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### **Appendices**

- A. Site-specific and CEPA Information Requirements
- B. Table of Contents for a Replacement Class Screening Report

# PROPERTY OF ENVIRONMENT CANADA

#### 1. Introduction

Canada is committed to tough and effective controls on ocean disposal. In May 2000, Canada became the 10th country to join the 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, known as the London Convention 1972. The Protocol contains strong environmental protection requirements, including a list of permissible wastes, an assessment framework for those wastes and other matter, a ban on incineration at sea, and a ban on the export of waste for disposal at sea.

The federal government implements the provisions of the London Convention, 1972 and the 1996 Protocol through the Canadian Environmental Protection Act (CEPA) which is one of the measures in place to protect Canada's marine environment through pollution prevention and coastal zone management. Specifically, Part 7, Division 3 of the CEPA, regulates:

- a) the disposal of all types of material at sea, including destruction at sea by incineration; and
- b) the loading of wastes on ships, aircraft, platforms, or other fabricated structures for disposal at sea.

Environment Canada regulates the disposal of substances at sea by means of a system of permits under CEPA and the Ocean Dumping Regulations. At the present time, each application for disposal at sea is separately evaluated to determine if a permit will be issued. In accordance with the London Convention and its 1996 Protocol, Schedule 5 of CEPA 1999, fish offal that cannot be recycled as fertilizer, animal feed or other products may be considered suitable for ocean disposal.

Each year Environment Canada issues between 40 and 50 permits for the disposal of fish offal in waters off the coast of Newfoundland and Labrador. Because the power to grant a Disposal at Sea Permit is named on the Law List Regulations under the *Canadian Environmental Assessment Act (CEAA)* and because the disposal of a substance at sea under the authority of such a permit is also on CEAA's Inclusion List, an environmental assessment must be conducted of proposed ocean disposal activities.

Both CEPA and CEAA are sustainable development tools that rely on the precautionary principle. 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.

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#### **Objectives** 1.1

The objective of this report is to review the potential opportunities and constraints of developing a Class Screening Process or other mechanism for conducting environmental assessments for fish offal disposal at sea projects in Newfoundland and Labrador. This report is to make a preliminary recommendation regarding the preferred way Environment Canada should proceed. In addition, this review scopes out the level of effort and information requirements anticipated to implement the preferred approach.

#### 1.2 Fish Offal and its Disposal

In general, fish offal is waste and other organic matter 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. Industrial fish processing operations in Newfoundland and Labrador generate waste from both wild stock and aquaculture. Environment Canada does not issue permits for aquaculture wastes.

The scope of a typical fish offal disposal at sea project can include the following activities:

- handling and loading at source and/or transfer points; a)
- b) transportation on land and water;
- c) storage on board vessels;
- d) handling; and
- disposal at sea at a specified disposal site. e)

It is noteworthy that the activities (a) through (d) above are not considered physical works and associated activities under CEAA, but Environment Canada typically considers these activities within the scope of the project for a Disposal at Sea permit.

### 2. Environmental Assessment Options

# 2.1 Class Screening and the Canadian Environmental Assessment Act

The Canadian Environmental Assessment Act is a legislated environmental assessment regime designed to integrate environmental considerations early in the decision making process for projects with a federal decision or responsibility, whether as proponent, land administrator, source of funding or regulator.

Because the power to grant a Disposal at Sea Permit is named on the *Law List Regulations* under the *CEAA* and because the disposal of a substance at sea under the authority of such a permit is also on *CEAA*'s Inclusion List, an environmental assessment must be conducted of proposed ocean disposal activities.

The first type of environmental assessment under *the Act* is a self-directed assessment process called a screening. A screening is considered self-directed because the federal Responsible Authority (RA) determines the scope of the project subject to environmental assessment (EA) and either directly conducts or manages the EA process through the proponent. Fish offal disposal projects require assessment through a screening.

Anticipating the potentially large number of screenings, many of which are similar and result in a limited range of predictable mitigable environmental effects, *the Act* provides for a class screening mechanism. Section 19(1) of the Act provides for the declaration of Class Screening Reports.

Class screening reports can be of two categories:

- Model Class Screening Reports. A Model Class Screening Report serves as a model when
  conducting an environmental assessment of a specified group of similar projects. It includes a Class
  Screening Project Report (CSPR) that provides additional, project-specific information to add to
  that provided in the Model Class Screening Report. The Responsible Authority then decides
  whether the project will have adverse environmental effects following the application of mitigation
  measures.
- Replacement Class Screening Reports. The Replacement Class Screening Report differs from the Model Class Screening in that projects falling within the class are exempted from Section 18 and 20 of the CEAA. As a result, an environmental assessment is not required, provided the RA ensures implementation of mitigation measures described in the report.

#### **Expanded Project Scope Option** 2.2

Apart from a MCSR or a RCSR, a third option being contemplated by Environment Canada relates to expanding the scope of the disposal at sea activity subject to environmental assessment as allowed under Section 15(2) of CEAA. Section 15(2) states:

"For the purposes of conducting an environmental assessment in respect to two or more projects,

- the responsible authority, or a
- b)where at least one of the projects is referred to a mediaton or a review panel, the Minister, after consulting with the responsible authority, may determine that the projects are so closely related that they can be considered to form one single project".

For this option, instead of defining the project in terms of each permit application on an individual basis, disposal at sea activities that are likely to take place in a given area and over a certain time period could be grouped together as a single project.

#### **3. Evaluation of Options**

Table 1 presents the framework developed to evaluate the environmental assessment options identified by Environment Canada.

Table 1. **Evaluation Framework** 

| Criteria  | Key Question  |
|---|---|
| 1. Applicability and Compatibility with Existing Legislation, Regulations and Conventions | <ul> <li>Is the option applicable to the types of projects under consideration?</li> <li>Can the option be implemented within the existing framework of legislation, regulations, conventions/protocols?</li> </ul>   |
| 2. Efficiency   | <ul> <li>Can the option reduce the overlap between EA and the CEPA permitting process?</li> <li>Can the option reduce the time required to conduct an EA and issue a CEPA permit?</li> <li>Can the option reduce public registry and/or CEAR requirements?</li> </ul> |

Table 1. Evaluation Framework

| Criteria |   | Key Question  |
|----------|---|---|
| 3.       | Effectiveness   | • Can the option improve the quality and utility of the EA or benefit the EA in other ways?   |
| 4.       | Flexibility   | <ul> <li>What kind of geographic scope can the option accommodate?</li> <li>Can the option address a requirement to assess</li> </ul>               |
|          |   | alternatives to disposal as required under CEPA?  Can the option easily be changed or modified at a later date to include new disposal sites?       |
| 5.       | Timing  | How quickly can the option be implemented?  |
| 6.       | Information Requirements  | • Is the information required to implement an option currently available?   |
| 7.       | Roles and Impacts on other Federal<br>Departments               | <ul> <li>Who needs to be involved in the development process?</li> <li>Will implementation have any effect on other Federal Departments?</li> </ul> |
| 8.       | Roles and Impact on Industry, the Public and other Stakeholders |   |

# 3.1 Applicability and Compatibility with Existing Legislation, Regulations and Conventions

### 3.1.1 Applicability of the Canadian Environmental Assessment Act

According to the Canadian Environmental Assessment Agency, any proposed Class Screening whether a Model Class or a Replacement Class should 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. They occur at specific disposal sites 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. Much of the loading and unloading is done manually with hand equipment rather than heavy or complex equipment. The characteristics of fish offal are well known and annual quantities of fish offal typically disposed of at sea have been estimated.

It is also noteworthy that CEPA requires a detailed description and characterization of the waste be undertaken for a decision as to whether the waste may be disposed at sea. Waste under consideration for any Class Screening is of one classification – waste from land-based industrial processing of finfish (wild stock) and shellfish (wild stock). Other types of fish waste may be occasionally disposed at sea, but will require an individual screening as they are not considered by Environment Canada to be appropriate for a class approach.

- 2. Well-understood Environmental Setting: Environment Canada has been responsible for the Ocean Disposal program and has operated fish offal disposal sites in Newfoundland and Labrador for several years. As such, Environment Canada 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, Environment Canada officials believe that no significant adverse environmental effects are likely to occur. Minor environmental impacts have occurred in the past from waste washing up on shorelines (temporary effects on nearshore marine water quality and aesthetics), largely due to improper disposal methods, abnormal environmental conditions during disposal. These effects are readily manageable through disposal protocols, training and contingency planning. Based on monitoring at several ocean disposal sites undertaken by Environment Canada, there appears to be little evidence of significant cumulative effects.
- 4. Project-Specific Follow-up Measures: Project-specific follow-up programs may be developed under a Model Class but should not be required under a Replacement Class. For a Replacement Class, the RA will likely be required to provide annual confirmation of cumulative effects assessment conditions to ensure no new projects cause any significant adverse environmental effects. 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 each year at selected sites, as required by the CEPA. Environment Canada'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, Environment Canada has been the only RA for fish offal projects. However permits are assessed with advice from the Regional Ocean Disposal Advisory Committee (RODAC). This expert committee includes representation

from Environment Canada, Fisheries and Oceans Canada, and often from relevant provincial regulatory authorities. The permit review involves a numbers of steps and may take 2 to 3 months. Project proponents are highly experienced in the disposal operations and with the CEPA requirements. However, as indicated previously the Disposal at Sea permitting process is an independent regulatory process that requires harmonization and integration with the CEAA. Some of the major overlaps and differences between these two processes include:

- CEAA requires the consideration of disposal activities within the scope of project, but for the CEPA application, this scope has been expanded to include other activities such as fish offal loading and transportation;
- Much of the information required to complete a screening under CEAA is also required to complete a CEPA application (refer to section 3.2.1 of this report for more details);
- Public involvement is a discretionary activity for a screening conducted under CEAA, but is encouraged during the CEPA permitting process through the requirement of newspaper notifications and gazetting of the permit;
- Follow-up monitoring is a discretionary activity for a screening conducted under CEAA, but is achieved through selective monitoring of the disposal at sea activities and sites by Environment Canada; and
- An environmental assessment conducted under CEAA focuses on the identification
  and assessment of environmental effects, identification of mitigation measures. The
  CEPA process that not only requires the consideration of environmental effects, but
  is also a tool designed to implement the required mitigation measures identified
  through environmental assessment.

A Model or Replacement Class may serve to reduce the overlap between CEPA and CEAA processes, making the planning and decision-making process more effective and efficient.

6. Public Concerns Unlikely. Anyone applying for a permit from Environment Canada 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 Environment Canada the chance to address these concerns while assessing applications. Before any ocean disposal permits and amendments to a permit come into force, they must be published in the Canada Gazette. Environment Canada has indicated that there has been little public response to such notifications and that there have been few public complaints in relation to disposal activities.

As fish offal disposal projects are likely to meet these six criteria, a Class Screening process, whether through a Model Class or Replacement Class is considered very applicable. Because fish offal disposal projects do not typically require project specific follow-up and because monitoring at disposal sites is an Environment Canada responsibility, the Replacement Class option provides a better 'fit'. This is provided that program-wide monitoring includes a sufficient number of fish offal disposal sites to allow for the annual confirmation of cumulative effects assessment conditions to ensure no new projects cause any significant adverse environmental effects.

Apart from a MCSR or a RCSR, the third option considered relates to expanding the scope of the disposal at sea activity subject to environmental assessment as allowed under Section 15(2) of CEAA. Although it is the responsibility of the Responsible Authority to determine the scope of the project for purposes of assessment, this option was not considered applicable by Gartner Lee Limited and the Canadian Environmental Assessment Agency (technical staff and legal council) for the following reasons:

- a) The scope of the project refers to those aspects of a project that will be the subject of the environmental assessment. In determining the scope of the project, the Environment Canada should consider the core project components, ancillary works and any related projects. Core project components would include anything that is being constructed, operated, modified, decommissioned or abandoned to achieve the main purpose of the project. Ancillary works include all the infrastructure, utilities and services (i.e., hydro, potable water, stormwater systems, sewage, waste storage/handling and disposal facilities) that are required to support the development, including any temporary works such as temporary buildings, storage areas, roads, bridges etc. In determining the scope of the project to undergo EA, Environment Canada needs to consider other projects and activities that are physically related (i.e., physically connected or linked) or interdependent (i.e., another project or activity is inevitable because the core project was developed). In this case, ocean disposal projects are neither physical connected or linked nor interdependent.
- b) Ocean disposal projects involve multiple applicants from industrial processing plants across Newfoundland and Labrador. A combined screening is not appropriate for multiple projects with multiple proponents.
- c) The intent of Section 15(2) is to avoid conducting two environmental assessments when two different components of a larger, more complex project might trigger the Act and where one might have two RAs. Although an EA is not required for activities such as handling and loading at source and/or transfer points; transportation on land and water; storage on board vessels; and handling, Environment Canada is not precluded from expanding the scope of the project to include such activities for the purposes of an EA to be more consistent with the CEPA permitting process.

d) Section 15(2) might be applicable in determining the temporal boundaries of the assessment (either a MCSR or a RCSR) because the ocean disposal activities of one proponent tend to occur at the same locations each year, but is not applicable if there are multiple proponents and disposal sites used. Although Section 15(2) might be considered an opportunity to define the disposal at sea activity as a multi-year project, the same efficiencies for permit amendments are likely to be derived by a RCSR.

For these reasons, this option is not considered appropriate and is not considered further in this review.

#### 3.1.2 Compatibility with CEPA and International Conventions

In order to comply with CEPA and International Conventions, Environment Canada must ensure that it considers all factors required under Part 7 of CEPA when making its decision. In this case, an EA should be considered as <u>input to the CEPA decision</u> on whether or not to grant an Ocean Disposal permit and not a separate process, triggered by CEPA (i.e., rather than an independent parallel process). With this perspective, both a MCSR or RCSR can be structured to provide this input effectively and efficiently. A MCSR is perhaps slightly more compatible with CEPA and International Conventions given that the assessment can be tailored to each application / project. It is recommended that Environment Canada's legal staff offer an opinion on this matter.

### 3.2 Efficiency

#### 3.2.1 Reduction of Overlap with CEPA

There are several areas of overlap between CEAA requirements and CEPA requirements that will need to be addressed to ensure maximum efficiencies. Much of the overlap relates to the type of information that is needed for a CEPA application and the information required for an environmental assessment under CEAA.

The issuance of a Disposal at Sea permit requires that applicants provide Environment Canada with a completed CEPA Permit application. The CEPA Permit application form requests all the basic information requirements to allow Environment Canada to complete an EA and to ensure compliance with Part 7 of the CEPA and the provisions of the London Convention, 1972 and the 1996 Protocol. Based on Environment Canada's existing EA screening form for fish offal and the CEPA Disposal at Sea application, there exists a great deal of overlap.

Because a Model Class requires the completion of a CSPR there exists little opportunity to reduce the need to document things twice (i.e., in the CEPA Application and CEAA Screening). In contrast, the Replacement Class does not require further site-specific documentation and avoids the need to duplicate documentation.

Moreover, a RCSR could be developed to a level of detail that would allow applicants and/or Environment Canada staff to complete their CEPA Disposal at Sea application and issue permits more completely and efficiently. For example, the RCSR could be available on-line. The RCSR could include the following items that could be 'cut' and 'pasted' into a CEPA Disposal at Sea application and/or a disposal permit.

- a) generic descriptions of equipment and disposal at sea activities (i.e., handling and loading at source and/or transfer points; transportation on land and water; packaging and containment on board vessels; and handling and disposal at disposal site);
- b) chemical, biological and physical information for various types of fish wastes (e.g., flesh, skin, bones, entrails, shells or stickwater);
- c) names and locations (i.e., latitude and longitude) of disposal sites;
- d) maps of each disposal site; depths at disposal sites; proximity to facilities and sensitive areas for each site;
- g) estimates of the likely movement and dispersal in the water column and on the sea floor of the substances dumped;
- h) allowable dumping quantities and rates per site;
- i) recommended speed during dumping;
- i) estimated time required for discharge;
- k) listing of applicable permits and approvals;
- 1) generic comparative evaluation of alternatives;
- m) standard mitigation measures, best practices and procedures; and
- n) applicable timing restrictions for each site.

#### 3.2.2 Time Requirement to Complete an Environmental Assessment

Both the Model Class and the Replacement Class options will serve to streamline the existing EA process and will reduce the time required to conduct the assessment in order to issue a CEPA permit. Experience indicates that the time required to complete a project-specific environmental assessment under a Model Class depends upon the complexity of the Model (i.e., number of classes and subclasses, number of exclusions, extent to which referrals and consultations are required) and the effectiveness of the Class Screening Project Report. Experience with the development and use of CSPRs indicates that some forms are quicker to complete than others. Given the simple nature of fish offal disposal at sea projects, a relatively straightforward, checklist based CSPR could be designed for use by Environment Canada staff.

Unlike the Model Class option, a Replacement Class does not require the completion of any project specific forms or "sign-off" sheets such as a Class Screening Project Report or related records. As such, this option offers the potential for a significant time savings over the Model Class option and the status quo. It is possible that the RCSR could contain a standardized set or listing of best management practices, mitigation measures, contingency plans etc., that any applicant would need to comply with. This listing could merely be appended to or inserted into the CEPA Permit under the existing heading "Requirements and Restrictions". The time and effort invested in the RCSR's development could conceivably be recovered over 1 to 2 years of its application.

#### 3.2.3 Public Registry and CEAR Requirements

For the purpose of facilitating convenient public access to records relating to any environmental assessment conducted in accordance with the Act, the RA is required to establish a public registry. The public registry (the Canadian Environmental Assessment Registry – CEAR) consists of two components – an Internet Site and a Project File. The Internet Site is an electronic registry administered by the Agency. The RA and the Agency are required to contribute specific records to the Internet Site relating to the MCSR or a RCSR and any sign-off forms or project reports completed in relation to the report. The Project File component is a file maintained by the RA during an environmental assessment and made available to the public in a convenient manner. The Project File must include all records produced, collected or submitted with respect to the environmental assessment of the project, including all records included on the Internet Site. By having a public registry, the public can, on their own initiative, seek out information on what environmental assessments are being undertaken and can request access to environmental assessment information.

Upon declaration of a MCSR, the Act requires Responsible Authorities to post on the Internet site of the Registry, at least every three months, a statement of projects for which a model 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 model class screening report was used;
- the location of each project; and
- the date of the decision.

The project file component is a file maintained by the RA during an environmental assessment. The project file must include all records produced, collected or submitted with respect to the environmental assessment of projects, including class screening project reports and all records included on the Internet site. The responsible authority must maintain the file, ensure convenient public access, and respond to information requests in a timely manner. The need to complete and file a CSPR does not offer any advantage to Environment Canada, as this is already being done for individual screening reports.

Upon declaration of a RCSR, the Act requires that Responsible Authorities also post on the Internet site of the Registry, at least every three months, a statement of projects for which a Replacement Class screening report was used. The statement would also be in the form of a list of projects, and would need to include the same project information as required under the Model Class option (see above). Unlike the Model Class option, a Replacement Class does not require the completion of any project specific forms or "sign-off" sheets such as a Class Screening Project Report or related records. As such, this option offers an administrative advantage over the Model Class option and the status quo.

#### 3.3 Effectiveness

Both the Model Class and the Replacement Class options are likely to improve the quality of EA. By their very nature, these Class Assessments will likely consider a much broader range of potential effects and mitigation measures. They will provide Environment Canada with the opportunity to consolidate available information on the effects of fish offal disposal activities in Newfoundland and Labrador, the nature of disposal sites and monitoring results. The process of MCSR and RCSR development will serve to identify gaps in knowledge that will need to be addressed. This one-time process will likely serve to increase the quality of the final product, something that cannot be done on a project by project basis.

### 3.4 Flexibility

#### 3.4.1 Geographic Scope

In terms of geographic scope, past experience indicates that the Model Class option is best suited to projects that are well defined and the typical environmental settings are well understood. Models are best suited to environmental assessments of projects where project-specific conditions do not vary and site-specific information is not needed to predict effects and make a determination as to their significance.

For example, Models have been defined nationally, provincially and for broad regions. Here are a few examples:

- a) Environment Canada's Model Class for hydrometric stations in Ontario Region (March, 2004) was developed not only to assess projects at existing hydrometric station (i.e., with known and fixed locations) but also new hydrometric station projects where the location was yet to be determined. This Model Class will also be developed for Environment Canada's Prairie and Northern Region.
- b) Environment Canada's Model Class for small-scale water quality and habitat improvement projects was defined on a national basis (i.e., for projects with no known or fixed locations).
- Parks Canada's Models for routine development projects and routine operation and maintenance of electrical power transmission facilities projects applies within the Town of Banff and proximate outlying areas (i.e., for projects with no known location, but within a relatively well defined and understood environmental setting).
- d) The Prairie Farm Rehabilitation Administration (PFRA), which administers federal funding to provincial governments and municipalities for prairie grain road modification projects through its Prairie Grain Roads developed a Model for routine prairie grain road modifications done by provinces and municipalities in Manitoba, Saskatchewan and Alberta (i.e., for projects with no known or fixed location).
- e) Industry Canada's proposed Model for international submarine cable projects is being defined for the Juan de Fuca Strait and the Strait of Georgia area (for projects with no known or fixed location, but within a relatively well defined and understood environmental setting).

Given these precedents, a Model could be defined to include all disposal at sea projects within Newfoundland and Labrador or any sub-regions. This option is only good if the effects of ocean disposal activities and associated mitigation measures are expected to be different in different environmental settings. For example, a Model Class could be developed that applies to <u>pre-defined groupings</u> of sites within Newfoundland and Labrador where the "groupings" have similar environmental settings (i.e., depths, substrates, distance from shore, proximity to other ocean uses, etc). Specific sites could be identified in each grouping.

a) A description of each grouping would be needed for the MCSR. Groupings would have to be defined clearly on the basis of similar environmental conditions.

- b) Groupings would need to be "approved" by Environment Canada in consultation with the Regional Ocean Disposal Advisory Committee (RODAC), particularly Fisheries and Oceans Canada, and relevant provincial regulatory authorities.
- c) Disposal at sea could be undertaken at any site(s) identified in the MCS, provided that the site fits within the described groupings (or sub-classes).
- d) New disposal sites could be added to each grouping with an amendment to the RCSR, provided that they fit the "group" definition.
- e) Program-wide follow-up could be undertaken for each grouping, but cumulative effects assessments might be complicated if disposal sites are dispersed geographically.

The Replacement Class option may also be appropriate for projects where there exists sufficient site-specific information, where the project activities are well defined and do not vary substantially. This precondition is required to allow for an accurate identification of potential effects, Valued Ecosystem Components and determination of significance. Examples of Replacement Classes are few because the amended Canadian Environmental Assessment Act has recently been adopted. In fact, some of the Models described above might be more appropriate as Replacement Classes. However, the experience to date indicates that a Replacement Class is best suited for projects where the locations are relatively fixed and where the project-specific environmental setting(s) is well understood.

For example, Parks Canada is developing a Replacement Class for Special Events in the Halifax Defence Complex (i.e., several small fixed sites operated by Parks Canada). In this case, the environmental settings at each site have been described in detail within the RCSR to ensure accurate predictions of project-environment interactions. Fisheries and Oceans Canada are working on a Replacement Class of watercourse crossings. In this case, site-specific information is not available, but the conditions for the application of the Replacement Class are well defined in the RCSR, providing the predictability in effects that is required for a Replacement Class.

In the case of fish offal disposal at sea, the Replacement Class option offers an advantage over the Model Class option. Environment Canada has a long list of pre-defined disposal sites where the disposal history and environmental conditions are well known. If some information is not currently available it can be collected because the sites are known. As such, the Replacement Class option is more suited to these projects than the Model Class option.

For the Replacement Class there are several options that are possible. Each of the following options has its own opportunities and constraints, as follows:

- A Replacement Class that applies to all of Newfoundland and Labrador could be developed that is tied to identified disposal sites (i.e., only those existing disposal sites listed/described in the RCSR could be used).
  - a) A description of each disposal site would be needed for the RCSR at a level of detail that would allow for an accurate identification of potential effects, Valued Ecosystem Components and determination of significance.
  - b) Disposal at sea activities could only be undertaken at the specified sites.
  - c) Disposal sites would need to be "approved" by Environment Canada in consultation with the Regional Ocean Disposal Advisory Committee (RODAC), particularly Fisheries and Oceans Canada, and relevant provincial regulatory authorities.
  - d) New disposal sites would be approved through the existing assessment and permitting process and the RCSR could be amended according to the Agency's amendment process.
  - e) Program-wide follow-up and cumulative effects assessments is possible.
- 2. A Replacement Class that applies to <u>pre-defined zones</u> within Newfoundland and Labrador where there are similar environmental settings or where there are viable alternatives to disposal available.
  - a) A description of each zone would be needed for the RCSR at a level of detail that would permit the accurate prediction of project-environment interactions. Zones could to be defined on the basis of similar environmental conditions, the likely sources of fish offal and/or the availability of viable alternatives to disposal. At any rate it is likely that a significant effort would need to be expended on defining zones and characterizing the existing environment in each.
  - b) Zones would need to be "approved" by Environment Canada in consultation with the Regional Ocean Disposal Advisory Committee (RODAC), particularly Fisheries and Oceans Canada, and relevant provincial regulatory authorities;
  - c) Once approved, disposal at sea could be undertaken at any site(s) within the specified zone.
  - d) New disposal sites could be identified within zones without a requirement for an amendment to the RCSR.

- A predefined siting selection process could be included in the RCSR to satisfy e) Fisheries and Oceans Canada and provincial authorities. A predefined siting selection process could be included in the RCSR, to enhance the decision-making process.
- f) Program-wide follow-up and cumulative effects assessments could be undertaken per zone.

A Replacement Class that applies to all of Newfoundland and Labrador with no specific disposal sites identified in the RCSR is not a viable option. This has been confirmed with the Canadian Environmental Assessment Agency.

#### 3.4.2 Consideration of Alternatives

The CEPA requires that alternatives to disposal at sea be considered for every application on an individual basis. An environmental screening under CEAA does not require the consideration of alternatives to disposal. A study of alternatives to disposal at sea in Newfoundland and Labrador (Environment Canada, December, 2001) identified a wide range of potential options for fish offal, but concluded that:

"...the distribution of fish waste sources, high transportation costs, fluctuating waste supplies and high plant construction costs all present difficult obstacles to potential and established businesses... For this reason, future private sector investments in the fish waste industry will depend upon the outcomes of feasibility studies rather than upon the mere availability of raw material and a desire to use the resource more fully."

Given this conclusion, and the perspective that an EA should be considered as input to the CEPA decision on whether or not to grant an Ocean Disposal permit and not a separate process, triggered by CEPA neither the Model Class or Replacement Class option offer Environment Canada any assistance in dealing with the issue of alternatives to disposal. As mentioned previously, both a Model Class and Replacement Class can be developed to include a generic consideration of alternatives that could be used by applicants.

#### 3.4.3 **Ease of Modification**

An amending procedure will need to be defined to allow the modification of the MCSR or RCSR after experience has been gained with its operation and effectiveness. The reasons for such modification may include:

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

For both the Model Class and the Replacement Class options, the RA will need to notify the Agency in writing of its interest to amend the document. 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 MCSR or RCSR to the Agency, along with a request that the Agency amend the document and a statement providing a rationale for the amendment.

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

- a) are minor;
- b) represent editorial changes intended to clarify or improve the screening process;
- c) do not materially alter either the scope of the projects subject to the MCSR or RCSR or the scope of the assessment required for these projects; and
- d) do not reflect new or changed regulatory requirements, policies or standards.

The Agency in consultation with the RA would determine whether the changes meet these criteria or whether a new declaration period is warranted. If the Agency determines that the proposed changes do not meet these criteria, they may initiate a new declaration for the MCSR or RCSR for the remaining balance of the original declaration period or for a new declaration period if the changes:

- a) are considered to be substantial; or
- b) represent modifications to the scope of the projects subject to the class or the scope of the assessment required for these projects.

At present, the Agency does not have criteria or thresholds to guide its determination of whether the proposed changes are substantial because each MCSR or RCSR is different and requires case specific consideration. In addition, follow-up monitoring results might warrant a change in the MCSR or RCSR. Once again, the Agency and Environment Canada would need to jointly determine whether a new declaration period is warranted on a case by case basis.

The inclusion of a new disposal site within Newfoundland and Labrador waters would not likely represent a modification to the scope of the projects subject to the class or the scope of the assessment required for these projects. As such, the addition of a new site would be considered a minor amendment to the MCSR or RCSR. Consultation with the Canadian Environmental Assessment Agency indicates that a Class Screening can easily be amended to add or delete a disposal site without changing the declaration period. It was estimated that an amendment could be accomplished within two to four weeks provided that the new disposal site was subject to consultation with the Regional Ocean Disposal Advisory Committee (RODAC) and "approval" by Fisheries and Oceans Canada, and any other relevant provincial regulatory authorities. If any comments from other stakeholders are received, they would need to be dispositions and the Class Screening modified to reflect the comments received. This amendment process might take up to 90 days. There is no difference between what might be required for a Model Class or a Replacement Class.

#### 3.5 Timing

The time required to implement a Model Class Screening Report or a Replacement Class Screening Report will vary depending upon the level of effort placed towards their development, the amount of data/information available on disposal sites, and the desire on the part of other stakeholders to become a part of the Class Screening development process. Table 1 summarizes the key steps in getting a Model Class or a Replacement Class completed and ready for use by Environment Canada. As is evident, a minimum of 16.5 months is likely required and a maximum of two years may be required. If the site specific information identified in Appendix A is available, both a MCSR and a RCSR could be developed within 16.5 months, otherwise the upper end of the timeframe would be a more reasonable estimate.

**Table 2.** Likely Timelines

| Milestones or Steps  | Typical Time<br>Requirements (Months) |
|--|---------------------------------------|
| Project Scoping in Consultation with Fisheries and Oceans Canada | 1 – 2                                 |
| Information Review / Data Collection                             | 3 – 6                                 |
| Initial Draft of Model / Replacement Class Screening Report      | 1 – 3                                 |
| Environment Canada Review  | 1                                     |
| Agency Review  | 0.5                                   |
| Second Draft of Model / Replacement Class Screening Report       | 0.5                                   |
| Stakeholder Consultation / REAC Meeting                          | 2                                     |
| Third Draft of Model / Replacement Class Screening Report        | 1                                     |
| Agency Review and "Sign-off"                                     | 0.5                                   |
| Final Draft Model / Replacement Class Screening Report           | 0.5                                   |
| Report Translation and Agency "Sign-off"                         | 1 – 2                                 |
| 30 Day Public Review / External Consultation                     | 1                                     |
| Final Model Class / Replacement Class Screening Report           | 0.5 – 1                               |
| Declaration  | 0.5                                   |
| NEAS Integration   | 0.5 – 1                               |
| Internal Training  | 2                                     |
| Totals   | 16.5 – 24                             |

### 3.6 Information Requirements

There are few differences between the general information required to develop a MCSR or a RCSR. Both options will require the same type of information, however because a RCSR should be as site-specific as possible, a greater level of detail will be required for a RCSR than a MCSR. At present it is not certain whether the information required to develop a MCSR or RCSR is available. It is likely that some information can be obtained from existing Environmental Assessment, CEPA permit applications and permit conditions, CEPA guides related to the disposal at sea program, monitoring reports, public complaint records. Appendix A provides a preliminary listing of the disposal site-specific and CEPA information requirements for a RCSR. Such site-specific information is not likely to be required for a MCSR. Existing information sources could be assembled and reviewed to identify specific gaps or deficiencies, followed by a program to fill critical information gaps. As noted above, this activity could take up to 6 months depending upon the nature of the information gaps that would need to be filled.

### 3.7 Roles and Impacts on other Federal Departments

Based on past experience, only Fisheries and Oceans Canada has been involved in fish offal disposal at sea projects, however the transfer of Coast Guard responsibilities to Transport Canada will mean that Transport Canada (Canadian Coast Guard) will also be involved in project-specific assessments to address navigable waters issues.

Neither a Model Class or Replacement Class is likely to change the role of other Federal Departments in conducting project-specific environmental assessments because at present, Environment Canada is the sole RA for fish offal disposal projects. The major impact on other Federal Departments will be related to the development of a MCSR or a RCSR and their respective "down-stream" requirements for follow-up and cumulative effects assessments.

For a Model Class, Fisheries and Oceans Canada and the Canadian Coast Guard (Transport Canada) would likely continue their roles as an expert advisors on a project specific basis and for the development of a MCSR, including any project-specific follow-up and cumulative effects assessments. These departments would also likely continue to be involved in any new site selection activities.

For a Replacement Class, Fisheries and Oceans Canada and the Canadian Coast Guard (Transport Canada) would not need to become involved in any project specific assessment. These departments would need to provide their expert advice and guidance during the preparation of the RCSR, conducting program-wide follow-up and cumulative effects assessments, and in any new site selection activities.

Although Fisheries and Oceans and Transport Canada's likely roles, responsibilities and preferences should be confirmed, a Replacement Class would effectively eliminate their role in project-specific EAs, but would allow them input into the RCSR developments process and continued involvement in the Disposal at Sea program.

# 3.8 Roles and Impact on Industry, the Public and other Stakeholders

Any effort to streamline the EA process and improve the time required to obtain a CEPA permit is likely to be viewed positively by project proponents (i.e., CEPA applicants) if there is a noticeable improvement in approval times and mitigation requirement are not too onerous.

Other stakeholders such as the general public and non-governmental organizations may view such streamlining as a lowering of standards for environmental assessment.

The fish processors in Newfoundland and Labrador, the commercial fishing industry, industries associated with alternative uses of fish waste (e.g., composters), the general public and non-governmental organizations involved in fisheries and oceans issues will likely need to be involved in the development of a MCSR or a RCSR. At a minimum, these groups should be consulted during the development of these tools to ensure that the full range of environmental effects are addressed within the documents and that the mitigation measures and best practices identified are reasonable and practical for implementation. Furthermore, these groups will be given an opportunity to formally comment on the documents during the declaration process. Efforts to involve these groups early in the development of the Model or Replacement Class will serve to reduce the risk of serious objections at the tail end of the process.

### 4. Summary and Recommendation

Overall, there are few differences between the options and there are no guarantees of success. Past experience indicates that MCSRs serve to streamline EA processes provided that it is relatively easy to determine whether the Model applies to a given project and that the CSPR is not complex and is easy to fill-out. There is no similar experience with a Replacement Class as of yet. However, based on discussions with Environment Canada and the Canadian Environmental Assessment Agency, it is the opinion of Gartner Lee Limited that the development of a **Replacement Class Screening Report** would serve the interests of Environment Canada the best for the following reasons:

- a) a RCSR could be developed and applied to all of the Newfoundland and Labrador;
- b) a Replacement Class is most suited to projects where there are identified sites or project locations;
- a Replacement Class does not require the completion of any project specific forms or "sign-off" sheets such as a Class Screening Project Report or related records. As such, this option offers the potential for a significant time savings;
- d) a RCSR would minimize efforts in maintaining information on Environment Canada's public registry and the CEAR;
- e) a RCSR would serve to institutionalize a standardized set or listing of best management practices, mitigation measures, contingency plans etc., that any applicant would need to comply with, thus, improving regulatory certainty for project proponents; and

f) a RCSR could be developed to a level of detail that would allow applicants and/or Environment Canada staff to complete their CEPA Disposal at Sea application and issue permits more completely and efficiently. The RCSR could be available online and could include generic data items that could be 'cut' and 'pasted' into a CEPA Disposal at Sea application and/or a disposal permit.

The key to successful development of a streamlined EA process for fish offal projects requires the following:

- a) confirmation by Environment Canada's legal staff that an environmental assessment using a RCSR will not violate Canada's obligations under CEPA or international conventions;
- b) the perspective that an EA is as <u>input to the CEPA decision</u> on whether or not to grant an Ocean Disposal permit and not a separate unrelated process.
- c) investment of time and effort up-front to consult with the Canadian Environmental Assessment Agency and key stakeholders on their preferences and likely roles in Class Screenings. It will be critical that Fisheries and Oceans Canada and provincial officials confirm their role in EAs for fish offal disposal projects and be allowed to become engaged in the decision-making on the scope and content of a Replacement Class. The recently ratified Labrador Inuit Land Claims Agreement should be reviewed to determine the appropriate role for the Inuit;
- d) investment of time and effort up-front in collecting site-specific information (Appendix A), possibly conducting monitoring studies at fish offal disposal sites to confirm the absence of environmental effects, and developing and committing to site selection procedures for new fish offal disposal sites;
- e) integration between the content of the RCSR and information requirements of a CEPA application (Appendix A); and
- f) strict compliance with the Canadian Environmental Assessment Agencies standard templates for a RCSR (Appendix B).

# **Appendices**

## Appendix A

**Site-specific and CEPA Information Requirements** 

### Appendix A

#### Site-specific and CEPA Information Requirements

Consideration should be given to including the following site-specific information in the RCSR to allow for better impact prediction and assessment:

- Names and locations (i.e., latitude and longitude) of disposal sites;
- Names and locations of load sites;
- Transportation routes from load to disposal sites;
- Disposal history;
- **Existing Environmental Conditions:** 
  - > Air Quality and Acoustics;
  - > Fish and Fish Habitat;
    - Ocean Bed / Oceanography (i.e., depth, currents, salinity);
    - Benthic Invertebrates / Marine Plants;
    - Water Quality;
    - Fish and Sea Turtles;
    - Marine Mammals;
- Seabirds, Shore Birds and Waterfowl;
- Shoreline and Soils;
- Marine Protected Areas;
- Transportation / Navigation and Utilities;
- Ocean Bed Uses;
- Commercial Fishing and Aquaculture;
- Tourism and Recreation;
- Residents and Communities;
- Traditional Land and Water Use;
- Archaeological / Heritage Resources;
- Allowable dumping quantities and rates per site;
- Estimates of the likely movement and dispersal in the water column and on the sea floor of the substances dumped;
- Applicable timing restrictions for each site.

Consideration should be given to including the following information in the RCSR to allow for better integration between the RCSR and CEPA applications:

- Generic descriptions of equipment and disposal at sea activities (i.e., handling and loading at source and/or transfer points; transportation on land and water; packaging and containment on board vessels; and handling and disposal at disposal site);
- Chemical, biological and physical information for various types of fish wastes (e.g., flesh, skin, bones, entrails, shells or stickwater);
- Recommended speed during dumping;
- Recommended time required for discharge;
- Listing of applicable permits and approvals;
- Generic comparative evaluation of alternatives;
- Standard mitigation measures, best practices and procedures.

# Appendix B

**Table of Contents for a Replacement Class Screening Report** 

## Appendix B

### Table of Contents for a Replacement Class Screening Report

| Section Heading |  | Content   |
|-----------------|--|---|
| 1.              | INTRODUCTION   | Brief introduction to the report and its objectives.  |
| 1.1             | Class Screening and CEAA   | How and when a screening is triggered under CEAA. Standard text has been developed.   |
| 1.2             | Rationale for Replacement Class<br>Screening                         | Discuss how the project class meets the six criteria for a replacement class screening  |
| 1.3             | Consultation   | Summary of any consultation process used to develop the report, e.g., meetings with government agencies, formal public review of report and summary of any public concerns.   |
| 1.4             | Canadian Environmental Assessment Registry                           | Explanation of registry requirements for the RCSR. Standard text has been developed.  |
| 2               | PROJECTS SUBJECT TO CLASS SCREENING                                  | Description of the candidate class (scope of project/activities covered).   |
| 2.1             | Projects Subject to CEAA   | Identifies and describes projects that are subject to CEAA as well as the trigger.  |
| 2.2             | Projects Excluded under CEAA   | Identifies and describes those projects that are excluded under CEAA Exclusion List.  |
| 2.3             | Projects Subject to Replacement<br>Class Screening Report            | Identifies and describes the sub-classes (if any) and their respective projects that are subject to the class screening.  |
| 2.4             | Projects Not Subject to the<br>Replacement Class Screening<br>Report | Brief explanation of process for these projects (e.g., projects that could affect species at risk will not be subject to the RCSR).   |
| 3               | PROJECT CLASS<br>DESCRIPTION   | Project location, components and characteristics should be described Project activities for construction, operation, and decommissioning phases (and accidents) should be outlined.   |
| 3.1             | Seasonal Scheduling and<br>Duration of Projects                      | Description of typical seasons during which project activities are undertaken and typical timeframes.   |
| 3.2             | Effects of the Environment on the Project                            | Describe how the environment could affect the project. Preventative design measures may be mentioned.   |
| 3.3             | Construction   | Describe project activities   |
| 3.4             | Operation/Maintenance  | Describe project activities   |
| 3.5             | Decommissioning/Abandonment  | Describe project activities   |
| 3.6             | Accidents/Malfunctions   | Describe project activities   |
| 4               | ENVIRONMENTAL<br>REVIEW  | General introduction of environmental methods and approach.   |
| 4.1             | <b>Environmental Assessment</b>                                      | Identification of relevant temporal, spatial, administrative, and scientific or   |
|                 | Boundaries   | technically based boundaries (e.g., environmental effects may occur over an   |
|                 |  | area greater than the project area and last longer than project activities, availability or quality of environmental information may vary in different jurisdictions, scientific knowledge on an effect may be limited) and how this will be addressed. |

| Section Heading   | Content   |
|---|---|
| 4.2 Environmental Setting   | Describe the environmental characteristics of the areas covered by the class screening (terrestrial and aquatic/marine settings, heritage resources and human use) or explain that information is unnecessary because projects are well defined, mitigations are well established and potential environmental effects are well understood (standard text developed). State what is known re species at risk.  |
| 4.3 Issues Scoping and Valued Environmental Components                        | <ul> <li>Brief explanation of scoping process – was this done internally or were outside experts/public involved?</li> <li>May include table summarizing who considers VEC to be valued (e.g., regulatory departments, public, scientists) or why valued (regulatory, technical, social/cultural, economic).</li> <li>Project-environment interactions identified through the use of a matrix (VECs vs project phases and/or activities).</li> <li>There should be a clear list of the VECs selected, as well as a brief</li> </ul>   |
| 4.4 Potential Environmental Effects   | <ul> <li>justification for each (why VEC is valued, and how it interacts with project)</li> <li>Discussion of potential environmental effects resulting from project-environment interactions.</li> <li>A table to summarize all potential effects for each VEC.</li> <li>Need brief discussion of environmental effects to provide overview of their characteristics (e.g., Will most take place during construction? Where will they mostly occur and for how long? What is nature of effect – habitat loss, sedimentation, avoidance of site, disturbance to quality of life)</li> </ul> |
| 4.5 Cumulative Effects  4.5 Cumulative Effects                                | Identification of past, present, and likely future projects that could contribute to cumulative effects. Cumulative effects must be assessed for significance. State number of projects anticipated and/or that assumptions re cumulative effects will be confirmed every year.  Identification of past, present, and likely future projects that could contribute to cumulative effects. Cumulative effects must be assessed for significance. State number of projects anticipated and/or that assumptions re cumulative  |
| 4.6 Accidents And Malfunctions  | effects will be confirmed every year.  Identification of potential accidents and malfunctions throughout all phases of project (i.e., spills, leaks, equipment failure)   |
| 4.7 Mitigation  | Describe or summarize mitigative measures. Refer to any best management practices or standard operating procedures that form the basis of the standard mitigation measures.   |
| 4.8 Analysis and Prediction of Significance of Residual Environmental Effects | Potential environmental effects resulting from interactions between VECs and project activities are identified and analyzed in a matrix using the following criteria: magnitude, geographic extent, duration, frequency, reversibility, and ecological context. The significance of residual environmental effects is assessed.   |
| 5. ROLES AND RESPONSIBILITIES 5.1 Responsible Authorities                     | Identification and description of provincial and federal regulatory requirements and co-ordination mechanisms where applicable.  Identification of responsible authority(s) and federal permits and approvals that may be required and how the replacement class screening process accommodates the information requirements.   |
| 5.2 Federal Authorities   | Identification of federal authorities involved that will provide expert advice and knowledge.   |

| Section Heading |   | Content   |  |
|-----------------|---|---|--|
| 5.3             | Provincial/Territorial Coordination                                     | Description of provincial/territorial co-ordination process (if applicable). General introduction to the application of certain provincial (territorial) regulations, standards and guidelines, and identification of key provincial agencies. Detailed information to be provided in an appendix if necessary. |  |
| 5.4             | The Proponent   | Description of role of proponent if necessary.  |  |
| 6.0             | PROCEDURES FOR<br>AMENDING THE<br>REPLACEMENT CLASS<br>SCREENING REPORT | Description of amending procedures to allow for the modification of the RCSR. Standard text has been developed.   |  |
| 7               | REFERENCES  | List of references cited in report (if necessary).  |  |

Note: Table of Contents provided by the Canadian Environmental Assessment Agency in March 2004. Changes may have occurred since that time.