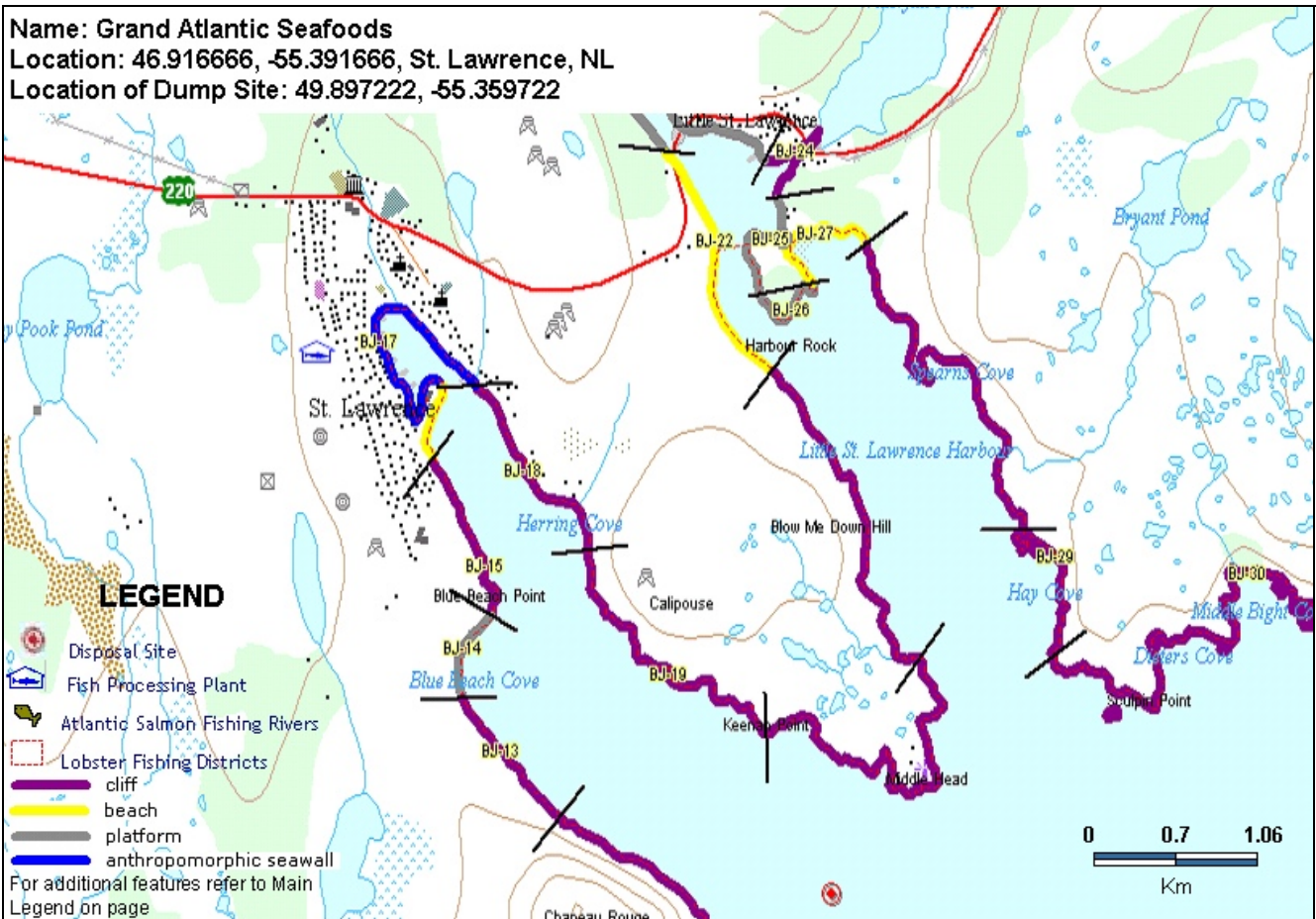


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Grand Atlantic Seafoods, St. Lawrence, Newfoundland
Location of Loading Site:	46° 55.00' N, 55° 23.30' W, St. Lawrence, Newfoundland
Location of Disposal Site:	46° 53.50' N, 55° 21.35' W, with an approximate depth of 52m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there are no alternatives for the disposal of offal. • Ocean dumping disposal permits were issued to Grand Atlantic Seafoods for the following time periods: June 1998-June 1999, June 1999-June 2000, July 2000-July 2001, July 2001-July-2002, and July 2002-July 2003. Prior to these dates the disposal site was last used in 1992 by another company.
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in this area include: bedrock, mixed sand-gravel beach, pebble-cobble beach, and boulder beach • Residential properties are located along the shore
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times

Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Fish and shell fish • Aquaculture site
Tourism & Recreation:	Recreational beaches are located in the area
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 1558 • Adjacent communities include: Little St. Lawrence
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 1000 tonnes/year • 7 tonnes/trip • 14 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	Cod trap berths are located along the shore

Name: Grand Atlantic Seafoods
 Location: 46.916666, -55.391666, St. Lawrence, NL
 Location of Dump Site: 49.897222, -55.359722

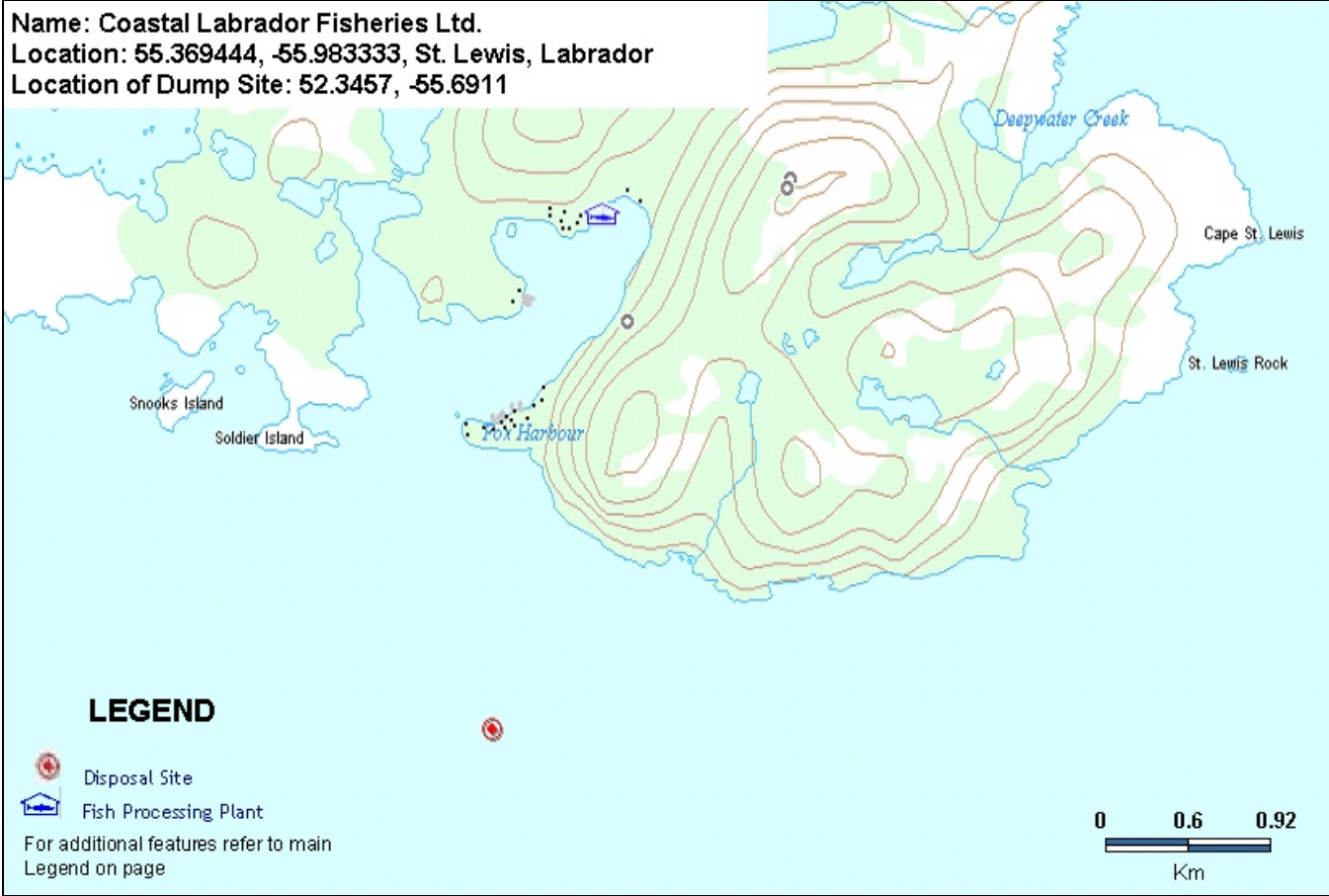


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Coastal Labrador Fisheries Ltd., St. Lewis, Labrador
Location of Loading Site:	52° 22.10' N, 55° 41.00' W, St. Lewis, Labrador
Location of Disposal Site:	52° 21.40' N, 55° 41.90' W, with an approximate depth of 37m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there are no alternatives for the disposal of offal. • In June 2003 Coastal Labrador Fisheries Ltd. was issued a new permit that authorized the use of a new disposal site. The old disposal site was too far away from the processing plant to be making 5 trips a day at peak production • Ocean dumping disposal permits have been issued annually to Coastal Labrador Fisheries Ltd. since August 2001 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	No available information
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times

Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Snow crab • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 290 • Adjacent communities include: Mary’s Harbour
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 1500 tonnes/year • 5 tonnes/trip • Max. of 5 trip/day at peak production
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Coastal Labrador Fisheries Ltd.
Location: 55.369444, -55.983333, St. Lewis, Labrador
Location of Dump Site: 52.3457, -55.6911

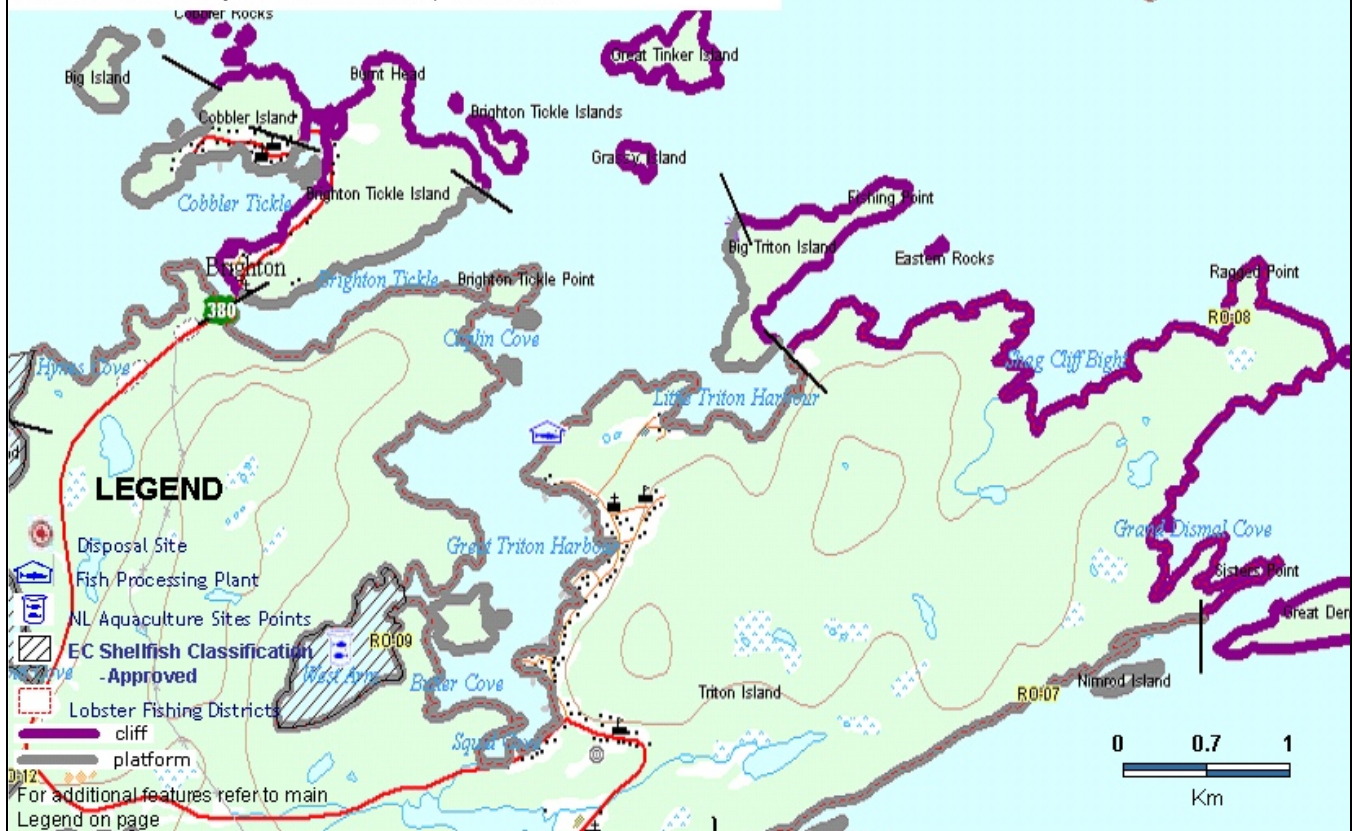


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Fishery Products International Ltd., Triton, Newfoundland
Location of Loading Site:	49° 32.18' N, 55° 35.54' W, Triton, Newfoundland
Location of Disposal Site:	49° 33.30' N, 55° 34.00' W, with an approximate depth of 183m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Majority of the capelin offal is converted into animal food and meal • Ocean dumping disposal permits have been issued annually to Fishery Products International Ltd. since 1982 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	The type of shoreline in the area is bedrock
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A conveyor belt is used to move offal from the processing plant onto a barge. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site

Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Capelin and snow crab • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 1102 • Adjacent communities include: Jims Cove, Cards Harbour and Brighten
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 3500 tonnes/year • 11 tonnes/trip • 9 trips/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	Cod trap berths are located along the shore

Name: Fishery Products International Ltd.
 Location: 49.538333, -55.598333, Triton, NL
 Location of Dump Site: 49.558333, -55.566666

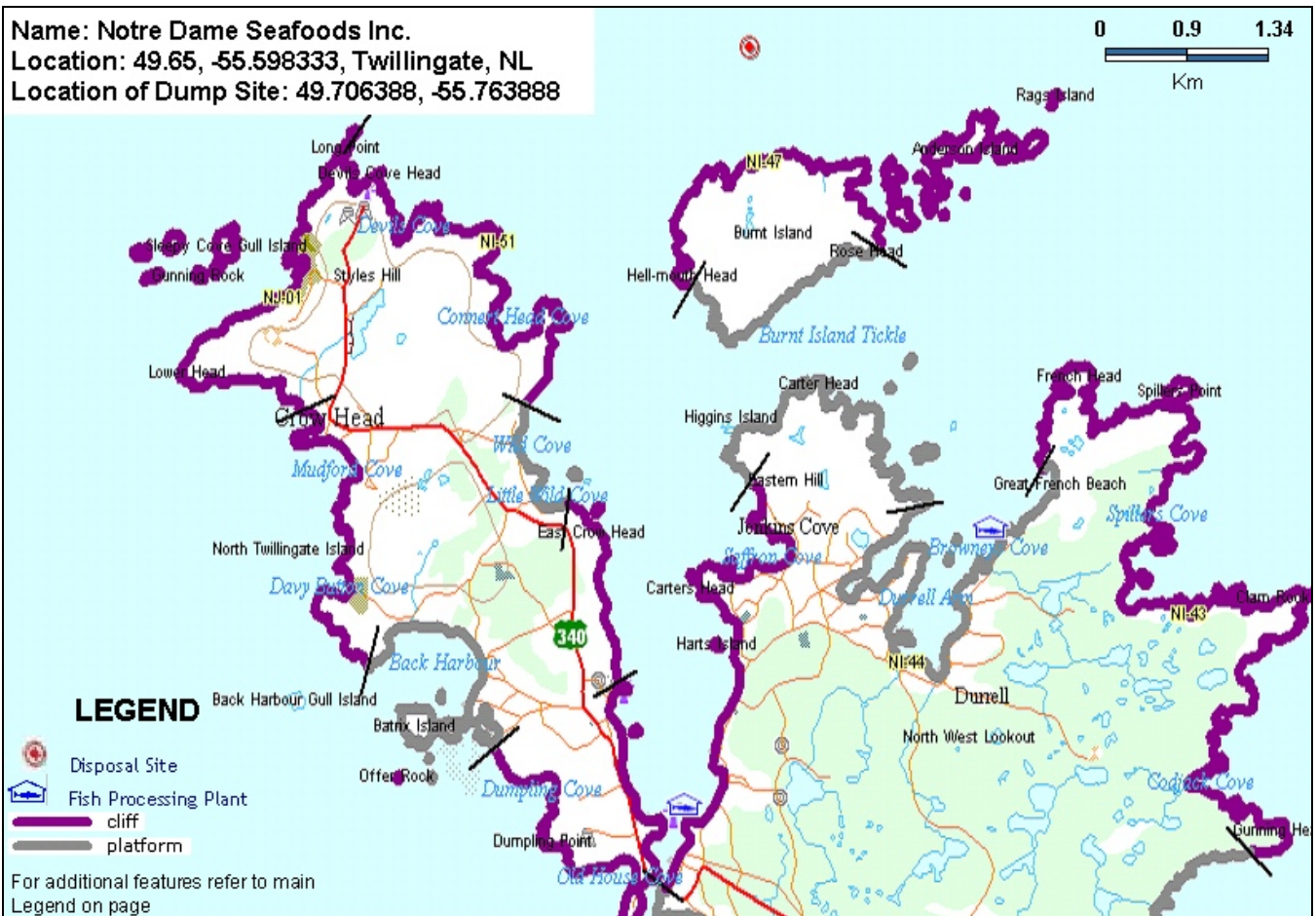
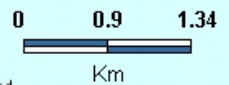


**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Notre Dame Seafoods Inc., St. Johns, Newfoundland
Location of Loading Site:	49° 39.00' N, 55° 35.54' W, Twillingate, Newfoundland
Location of Disposal Site:	49° 41.83' N, 55° 45.50' W, with an approximate depth of 80m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there is no alternative for the ocean disposal of offal • Ocean dumping disposal permits have been issued annually to Notre Dame Seafoods Inc. since May 2002 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in this area include: pebble-cobble beach, mixed sand-gravel beach, and bedrock • Residential properties are located along the shore
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A conveyor belt is used to move offal from the processing plant onto a barge. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site

Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Shrimp • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 2611 • Adjacent communities include: Bayview and Durrell
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 2500 tonnes/year • 35-40 tonnes/trip • 1 trip every second day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Notre Dame Seafoods Inc.
Location: 49.65, -55.598333, Twillingate, NL
Location of Dump Site: 49.706388, -55.763888



LEGEND

- Disposal Site
- Fish Processing Plant
- cliff
- platform

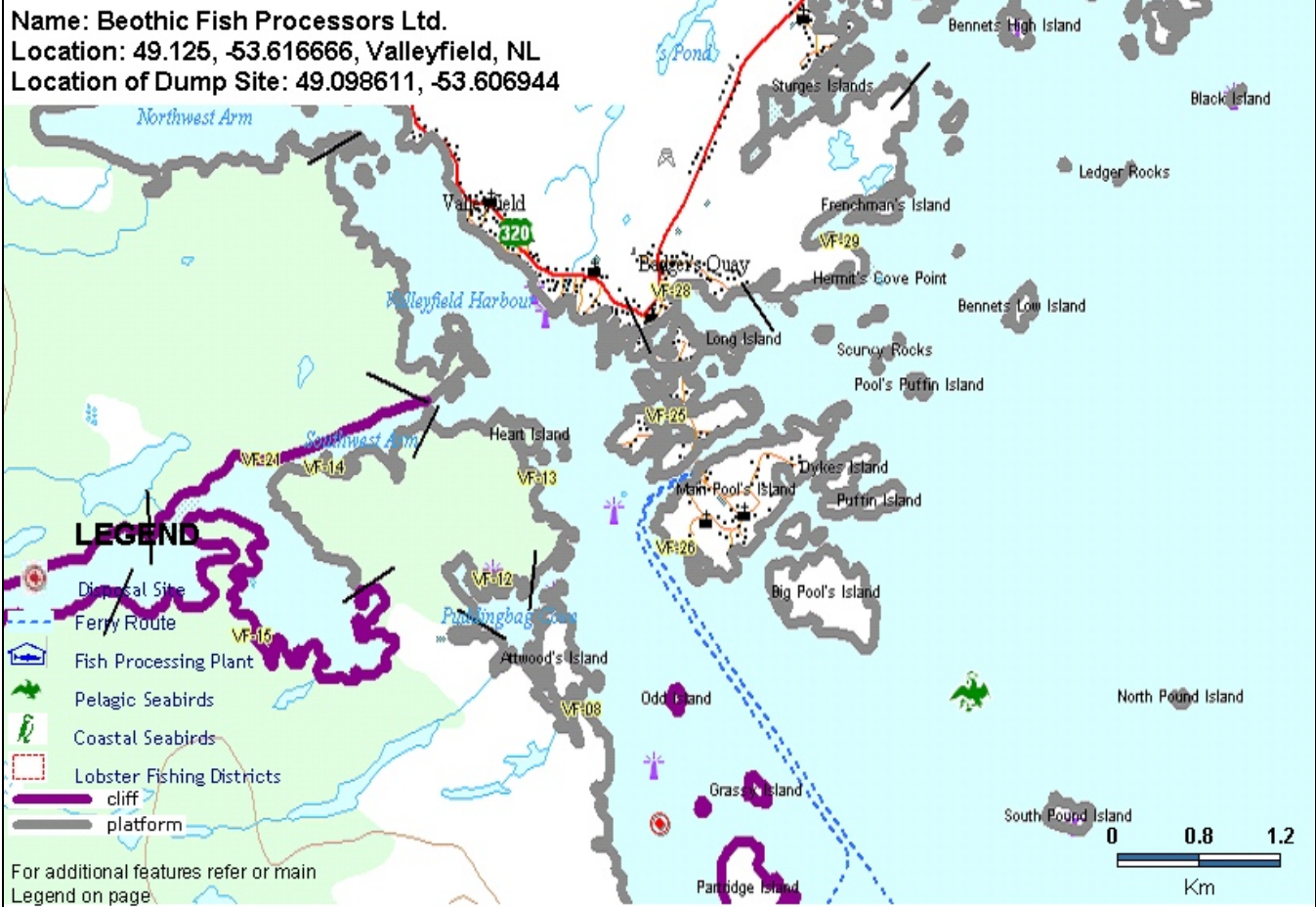
For additional features refer to main Legend on page

**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Beothic Fish Processors Ltd., Valleyfield, Newfoundland
Location of Loading Site:	49° 07.30' N, 53° 36.60' W, Valleyfield, Newfoundland
Location of Disposal Site:	49° 05.55' N, 53° 35.85' W, with an approximate depth of 8m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • There are no alternatives for the disposal of offal • Beothic Fish Processors Ltd. operated its own fishmeal plant for ground fish and pelagic species in the 1970's and 1980's. But due to high operating costs, poor markets, and environmental problems it was decommissioned in 1989. • Previous history also indicates that Beothic packed and transported male capelin for the U.S. market, it also packed and shipped turbot heads for a market in Asia • Ocean dumping disposal permits have been issued annually to Beothic Fish Processors Ltd. since 1990 to present date
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	None
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in this area include: bedrock and boulder beach • Residential properties are located along the shore
Marine Protected Areas:	None
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A conveyor belt is used to move offal from the processing plant onto a barge. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming

	<p>within 300m of the site.</p> <ul style="list-style-type: none"> • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Ground fish and snow crab • No aquaculture
Tourism & Recreation:	None
Residents & Communities:	<ul style="list-style-type: none"> • Population – No available information • Adjacent communities include: Badgers Quay, Brookfield and Pools Island
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 2000 tonnes/year • 15 tonnes/trip • Trips/day vary with species and volume being processed daily
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Where depth of the disposal site is less then 35m, measurements of depth must be obtained and reported near the time of the first disposal and then every two months during the disposal activity. This is to ensure that the normal water depth is maintained.
Applicable Timing Restrictions:	Not applicable
Additional Information:	None

Name: Beothic Fish Processors Ltd.
Location: 49.125, -53.616666, Valleyfield, NL
Location of Dump Site: 49.098611, -53.606944



**SITE SPECIFIC INFORMATION
FOR REPLACEMENT CLASS SCREENING**

Name of Site:	Shawmut Fisheries Ltd., Witless Bay, Newfoundland
Location of Loading Site:	47° 16.74' N, 52° 49.42' W, Witless Bay, Newfoundland
Location of Disposal Site:	47° 16.34' N, 52° 47.54' W, with an approximate depth of 50m
Transportation Route From Loading To Disposal Site:	<ul style="list-style-type: none"> • Most direct navigational route from load to disposal site • Refer to attached chart
Disposal History:	<ul style="list-style-type: none"> • Disposing of fish waste and other organic matter resulting from industrial fish processing operations • Currently there are no alternative to ocean disposal • Previous history indicates (2001) that Cape St. Mary's Enterprises had set up a crusher and drier next to the plant where 95% of all crab shells were dried and shipped to China • Shawmut Fisheries Ltd. has been issued ocean disposal permits annually since 1990 to present date. • Shawmut Fisheries Ltd. was issued a warning respecting an alleged violation in 1990, 1992 and 2004. The warning was issued by an environmental officer which had reasonable grounds to believe that the company was in violation of subsection 124 (1)(B) Canadian Environmental Protection Act, 1999 (CEPA, 1999). The company had not been disposing of the offal in accordance with Canadian Ocean Disposal Permit. The offal was being dumped 800m short of the designated dumpsite. • Also, in 1994, 1997 and 1998 there were complaints that the company was allegedly dumping short of the designated dump site and that large amounts of crab carcasses had collected along the shoreline.
Air Quality	Disposal process has no impact on air quality
Marine Environment	Dispersive
Seabirds, Shorebirds, & Waterfowl:	GULL ISLAND <ul style="list-style-type: none"> -Razor Bills -Atlantic Puffins -Black Guillemots -Black-legged Kittiwakes -Common Murres -Northern Fulmars -Manx Shearwaters -Leach's Storm Petrel

	<ul style="list-style-type: none"> • Along the shoreline are waterfowl migration stopover areas and over wintering areas for sea ducks
Shoreline:	<ul style="list-style-type: none"> • The types of shoreline in the area include: pebble cobble-beach, boulder beach and bedrock • Residential properties are located along the shore • Some beaches in the area are spawning grounds for capelin
Marine Protected Areas:	Witless Bay Island Ecological Reserve/Seabird Ecological Reserve
Transportation/Navigation & Utilities:	<ul style="list-style-type: none"> • Barges or other floating equipment capable of containing all waste cargo will be used regarding all safety and navigational rules during loading and transit to approved disposal site. • A forklift is used to dump offal onto barge from fish containers. The barge is self propelled or towed to the approved dump site where the offal is discharged while steaming within 300m of the site. • The offal is covered by a net to prevent access by gulls • Radar reflecting devices are displayed at all times
Ocean Bed Uses:	No other uses for ocean bed near disposal site
Commercial Fishing & Aquaculture:	<ul style="list-style-type: none"> • Snow crab and ground fish • No aquaculture
Tourism & Recreation:	Recreational beaches are located in the area
Residents & Communities:	<ul style="list-style-type: none"> • Population – approximately 1056 • Adjacent communities include: Mobile and Bay Bulls
Traditional Land & Water Uses:	No available information
Archaeology/Heritage Resources:	None
Allowable Dumping Quantities & Rates Per Site:	<ul style="list-style-type: none"> • 800 tonnes/year • 10 tonnes/trip • 2 trip/day
Movement & Dispersal In Water Column & On Sea Floor Of Substances Dumped:	Not applicable

Applicable Timing Restrictions:	None
Additional Information:	None

Name: Beothic Fish Processors Ltd.
Location: 47.287222, -53.828333, Witless Bay, NL
Location of Dump Site: 47.276111, -53.791666

