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(12/2025)

# ENVIRONMENTAL RESPONSE STANDARDS

SECOND EDITION  
12/2025



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# **1 GENERAL**

## **1.1 INTRODUCTION**

Part 8 of the *Canada Shipping Act, 2001* (CSA 2001), applies to all Canadian waters, which include all inland waters and waters out to 200 nautical miles. It applies to vessels in those waters, oil handling facilities (OHF) engaged in or proposing to engage in the loading and unloading of oil to or from prescribed vessels and to certified response organizations (ROs).

The *Environmental Response Regulations* (ERR) do not apply to vessels that are on location and engaged in exploration of oil and gas from the seabed of internal waters, the territorial sea or the continental shelf of Canada. The *Canada Oil and Gas Operations Act* (1985) governs these activities, which are the responsibility of the Minister for Natural Resources Canada.

The *Environmental Response Standards* (referred to below as “the Standards”) support and provide context to the *Environmental Response Regulations* (referred to below as “the Regulations”). These Regulations repeal the *Response Organization Regulations* and deal with matters related to the prevention of, and response to oil pollution incidents from OHFs of a class established by the ERR that are engaged in the loading or unloading of oil to or from a prescribed vessel. Furthermore, the Regulations establish the requirements for Canadian certified response organizations and the standards provide clarification on these requirements. The Standards also explain the types of vessels (the prescribed classes) that require an arrangement with an RO. This Transport Publication (TP) supports the Regulations and replaces TP 12401 and TP 12402 (Response Organization Standards and Oil Handling Facilities Standards, 1995). The Standards also outline the calculations used in determining the total rated capacity of an RO’s equipment in responding to an oil pollution incident.

**Oil Handling Facilities:** This section of the TP will provide additional explanation of the requirements found in the Regulations surrounding the details in the oil pollution prevention and emergency plans, exercises, and training. It also explains the requirement for OHFs of an established class to have a declaration on site and for those OHFs located at or south of 60°N to have an arrangement with an RO.

**Vessels:** This section explains the requirements for prescribed classes of vessels to have a declaration on board.

**Response Organizations:** This section explains the calculations to be used by ROs to quantify minimum recovery, storage and boom equipment requirements for certification purposes. It also provides explanation of best practices Response Organizations should follow when planning and responding to oil pollution incidents.

## 1.2 STATUTORY AUTHORITY

As per subsections 35(1) and 182(1) of the CSA 2001, the Governor in Council may, on the recommendation of the Minister, make regulations for carrying out the purposes and provisions of Part 8, including regulations:

- (a) respecting the circumstances in which operators of OHFs shall report discharges or anticipated discharges of pollutants, the manner of making the reports and the persons to whom the reports shall be made (182(1)(a));
- (b) establishing classes of OHFs and determining which of the requirements set out in sections 167.1 to 168.01 apply to the operators or, to persons who propose to operate, OHFs of each class (182(1)(d.1));
- (c) respecting oil pollution prevention plans and oil pollution emergency plans, including the time within which the plans shall be submitted to the Minister of Transport (Minister) and the circumstances in which up-to-date plans shall be submitted to the Minister (182(1)(d.2));
- (d) respecting the procedures, equipment and resources referred to in paragraph 168(1)(e) and section 168.3 (182(1)(d.3));
- (e) respecting the information and documents referred to in sections 167.1 and 167.3 and subsection 168.01(2), including the time within which the information and documents shall be submitted to the Minister (182(1)(d.4));
- (f) respecting the issuance, amendments, suspension, reinstatement, cancellation or renewal of certificates referred to in section 169 (182(1)(b));
- (g) respecting the manner in which ROs and persons who make an application under subsection 169(1) must calculate proposed fees before notifying the Minister of the fees under subsection 170(1); and
- (h) prescribing anything that by this Part (Part 8) is to be prescribed (182(1)(e)).

## 1.3 SUMMARY OF AUTHORITY

The *Environmental Response Standards* provide support to the ERR as a tool to ensure prescribed vessels have an arrangement with an RO and a declaration on board the vessel. The Standards will also support the requirements of an OHF of an established class to have a declaration on site, an arrangement with an RO (where applicable), an oil pollution prevention plan (OPPP), an oil pollution emergency plan (OPEP), and the procedures, equipment and resources for immediate use in the event of an oil pollution incident. Further, the Standards will support the requirements for ROs to calculate the capacity of their equipment in responding to a marine oil pollution incident.

## **2 VESSELS**

### **2.1 GENERAL**

All prescribed vessels destined to a Canadian port must ensure that they have a valid arrangement in place with the certified oil spill RO in their region prior to arrival in Canadian waters.

The CSA 2001 Part 8, paragraph 167(1)(a) states the following:

...every prescribed vessel or vessel of a prescribed class shall

- (a) have an arrangement with a response organization in respect of a quantity of oil that is at least equal to the total amount of oil that the vessel carries, both as cargo and as fuel, to a prescribed maximum quantity, and in respect of waters where the vessel navigates or engages in marine activity.

#### **2.1.1 Declaration**

The purpose of the declaration is to bring together a few critical pieces of information that are readily available in the event of an oil pollution incident. Experience has shown that the information supplied in this declaration can greatly reduce delays in mounting an effective response to an oil pollution incident.

In paragraph 167(1)(b) of the CSA 2001, every prescribed vessel must have on board a declaration, that:

- (a) Identifies the name and address of the vessel's insurer or, in the case of a subscription policy, the name and address of the lead insurer who provides pollution insurance coverage in respect of the vessel;
- (b) Confirms the arrangement has been made (for vessels located in waters at or south of 60°N), and
- (c) Identifies every person who is authorized to implement the arrangement (for vessels located in waters at or south of 60°N).

In addition to the above, the declaration also identifies the name of the person responsible for implementing the Shipboard Oil Pollution Emergency Plan (SOPEP) required by subsection 27(1) of the *Vessel Pollution and Dangerous Chemicals Regulations* (VPDCR).

There are two declarations found in schedules 4 and 5 of this document; one for vessels located south 60°N and one for vessels located north of 60°N.

<b>SEE SCHEDULES 4 &amp; 5 FOR THE DECLARATIONS FOR A VESSEL</b>
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## **3. OIL HANDLING FACILITIES**

### **3.1 GENERAL**

This Part provides further explanation and support to the requirements found in the Regulations as they pertain to OHFs of an established class.

Part 8 of the CSA 2001 outlines the framework for prevention and response for those who propose to operate an OHF and operators of existing OHFs that are engaged in the loading or unloading of oil to or from a prescribed vessel.

The framework is built to ensure those persons who propose to operate an OHF notify the Minister of the proposed operations and to provide the Minister with the plans in advance of commencement of operations.

For the operators of OHFs, the framework ensures that they have an arrangement with an RO (where applicable), an up-to-date OPPP and OPEP on site and have procedures, equipment and resources available for immediate use in the event of an oil pollution incident. The Act also establishes a requirement that if the operator proposes to make changes to its facility that will impact the loading and unloading of oil to or from a vessel, then the operator must notify the Minister of the proposed change, revise its plans and submit those plans to the Minister in advance of the change taking place.

The standards are intended to be used in support of the ERR and where necessary, provide further information for those items that are “specified” in the CSA 2001.

### **3.2 ESTABLISHED CLASSES OF OIL HANDLING FACILITIES**

Section 5 of the *Environmental Response Regulations* establishes classes of oil handling facilities based on the facility’s transfer rate in cubic metres per hour, in respect of oil that is loaded or unloaded to or from prescribed vessels referred to in Part 1 of the Regulations.

For the purposes of Section 5; Determination of the classification of the facility will be based on the maximum transfer rate achieved at that facility.

The maximum transfer rate will be viewed as the total combined simultaneous maximum flowrates which an OHF may routinely achieve within the conduits between vessels and facility flanges, while transferring oil. This will include the sum total of these maximum flowrates of all lines that transfer simultaneously. This may not necessarily be the maximum theoretical flowrate which could be mechanically achieved by the pumps and conduits utilized in a transfer but rather a representation of the highest of the transfer rates that are actually realized during normal operations.

In the case of multiple docks and/or multiple berths; All simultaneous vessel to OHF transfer operations will be considered as one for this calculation. The overall classification of the OHF will be based on the sum total of the transfer rates for all lines that transfer simultaneously at all berths and docks that are present at the OHF. (Flow rates of lines to be combined when two or more lines transfer simultaneously throughout the facility).

For example, if the facility transfers diesel in line no.1 at a rate of  $100\text{m}^3/\text{hr}$ , jet fuel in line no.2 at a rate of  $100\text{m}^3/\text{hr}$  and asphalt in line no.3 at a rate of  $100\text{m}^3/\text{hr}$ , at the same time, then the combined transfer rate would be  $300\text{m}^3/\text{hr}$  Therefore this facility would be classified as a Class 2 facility.

If that same facility has a second dock where crude oil is transferred at a rate of  $500\text{m}^3/\text{h}$  and those two docks conduct transfer operations at the same time then the transfer rate to be considered for classification would be the sum total of all for lines ( $800\text{m}^3/\text{hour}$ ). The facility would be considered a Class 3 facility.

Section 13 of the ERR also establishes the need to have available for immediate use the equipment and resources that are required to contain, control, recover and clean up a discharge of oil of at least the applicable quantity based on the classification of the OHF. Operators must also consider the types of equipment and resources required to address a discharge of each type of product they transfer and have on hand the appropriate equipment to respond to a discharge of a quantity based on the facility's classification.

For example, the facility in the example above transfers diesel, asphalt and crude products. Therefore, they must have the appropriate equipment and resources on hand to respond to all three products. The quantity of response capacity will be determined based on the classification of the facility. In this example the quantity required would be enough to contain, control, recover and clean up 15 cubic meters of asphalt, diesel and crude oil products.

Though many of the requirements for OHFs are similar irrespective of their location, some differ depending on their geographical location, thereby recognizing the flexibility to establish different requirements to account for practical considerations. OHFs located north of  $60^\circ\text{N}$  must have the necessary procedures to respond to a discharge of the total quantity of oil that could be loaded or unloaded to or from a prescribed vessel, up to a maximum of 10,000 tonnes. This requirement reflects that there are no TC-certified response organizations operating north of  $60^\circ\text{N}$ . Additionally, equipment and resources are required to contain, control, recover and clean up the discharge of a quantity of oil up to the applicable threshold set out in clauses 11(1)(b)(i)(A) to (D) of the ERR.

Furthermore, operators of OHFs must provide information of the names of persons who are authorized to implement the OPEP as set out at subparagraph 168(1)(b)(iii) of the

Act. Operators should provide a list of all persons who have the authority to implement the plans on behalf of the operator in their plans.

### 3.3 DECLARATION

In accordance with Part 8, section 168 of the CSA 2001, every OHF of a class established by the Regulations, must have on site a declaration, in the form set out in Schedule 1 of the standards, that:

- (a) describes the manner in which the operator will comply with the ERR and reporting requirements in Part 3 of the *Vessel Pollution and Dangerous Chemicals Regulations*.
- (b) confirms that the arrangement has been made (for OHFs at or south of 60°N); and
- (c) identifies every person who is authorized to implement the arrangement (for OHFs at or south of 60°N) and the oil pollution emergency plan (all OHFs).

The purpose of the declaration is to bring together critical information to have readily available in the event of an oil pollution incident. Experience has shown that the information supplied in this declaration can greatly reduce delays in mounting an effective response to an oil pollution incident.

There are two declarations found in schedules 1 and 2; one for OHFs located at or south of 60°N and one for those located north of 60°N.

<b>SEE SCHEDULES 1 AND 2 FOR THE OHF DECLARATIONS</b>
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### 3.4 NOTIFICATION OF PROPOSED OPERATIONS

Upon receiving Royal Assent in December 2014, Bill C-3, the *Safeguarding Canada's Seas and Skies Act* brought forward changes to the CSA 2001 that introduced requirements for persons who propose to operate an OHF. The Act sets out the timeframes for the submission of the oil pollution prevention and emergency plans (subsection 167.2(1) of the CSA 2001) while the ERR stipulate the timeframe for notifying the Minister of the proposed operations (as required under section 167.1 of the CSA 2001).

Section 8 of the ERR stipulates that a person proposing to operate an OHF must notify the Minister of the proposed operations at least 180 days before commencing transfer operations. This timeframe is consistent with the requirement section 168.01 of the CSA 2001 for notifying the Minister when proposed changes are being made to the OHF's operations.

Schedule 3 of these standards includes the information the person should provide to TC when making such notification of the proposed operations (section 167.1).

This advance notice will provide TC with the time needed to prepare for the receipt of the plans (ss. 167.2(1) - 90 days prior to commencement), review the plans and schedule the necessary inspections.

The prescribed requirements for the oil pollution prevention and emergency plans that the person submits to TC are found in Part 2 of the ERR.

### **3.5 NOTIFICATION OF PROPOSED CHANGE TO OPERATIONS**

The changes made to the CSA 2001 as part of Bill C-3, section 168.01 lays out the framework and requirements for operators of OHFs that propose to make a change or permit a change to be made to the facility's transfer operations.

Section 168.01 of the Act also sets out the requirements and the timeframe for operators of an OHF to notify the Minister, the timeframe for submitting revised oil pollution prevention and oil pollution emergency plans to the Minister and the obligation for the operator to ensure the plans meet the requirements set out in the ERR before the change to be made.

However, if an OHF operator plans to decrease the oil transfer rate at the facility, the Minister may specify a period of less than 180 days to receive the notification from the operator. Operators should contact their regional TC-ER office to discuss the specifics of their planned changes to determine the best path forward.

Schedule 3 of these standards provides the information that the operator of the OHF should provide to the Department when making such a notification.

<p><b>SEE SCHEDULE 3 FOR NOTIFICATION OF PROPOSED OPERATIONS OR PROPOSED CHANGE TO OPERATIONS</b></p>
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### **3.6 OIL POLLUTION PREVENTION PLAN (OPPP)**

#### **3.6.1 General**

These standards provide supporting details for the requirements found in the Regulations on what must be contained in the OPPP. This plan is designed to ensure that the necessary planning is undertaken to help prevent a discharge of oil during the loading or unloading of oil to or from a prescribed vessel.

Each OPPP will be applicable to the particular OHF, taking into account the requirements found in the ERR. The operator of an OHF or a person who proposes to operate an OHF, provided the OHF is of a class established by the ERR, should take into account the specifics of the facility and its surroundings when developing the OPPP.

The objective of an OPPP is to help the OHF prevent discharges into the marine environment when loading and unloading oil to or from a vessel by identifying the hazards associated with the OHF's activities and to assess the risk to the environment from these activities. The desired result is continuous improvement towards eliminating discharges of oil into the marine environment. In order to minimize the risk to the marine environment, prudence and due diligence in maintaining an effective OPPP and marine operations is essential to mitigate the threat and ultimately strengthen the existing marine oil spill preparedness and response regime in Canada.

Examples of the type of activities surrounding the transfer operations include:

- (a) Berthing and unberthing of vessels;
- (b) Communications;
- (c) Transferring oil in bulk to or from a vessel;
- (d) Maintaining vessels at the berth;
- (e) Emergency procedures;
- (f) Maintaining critical equipment; and
- (g) Assessing environmental conditions.

The operator of an OHF or a person who proposes to operate an OHF must have an OPPP, describing the preventive measures established at the OHF involving the loading or unloading of oil to or from a prescribed vessel. The OPPP requirements apply to all classes of OHF established by the ERR (classes 1 to 4).

To minimize duplication of effort, if an existing OPPP has been prepared on a voluntary basis or in accordance with the requirements of other legislative requirements of another government, it can be used as long as it meets the requirements of the ERR. If the existing plan does not meet all the requirements identified, the OPPP must be amended to be in compliance with the ERR.

The OPPP and the OPEP are two separate plans. However, if the elements of both plans can be combined into one plan, it is acceptable as long as each component required by the Regulations can be clearly identified.

Sections 3.6.2 to 3.6.4 are areas that should be considered while developing the OPPP. Incorporating these areas will help to strengthen the OPPP and the effectiveness of the prevention activities during an oil transfer at the facility.

### **3.6.2 Environmental Policy**

When developing the OPPP, consideration should be given to including the OHF's environmental policy that:

- (a) is appropriate to the nature, scale and environmental impacts of the OHF's marine activities;
- (b) includes a commitment to continual improvements and prevention of marine pollution;
- (c) includes a commitment to comply with relevant environmental legislation and regulations, and with other requirements to which the OHF subscribes;
- (d) provides the framework for setting and reviewing environmental protection objectives and targets; and
- (e) is documented, implemented, maintained and communicated to all employees.

### **3.6.3 Hazard Identification, Risk Assessment And Mitigation**

While developing the OPPP, it is encouraged to identify the hazards associated with the transfer of oil to or from a prescribed vessel, assess the risks with those hazards and highlight the measures that will be taken to prevent an incident from happening. This could include:

- (a) the procedures identifying those activities undertaken at the OHF that may impact the marine environment, identifying the hazards and when an event could occur. Examples of such activities include:
  - a) ensuring the OHF's design capability, condition and water depth can handle the size of vessels transferring at the facility while;
  - b) overseeing vessel berthing and unberthing;
  - c) handling overseeing vessel mooring and maintaining moor;
  - d) managing general tanker hazards while vessels are alongside;
  - e) developing a joint, mutually acceptable (between vessel and OHF) plan for oil transfer;
  - f) implementing and maintaining the oil transfer plan;
  - g) suspending or completing the oil transfer;
  - h) making a temporary or permanent change in the facility's design, equipment or operating procedures and
  - i) describing the general operation of equipment
- (b) an assessment of the probability and consequences of an incident resulting from the identified hazards.
- (c) identification of the processes (measures) used to mitigate the risks identified through the assessments.

### **3.6.4 Risk Identification And Analysis**

The OPPP should contain procedures that identify the environmental factors of the OHFs activities that the OHF can control, and over which the OHF can be expected to have an influence, in order to determine those risks which, have or can have significant

impacts on the marine environment. The factors related to those significant impacts should be considered in setting its environmental protection objectives.

### **3.6.5 Duties of Operators**

It is important that the OPPP describes those preventative duties that the operator of the OHF is responsible for and that are in line with the ERR. Some of those duties include:

- (a) securing the vessel while taking into consideration the weather, tidal and current conditions, and that the mooring lines are tended so that the movement of the vessel does not damage the transfer conduit or its connections. This is a shared responsibility between the vessel and the operator of the OHF, where applicable;
- (b) loading or unloading procedures;
- (c) reporting for readiness prior to commencement of the transfer operation;
- (d) communications between the vessel and OHF;
- (e) readiness of equipment and procedures for the transfer; and
- (f) attendance of competent personnel during the transfer operation.

### **3.6.6 Training for Operators**

The operator of the OHF must ensure the personnel (including contractors) engaged in the loading and unloading of a vessel are prepared for the responsibilities they may be requested to undertake by receiving the appropriate training.

The training should include but is not limited to the following criteria:

- (a) Equipment deployment techniques;
- (b) Spill prevention, control, and countermeasure;
- (c) Workplace Hazardous Materials Information System (WHMIS);
- (d) Roles and responsibilities of various responders;
- (e) Site safety plan;
- (f) Transfer operations;
- (g) Basic vessel information; and
- (h) Vessel arrival / departure procedures

### **3.6.7 Training Records**

The OHF operator must keep training records for each person who has received training and they must be kept for a minimum of five years. If the training is valid for

more than five years, the operator must identify the validity period of the training. The training records could be kept internally and do not have to be included in the OPEP or OPPP. However, the OHF operator must provide the updated copy of the training records to TC upon request.

### **3.7 OIL POLLUTION EMERGENCY PLAN (OPEP)**

#### **3.7.1 General**

The standards provide supporting details for some of the requirements found in Part 2 of the ERR on what must be contained in the OPEP. This plan is designed to be used in the planning process in the preparation to respond to a discharge of oil during the loading or unloading of a prescribed vessel.

Each OPEP will be unique, taking into account the resources, equipment, procedures and geographic features used in the event of a discharge of oil during loading or unloading of a prescribed vessel at the OHF.

The operator of an OHF or a person who proposes to operate an OHF, must take into account the specifics of the facility and its surroundings when developing the plan.

#### **3.7.2 OPEP Policies And Procedures**

The procedures, equipment and resources that the operator of the OHF must plan for and have available for immediate use and must implement in the event of a discharge of oil during the loading or unloading of a prescribed vessel are found in section 13 of the ERR, including time standards that the facility must achieve in the event of a spill. These time standards are critical to ensure an immediate response is undertaken by the operator of the OHF.

The OPEP must include the information set out in the ERR. The policies and procedures that are important in the OPEP are those that the operator of the OHF will follow in the event of an oil pollution incident. Some examples of such policies and procedures would be:

- a description of the activities (procedures) that will be carried out in the event of an oil pollution incident.
- the procedures for reporting a discharge or anticipated discharge of oil, including the federal emergency number that will be used in the event of a spill (i.e. Marine Communications and Traffic Services (MCTS)).
- to shut down immediately and not restart loading or unloading operations in a manner that would interfere with the immediate, effective and sustained response to the oil pollution incident.
- to not restart loading and unloading operations until it is safe to do so.
- the procedures which the operator of the OHF plans to follow in response to an oil pollution incident.

### 3.7.3 Scenario Development And Factors

Scenarios are required for all types of products transferred at the facility in respect of fate and behaviour and to cover preparedness needs specifically related to response protocols for those types of products.

As part of the OPEP, oil pollution scenarios must be developed which describe the incident and the proposed response to a possible discharge. All OHFs are required to include an oil pollution scenario in respect of each type of oil product transferred, that describes the procedures to be followed to respond to a discharge of a quantity of the oil product specified in 11(1)(b)(i).

As noted in Section 3.2, the overall classification of an OHF is based on the combined transfer rates of all operations that are conducted simultaneously. The regulations require that an OHF have at least one scenario present for the transfer rate of the Class assigned to the facility as per 11(1)(b)(i) A-D. However, for the scenarios, the transfer rate and spill size may be based on the individual product rather than the overall classification of the facility. These two factors will differ depending on the product.

Scenarios of a particular product should be based on the highest transfer rate achieved by that product. (Spill size in the scenario should relate to the classification associated with the transfer rate from the table in Section 5 of the ERR based on the highest transfer rate achieved by that specific product).

Scenarios may be developed based on product type for which a similar response would be implemented in the event of a discharge. For example, one scenario might cover persistent products such as light crude and heavy crude while another scenario might cover more than one lighter product such as diesel and jet fuel. Response strategies and tactics as well as the fate and behavior of the products should be considered when deciding which products can be combined in a developing a single scenario.

For example, if a Class 3 facility conducts simultaneous transfers of Jet fuel at a rate of  $500\text{m}^3/\text{hr}$ , diesel at a rate of  $200\text{m}^3/\text{hr}$  and asphalt at a rate of  $100\text{m}^3/\text{hr}$ , then it should develop scenarios for the following:

- (a) A scenario for Diesel or Jet fuel (Provided a similar response would be implemented) which describes the procedures to be followed to respond to a discharge of a quantity of that oil product of at least  $5\text{m}^3$  and:
- (b) A scenario for asphalt which describes the procedures to be followed to respond to a discharge of a quantity of that oil product of at least  $1\text{m}^3$ .
- (c) A scenario for a discharge of a combination of products which describes the procedures to be followed to respond to a discharge of a quantity of at least  $15\text{m}^3$ .

As per the ERR the assumptions used in each scenario that is developed must take into account, at a minimum, the following factors:

- (a) the nature of the oil product;
- (b) classes of vessels referred to in section 2 that are loaded or unloaded at the OHF;
- (c) the tides and currents that exist at the OHF;
- (d) the meteorological conditions that exist at the OHF;
- (e) the surrounding environmentally sensitive areas that would likely be affected by a discharge, including but not limited to: fish and wildlife habitat areas, flood plain areas, intakes of drinking water systems and recreational water use areas;
- (f) the measures to be taken to minimize the effects of a discharge; and
- (g) the time necessary to carry out a response to an oil pollution incident in accordance with these Regulations.

### **3.7.4 Oil Pollution Incident – Priorities**

As per the Regulations, the OPEP must contain information regarding the activities that will be carried out in the event of an oil pollution incident, taking into account the priorities listed below, the order and the time within which those activities will be carried out and the positions of the persons responsible for carrying them out.

The following are the priorities that must be considered:

- (a) the safety of the facility's personnel;
- (b) the safety of the facility;
- (c) the safety of the communities living adjacent to the facility;
- (d) the prevention of fire and explosion;
- (e) the minimization of the effects of a discharge;
- (f) the reporting of the oil pollution incident;
- (g) the environmental impact of a discharge; and
- (h) the measures to be taken for clean-up following the oil pollution incident, including with respect to environmentally sensitive areas and surrounding ecosystems.

### **3.7.5 Exercises**

The exercise program is an integral part of the OPEP. The primary goals of the exercise program are to evaluate, in a controlled environment, the effectiveness of all aspects of the procedures, equipment and resources identified in the OPEP, the capabilities of OHF response staff, and the interaction between the OHF, vessels, other government

agencies, and ROs. Exercises are divided into four categories: internal notification, external notification, deployment and table-top (management).

When designing an exercise, specific evaluation criteria should be developed. The evaluation criteria should be based on the actions expected to be carried out to achieve the objectives of the exercise. A written description of any exercise, other than a notification exercise, must be sent to Transport Canada at least 30 days in advance of the exercise to allow the marine safety inspector sufficient time to review the objectives of the exercise, raise any concerns, and to be prepared to attend and evaluate the exercise when it is conducted. The written description should include the date, time, location, exercise type and a brief description of the scenario and the objectives to be exercised.

To test the interaction between various parties, exercises should be coordinated with TC Marine Safety and Security, and other players or interested parties such as vessels that could be used when responding to an oil pollution incident and vessels engaged in oil transfer operations, RO(s), the Canadian Coast Guard (CCG), Environment and Climate Change Canada (ECCC), First Nations and local communities.

OHF operators should describe in their plans how they intend to implement their exercise program over a three-year cycle including a description of the types of exercise, the frequency of the exercises and the year in which they intend to execute each activity. Furthermore, a schedule of the proposed exercises must be included in the OPEP as per sub-paragraph 11(i.1) of the regulations.

For the purposes of paragraph 12(2) of the ERR, an oil pollution simulation exercise is limited to deployment exercises and table-top management exercises described in the table below. As per the ERR, if a gap is identified as a result of an oil pollution simulation exercise, it will trigger a review of the OPPP and OPEP by the OHF operator. If updates to one or both of the plans are deemed necessary, the updates must be completed within 90 days after the day on which the event occurred.

Any gaps or deficiencies in the OPPP or the OPEP identified as a result of internal or external notification exercises should be addressed in the plans and should be submitted as part of the regular annual update.

The following table lays out the objectives of the various types of exercises, a description of the exercises and the suggested frequency the exercises should be carried out.

**OIL HANDLING FACILITIES – EXAMPLE OF EXERCISE PROGRAM**

<b>TYPES OF EXERCISE</b>	<b>DESCRIPTION</b>	<b>FREQUENCY</b>
<b>Internal notification:</b> <b>Objective:</b> Verify the ability to contact, in a reasonable time, OHF response staff identified in the OHF's OPEP.	<ul style="list-style-type: none"> <li>• Notification of emergency call out</li> <li>• Activation of the OHF response/management team</li> </ul>	Two (2) times a year
<b>External notification</b> <b>Objective:</b> Verify the ability to contact OHF authorities, company management, governments and other organizations identified in the OHF's OPEP within a reasonable time.	<ul style="list-style-type: none"> <li>• External notification systems – emergency call out to OHF neighbours</li> <li>• Mobilization of the OHF response/Management team</li> <li>• Activation of ROs and contractors</li> <li>• Notification of government and nongovernment agencies</li> <li>• Notification of the federal emergency number found in the OPEP</li> </ul>	Once a year
<b>Deployment:</b> <b>Objective:</b> Evaluate the effectiveness of the OHF response team in following the procedures established to contain/recover a spill, using response equipment described in the OPEP within time standards.	<ul style="list-style-type: none"> <li>• Shut down procedures</li> <li>• Source control</li> <li>• Deployment of equipment</li> <li>• Containment and recovery activities</li> <li>• Site Safety Plan development</li> </ul>	Once a year
<b>Tabletop - Management:</b> <b>Objective:</b> Evaluate all aspects of the OHF's response management system by simulating an incident using a scenario with inputs. Simulation of deployment of equipment and activation of personnel. Test the communication, briefing, reporting and data and records collection and management techniques.	<ul style="list-style-type: none"> <li>• Identification of the On-Scene Commander</li> <li>• Establishment of the management team</li> <li>• Understanding roles and responsibilities of mandated agencies</li> <li>• Situational analysis</li> <li>• Spill Trajectory</li> <li>• Environmental assessment</li> <li>• Site Security</li> <li>• Financial record management</li> <li>• Equipment tracking</li> <li>• Waste management (disposal)</li> <li>• Preparation of Incident Action Plan</li> <li>• Public Awareness/notification</li> <li>• Post incident de-briefing</li> </ul>	Once every three (3) years

For those OHFs of a class established by the ERR that have a shortened shipping season, for example, OHFs located north of 60°N, the suggested frequency noted in the above table, may not be feasible. As an alternative, a deployment and notification exercise should be conducted once each season, prior to the first transfer of oil.

The operator of an OHF must keep a record of the dates and results of each exercise to capture the lessons learned from each exercise and to ensure the results are taken into consideration in subsequent exercises.

### **3.7.5.1 Exercise Report**

Exercise reports are used to identify gaps and deficiencies in the implementation of the OHF plans. Section 15 of the ERR describes the elements that have to be included in the exercise report as well as the submission requirements to the Minister. Exercise reports must be submitted to the Minister within 90 days after the day the exercise is conducted.

### **3.7.6 Training**

Training is an integral part of the OPEP. Training activities are a tool to ensure the knowledge, skills and ability of the personnel taking part in the response activities are current and correspond to their roles in an incident.

A description of training provided to the OHF personnel or other persons should be included in the OPEP, including the frequency of the training.

The following are examples of the type of training criteria that should be considered when providing training to personnel or other individuals who might be called upon to respond to an oil pollution incident.

#### **3.7.6.1 Training Criteria**

##### **a) Familiarization with the OPEP**

GOAL: Each OHF staff member (or persons contracted to conduct transfer operations at the OHF) is familiar with the contents of the OPSP and the OPEP and is proficient in the functions that may be assigned to them.

##### **b) Training of the Notification System**

GOAL: Members of the OHF response team (or persons contracted to conduct response operations) are trained in the procedures on how to activate the internal/external notification system.

##### **c) Training for Response Managers – Roles and Responsibilities during an Incident**

GOAL: The OHF response team managers are familiar with their roles and responsibilities during an incident (i.e. Incident Command Systems) and their interaction with other representatives involved in an effective spill response.

#### **d) Theoretical and Hands on Training for Deployment of Pollution Countermeasure Equipment**

GOAL: Provide the response team with the ability to effectively use the equipment to contain, control, recover and clean up after the discovery of the discharge, within the time standards found in subsection 13(2) of the ERR. It is important this type of training covers the handling of all response equipment described in the OPEP e.g., appropriate training for vessel operators, containment equipment (booms, absorbent material, anchors, etc.), recovery equipment (vacuum trucks, oil skimmers, etc.) and establishing temporary storage for recovered oil and oily waste, as required. If the OPEP includes other strategies, the OHF response team should know how to handle the appropriate equipment and the procedures.

#### **e) Training in the Safety component of the OPEP**

GOAL: Each member of the OHF response team is familiar with the safety standards and relevant health and safety legislation. This legislation includes such things as federal, provincial and territorial occupational health and safety laws, such as the *Transportation of Dangerous Goods Act*, Workplace Hazardous Materials Information System (WHMIS) requirements, etc.

#### **3.7.6.2 Training Records**

The OHF operator must keep training records for each person who has received training and they must be kept for a minimum of five years. If the training is valid for more than five years, the operator has to identify the validity period of the training. The training records could be kept internally and do not have to be included in the OPEP or OPSP. However, the OHF operator has to provide the updated copy of the training records to TC upon request.

### **3.8 PLAN REVIEW**

#### **3.8.1 Annual Review**

The OHF operator should provide in their plans a description of the procedures for reviewing and updating their OPEP and OPSP including but not limited to:

- (a) Annual reviews and updates if necessary.
- (b) Identification of amended sections by highlighting changes.
- (c) Submission of the updated plans to TC within one year as defined in paragraph 12 (1) of the ERR
- (d) Notification should be sent to TC if no updates to the plans are required.

The plans should be reviewed each year and submitted within one year of the previous year's submission. For example, if a plan is submitted on April 01, 2024, then reasonably, the next revision should be submitted on or before April 01, 2025. Should there be no changes to the plans as part of the annual review then the operator must

notify TC in writing (by email or letter to the Regional Manager ER (or designated contact) that there is no change within the same time period.

Amended sections of the plans should be well identified by highlighting the changes in the revision log, the table of contents and/or in the body of the document.

### **3.8.2 Events**

Paragraph 12(2) of the ERR identifies two events that require plan reviews, updates or submission, if necessary, within 90 days after the day on which the event occurred. If any other event occurred, the proposed updates to the plan could be submitted as part of the annual review and submission to TC.

Should one of the listed events occur that requires a review and submission, an annual review and submission will still be required, however if there are no changes to report from the intermediate version submitted then the operator can simply notify TC in writing that there are no changes to report.

### **3.8.3 Records**

As per paragraph 12(4) of the regulations the operator must keep a record of the date and the results of each review of the oil pollution prevention plan and the oil pollution emergency plan conducted under subsections (1) and (2), including any updates, and must maintain the record for three years after the day on which it is created.

## **3.9 OIL POLLUTION INCIDENT REPORT**

After a discharge or an anticipated discharge, the OHF operator must make a report setting out the causes and contributing factors that are needed to reduce the risk of reoccurrence. If necessary, the plans could be updated to reflect any deficiencies identified during the oil pollution incident. Other than the requirements listed in section 16, the report should include:

- (a) the date and the description of the oil pollution incident;
- (b) names and types of any vessel involved;
- (c) response measures that were implemented during the oil pollution incident;
- (d) any corrective actions to be taken to mitigate deficiencies; and
- (e) any ongoing response activities by the OHF or its contractors.

The report should be sent to TC within 90 days after the event and the record should be kept for a minimum period of three years.

## **4 RESPONSE ORGANIZATIONS**

### **BACKGROUND INFORMATION**

The standards are intended to be used in the planning process in preparation for a response to an oil spill incident. Each response plan will be unique, taking into account the geographic features specific to that region. Since the response to an incident will be influenced by environmental and other factors, the standards should not be used as a performance standard to measure the appropriateness of the response. Rather, they seek to ensure that a suitable response infrastructure is in place and ready to be deployed in the event of any spill, regardless of size and conditions.

Response Organizations require a certificate of designation in order to offer arrangements to vessels and OHFs that in turn are required to have an arrangement for spill response. The arrangement is also the means by which ROs levy and collect fees to cover the costs they assume to meet certification standards. This section details the technical and administrative RO certification requirements to ensure that preparedness levels for each Geographical Area of Response (GAR) are appropriate.

In accordance with subsection 169. (4) of CSA 2001, every certificate of designation is valid for 3 years.

The planning element is constructed as a demonstration of capability and capacity only and should not be considered a performance standard. Actual operational performance will be influenced by many factors including environmental conditions, oil fate and behavior and other factors. The plan is not an operational document but an outline of how an RO can achieve preparedness.

### **4.1 CAPABILITY TO COMPLY WITH REQUIREMENTS RELATING TO PROCEDURES, EQUIPMENT, AND RESOURCES**

The ROs should demonstrate in their response plan that they have the capability to comply with the requirements relating to procedures, equipment and resources in respect of their geographical area, as outlined in the Regulations.

The requirements described in the *Environmental Response Regulations* are based on the premise of pre-planning activities, they are not considered performance standards. The intent is to establish an efficient and effective system of response to future oil pollution incidents. The requirements are broad, allowing ROs to seek innovative solutions, to take advantage of local resources and technology advances when developing their plans.

#### **4.1.1 Quantity of Oil**

The applicant must indicate in their plan the total quantity of oil for which they are seeking certification as per Section 17 of the Regulations.

### **4.2 RESPONSE CAPACITY AND RESPONSE PLAN**

Section 18 of the ERR outlines the requirements for the information to be included in the Response Plan submitted for the purpose of certification:

#### **4.2.1 Legal Name and Address**

The Response Organization's legal name and civic address as well as mailing address for correspondence.

#### **4.2.2 Description of the GAR**

The RO shall provide a description of their GAR in their plan. The GAR description should include, but not be limited to:

- (a) Geographic coordinates where appropriate;
- (b) A list of provinces and territories within the extents of the area;
- (c) A description of major waterways that would be included inside the area described. Examples include, but are not limited to, oceans, St-Lawrence Seaway, Great Lakes and any other waterways where prescribed vessels transit;
- (d) A description of any area that would be excluded within the greater limits of the GAR; and
- (e) A map to describe the extent of the area.

The RO must provide a list of designated ports, primary areas of response (PAR) and enhanced response areas (ERA) included in the GAR as per Schedule 1 of the Regulations.

#### **4.2.3 Personnel**

The name and position of each permanent personnel employed by a RO that may be required to be available in case of an oil spill response must be provided in the response plan. The term "position" may refer to the employee's job title within the company or to any function they may fulfill within a spill management system, such as the Incident Command System (ICS). An organization chart could be provided if available for display purposes.

#### 4.2.4 Contractors

The response plan must include a list of contractors (companies or individuals that supply services or resources) that the RO may contract during an oil pollution incident. The list should include the following information, but not be limited to:

- (a) Name of the contracting companies;
- (b) Types of resources or services that they are contracted to provide (i.e., equipment, human resources, trained responders, advisors); and
- (c) The number of trained responders potentially available during an oil pollution incident for response operations.

#### 4.2.5 Notification

Procedures for notifying personnel in case of an oil spill incident should be clearly explained in the plan. The plan should include the manner and order the personnel, trained responders and contractors would be notified.

#### 4.2.6 Support Vessels

Response organizations normally have company-owned vessels located in their response centres. However, they may employ other vessels that are not owned by the company to carry out various tasks as required in all operating environments. The RO should be prepared to make use of support vessels in their GAR.

The RO's plan should contain an evergreen list of vessels that the RO can access for use in the event of an oil pollution incident. The response plan should describe the methods the RO will use to update the list when information changes.

Where support vessels are used, the following precepts should be applied:

- a) The RO should maintain an up to date and accurate list of the vessels available in its GAR;
- b) Procedures for vetting vessels to ensure they are fit for purpose should be described in the response plan, including the vessel verification process for time of charter.
  - i. As noted in paragraph 35(2) of the ERR, the RO must obtain from the vessel or operator, a written statement indicating the vessel's operating hours. This can be achieved through the vetting process. RO's should be informed of the capabilities of the vessel and any accompanying personnel with respect to its hours of operation.
- c) The RO must ensure with owners that the vessel has a current valid certificate to complete the work assigned, including
  - i. Can provide accommodation and support services for any RO assigned personnel that are placed on the vessel to perform the required task.
  - ii. Have characteristics capable of performing the task(s) assigned in the specified area of operation defined by RO (Voyage classification and check

that any equipment loaded onto the vessel falls within limits of their stability documentation).

- d) Procedures should be developed for equipment to be used on vessels that describe the installation of the response equipment, if applicable; and
- e) The RO should provide training to on-board personnel of the support vessel if they are required to carry out duties with respect to response operations.

In the above description, capable is defined as having the ability to achieve a specific task.

#### **4.2.7 Procedures For The Treatment Of Discharged Oil**

Section 18(1)(g) of the ERR lays out the requirement to include the procedures described in Sections 22, 23 and 24 of the regulations in the content of the RO's response plan.

#### **4.2.8 Procedures For Response Measures Approvals**

Paragraph 18(1)(h) describes the requirement to have procedures in place to obtain approval from a government authority for certain activities listed in section 22. These activities may include on-water recovery of oil, recovery of submerged oil, treatment of shoreline and sensitivities, storage of recovered materials and bird hazing.

TC realizes that the polluter will bear the responsibility in most cases in obtaining these types of approvals. However, the intent of the regulation is to ensure that the RO has general knowledge of the need for approval for certain activities and processes in place to expedite their execution.

RO's should have knowledge of the agencies responsible for approvals as well as their information requirements, application forms, etc.

ROs should list in their plans, if known, examples of approvals that might be required to undertake these activities and describe the processes they follow to obtain such permits. A general description and reference to internal processes (SOPs for example) or external processes necessary to meet the requirements should be listed.

These procedures for approvals should be exercised throughout the certification cycle should the scenario include the type of activity that would require approval.

#### **4.2.9 Designated Port Equipment and Other Equipment Requirements**

##### **4.2.9.1 Designated Port Equipment Requirements**

An RO's response plan shall include a list of the minimum capacity and resources needed to remain at each designated port within their GAR including type, quantity and description of equipment with consideration to the designated port's local conditions,

risks, and logistical factors in respect to a 150-tonne response capability. Equipment and resources at the designated port should be capable of being operated during simultaneous response in all operating environments within the designated port (shoreline and sheltered waters).

An RO may choose to identify specific equipment to remain in the designated port; however, there is no requirement to create port specific equipment packages. The objective of the regulation is to ensure that response capacity in the port never falls below 150 tonnes.

This capacity should not be included in the overall 10,000 tonnes response capacity. The RO should define the minimum equipment requirements to be used during a 150-tonnes oil pollution incident. The description of the equipment should include:

- (a) Types of recovery devices appropriate for sheltered and shoreline operating environments;
- (b) Boom requirements as described in section 4.3.4 of the Environmental Response Standards;
- (c) Storage requirements as described in the section 4.3.4 of the Environmental Response Standards; and
- (d) Vessels required for effective response operations.

This identified equipment capacity cannot be removed unless permitted by the Minister as per section 36 of the ERR. For more information, refer to section 4.10 of this document.

#### **4.2.9.2 Other Equipment Requirements**

See Section 4.3 for information on Sections 18(k), 18(l) and 18(m) related to equipment requirements that must be detailed in the Response Plan.

#### **4.2.10 Required Training**

An RO's response plan must include a description of the training required for each class of person who may be involved in responding to an oil pollution incident highlighting the skills and knowledge that are necessary to undertake their roles and responsibilities as per the requirements of Section 25 of the regulations.

More information on the requirements of the training program is described in Section 4.8 of this document.

#### **4.2.11 Exercise Program**

A description of the exercise program referred to in Section 26 of the Regulations must be included in the content of the response plan. More information is available on the requirements of the exercise program in Section 4.9 of this document.

#### 4.2.12 Health and Safety

The RO should include a reference detailing how they incorporate provincial, territorial, and federal legislation concerning health and safety in their response plan.

Safety of all personnel is the number one objective during an oil spill response. The RO must plan effectively for the safety measures that will be required to protect the health and safety of all workers and ensure an unimpeded response. Safety measures must be based upon all applicable federal, provincial and territorial regulations, and clearly indicated in the plan.

The response plan may include information concerning the day-to-day health and safety practices of its own personnel, as well as information concerning the health and safety of others who are requested by the RO to be involved in the response. References to internal and external documents could be added to the response plan.

Each RO should provide a description of a comprehensive health and safety program that describes the measures to be put in place during a response to protect responders.

#### 4.2.13 Hours of Operation

An RO's response plan shall include the RO's daily hours of operation during a response and demonstrate how it will comply with the requirements relating to the procedures, equipment and resources in respect of its geographical area. Typical on-water recovery operations are either 12 hours or 24 hours; however, an RO may select any reasonable time period as long as they can support their decision. If planning for more than 12-hours on water recovery operations, an RO should explain in their plan how they are taking into account:

- Shift changes;
- Lighting; and
- Health and safety measures for working at night.

In some cases, the RO may plan on-water recovery operations for 12-hour periods during daylight hours but conduct other activities at night. The RO should provide a general statement to indicate that response activities may continue beyond 12 hours. Night operations could include, but not limited to the following activities: planning, equipment maintenance, unloading operations, rest periods, etc. Hours of operation will inform the calculations described in section 4.3.4 of these standards and incorporated by referenced in paragraph 18(1)(l) of the Environmental Response Regulations.

#### 4.2.14 Area Response Plans

Under Section 18(1)(r) of the Regulations, Response Organizations are required to explain how they subdivide their GAR into smaller areas for the purpose of establishing more localized area response plans. This is most likely best achieved by providing a map of the overall GAR showing the border limits of each area plan in their response plan. More information on the required content of area response plans is available in Section 4.6 of this document.

#### 4.2.15 Consideration of Other Contingency Plans

Paragraph 18(2) of the Regulations sets out requirements that response organizations must consider, in their response plans, any national or regional contingency plan for its geographical area that is issued by the CCG when available. The intent of this requirement is that RO will have awareness of CCG plans and response strategies in order to provide the best response possible.

Also, under paragraph 18(1)s, Response organizations must provide a list of any other contingency plans that have been considered in developing their response plan. A brief description of each plan could be added to the response plan to provide more information on the relationship between all plans.

#### 4.2.16 Evidence or Declarations

The Minister requires an RO to provide evidence, including declarations, that the Minister considers necessary to establish that the requirements for the issuance of the certificate have been met.

Below is an example of the type of declaration that must be signed by the proper signing authority within the organization:

**Pursuant to Part 8, paragraph 169 (3)(a), of the Canada Shipping Act, 2001, I, (Name of the person), for and on behalf of (Name of the response organization), declare that the procedures, equipment and resources referred to in the response plan are available to the response organization in conformity with the Environmental Response Regulation.**

### 4.3 EQUIPMENT REQUIREMENTS

#### 4.3.1 List of Equipment

An RO's response plan should include a list of equipment and resources, including type, quantity, and description, to be used during a simultaneous response in all operating environments, such as unsheltered waters, sheltered waters and shoreline.

The response capability of the equipment and resources allotted to each operating environment by the RO in a designated port, a PAR and an ERA shall be in accordance with the percentages set out in Schedule 2 of the ERR. Selected equipment should be suitable to operate in specific operating environments.

An RO's response plan must describe equipment operational capabilities to ensure that all response equipment (primarily booms, recovery and storage devices) is able to be deployed and operated to meet the environmental conditions that can be expected in the operating environment for which it is intended to be used, up to a maximum of Beaufort Force-4, as described in section 22(1) of the ERR.

The response plan should list the type and quantity of equipment in their inventory, including but not limited to:

- (a) Skimmer;
- (b) Boom;
- (c) Storage; and
- (d) Vessels.

Additional support, ancillary and specialized equipment is not required to be listed in the response plan but an inventory should be available upon request for review.

The RO should provide a general description of the maintenance program on their oil spill response equipment.

#### **4.3.2 Equipment Appropriate For Oil Types**

Response organizations must include, in their response plan, a list of types and quantity of equipment available for use within their GAR. Additionally, it is essential for ROs to identify the categories of oils moved (cargo and fuel) within their GAR to ensure that the RO has the proper resources to respond to any oil pollution incident.

The RO should identify the types of oil each recovery device is capable of handling, as well as their respective suitable operating environments. It is recommended that ROs make use of ASTM standards, the World Catalog of Oil Spill Response Products or any other reference materials when identifying appropriate devices for the various oil types and operating environments.

To demonstrate that their equipment is appropriate for the categories of oil that could be encountered, ROs should consider:

- (a) the likely fate and behavior of different oils moved in the area where they offer services; and
- (b) the constraints that the fate and behavior of the oils can impose on clean-up operations.

Response organizations have the responsibility to determine the oil categories moved in their geographic area of response. However, ROs may refer to federal publications in classifying oil categories. This may include oil categories found in ECCC's *Field Guide to Oil Spill Response on Marine Shorelines*, and the *Field Guide to Oil Spill Response on Freshwater Shorelines*. The classifications/categories in these manuals are:

- volatile oils (gasoline products);
- light oils (diesel and light crudes);

- medium oils (intermediate products and medium crudes);
- heavy oils (residual products, heavy fuel oils such as Bunker C, and heavy crudes); and
- solid oils that do not pour (bitumen, weathered Bunker C, tar, and asphalt).

As technology evolves, there are new oil products that are manufactured that might not fit into one of these categories, such as low sulfur fuel oils and very low Sulphur fuel oils. With their unique properties, Response organizations must consider these properties to determine the appropriate equipment to be used during a response.

The regulatory requirement is not prescriptive to provide ROs flexibility in how they may demonstrate their compliance. It is not intended that the RO should have 10 000 tonnes of response capacity for each category of oil. If a major spill occurs and the RO does not have enough equipment to appropriately recover the oil, additional resources could be requested through mutual aid agreements.

#### **4.3.3 Equipment Capacity Determination**

##### **4.3.3.1 Proposed Environmental Response Standards:**

The calculations are intended to be used by a Response Organization (RO) for planning purposes to quantify minimum recovery, storage, and boom equipment requirements to a quantity of 10,000 tonnes response capacity as prescribed in Section 18 of the *Environmental Response Regulations*.

For planning purposes, the following assumptions are to be applied in determining response capacity:

- a) If oil contaminates the shoreline, 10% of shoreline oil will be recovered by means of on water operations, requiring skimming, containment, and storage equipment, as per section 23(1)(b) of the regulations.
- b) Response Organizations shall plan to recover all the oil in unsheltered and sheltered waters within 10 days as per section 23(1)(a) of the regulations.
- c) The on-water portion of shoreline clean-up operations shall be completed within 50 days, as per section 23(1)(b) of the regulations.
- d) An RO must have 150-tonne of dedicated capacity for each Designated Port located in their geographical area, as defined in 18(1)(i) of the regulations. That capacity shall not be included as part of the equipment in determining the RO's 10 000 tonne response capacity.

##### **4.3.3.2 Equipment Capacity Determination Assumptions and Factors**

The following assumptions and factors are used for planning purposes. These assumptions are used to calculate the minimum amount of equipment that the RO should have in inventory in order to achieve their 10 000 tonne capacity. Assumptions may not be reflective of real oil pollution incidents, but they are meant to provide consistency

when determining equipment capacity. They must be applied when determining the rated capacity of the equipment to be presented in the RO's plan:

Assumptions:

- a) Evaporation and natural dispersion shall not be considered in the calculations.
- b) For planning purposes, recovery operations remain constant and are not impacted by factors such as environmental conditions, equipment breakdown or operator error.
- c) For planning purposes in Designated Ports, operating environments are assumed to be 50% sheltered waters and 50% shoreline (see schedule 2 of the Regulations).
- d) Oil thickness is assumed to be 1 cm.
- e) Specific gravity of oil spilled to be 1.0.

Factors:

- a) The RO's must have sufficient resources to conduct recovery operations in all defined operating environments simultaneously as per section 23 of the *Environmental Response Regulations*.
- b) Equipment capability must be apportioned in coordination with the percentages of operating environments described in schedule 2 of the *Environmental Response Regulations*.
- c) Equipment used in unsheltered waters must be capable of operating safely in Beaufort Force 4 conditions, as described in 22(1) of the Regulations.

#### 4.3.3.3 Total Response Capacity Determination:

The total capacity of an RO is a volumetric determination of response capability based on calculations of available equipment and resources that an RO intends to use in responding to oil pollution incidents in its geographical area of response.

The following factors must be applied when determining the total daily capacity:

- a) Daily Capacity (DC) of the RO shall be determined using the formula:

$$\mathbf{DC = Planned Volume \div Number of Operating Days}$$

Where:

- i. **Planned Volume** is the maximum oil volume for which the RO requests certification.
  - ii. **Number of Operating Days** is the number of days the RO plans to operate in order to recover 10 000 tonnes of oil for which it requests certification, as specified in section 17 of the Regulations. Depending on the operating environment, the number of days is defined in section 23 of the Regulations.
- b) Response planning must consider the requirements related to the planning time standards described in section 24 of the *Environmental Response Regulations*.

#### 4.3.3.4 Recovery Device Capacity Determination:

- a) For the purposes of 18(1)(l) of the Regulations, each recovery device capacity must be expressed as derated capacity and is determined using the following formula:  
**Recovery Device Capacity = Recovery Device Nameplate Capacity X Derating Factor**
- b) The derating factor shall be 20% of the nameplate capacity.
- c) To calculate the daily capacity defined in section 23 of the regulations, The daily recovery capacity of the skimming device is then calculated by:  
**Daily Recovery Rate = Derated Capacity X Hours of Operation**

Where:

- i. Hours of Operations is defined as the response organization daily hours of operations in the event of a response to an oil pollution incident as defined in 18(1)(q) of the Regulations.

#### 4.3.3.5 Storage Equipment Capacity Determination:

For the purposes of 18(1)(l) of the Regulations, storage capacity for liquid oil and oily water is determined by maximum volumetric capacity of the storage unit.

Storage Device Capacity is determined using the volumetric capacity provided by the manufacturer or by measurement by a person qualified to conduct such measurements such as a marine surveyor.

As both oil and water are collected during recovery operations, the derating factor (20%) is not used to determine storage capacity.

The daily capacities for primary storage defined in section 23 of the *Environmental Response Regulations* include;

- a) a sufficient primary temporary storage capacity to maintain recovery operations of oil or oily-water waste during a 24-hour period.

The quantity of primary storage required to support any recovery device is equal to the amount of liquid that would be recovered using the nameplate capacity of that device multiplied by the number of hours dedicated to on-water recovery operations, as described in section 18(1)(q) of the Regulations.

**Primary Storage = Recovery Device Nameplate Capacity X Daily Hours of Operations**

- b) a sufficient secondary temporary storage capacity to store at least twice the total quantity of oil or oily-water waste collected by the RO's oil recovery unit defined in a) that is used in a 24-hour period.

**Secondary Storage = Primary Storage X 2**

#### 4.3.3.6 Boom Quantity Determination

For the purposes of 18(1)(m) of the Regulations, the quantity of boom necessary for a response organization to respond adequately to an oil pollution incident of 10,000 tonnes, simultaneously in all operating environments, is determined using the following requirements:

- a) Unsheltered waters: minimum of 400 meters for each recovery device (see exception in 4.3.4.7)
- b) Sheltered waters:  

$$(B_s = 0.625 H_s) + (B_f = 1.25 H_s) = 1.875 H_s$$
 Where:
  - i.  $B_s$  is the amount of boom required to contain oil near the shoreline.
  - ii.  $B_f$  is the amount of boom required to contain free-floating oil.
  - iii.  $H_s$  is the quantity of oil in sheltered waters.
- c) Protective boom: minimum of 5,000 metres
- d) Shoreline recovery boom: minimum of 1,000 metres
- e) Designated port boom: oil containment boom lengths are based on 3 times the length plus 500 meters of the typical vessel entering the port, plus an additional 100 metres of shoreline protection / treatment to an overall maximum of 1,600 metres. This equipment is defined as part of the 150-tonne dedicated port capacity as mentioned in sub- paragraph 18(1)(i) and section 36 of the *Environmental Response Regulations* and should not be included in the overall capacity calculations.

#### 4.3.3.7 Unsheltered waters boom

For contingency purposes, in unsheltered waters, the RO should plan to allocate 400 metres of offshore boom (sweep boom) for each oil recovery unit. Some devices, such as current buster and sweep systems, already have boom incorporated in the recovery device. In those cases, the minimum of 400m is not required as the boom length provided would be sufficient.

Methods for unsheltered oil recovery include booms of varying sizes deployed in a static or sweep system mode. Rugged boom or open water boom may be required to protect small bays, harbours, estuaries or other areas close to shore.

#### 4.3.3.8 Sheltered waters boom

The success of any oil recovery operation depends on the flexibility of the RO's response plan and the mobility of emergency resources. Priority for deploying resources to protect environmentally sensitive areas will be made at the time of an oil pollution incident. As mentioned earlier, the plan itself must demonstrate to Transport Canada Marine Safety that the RO can successfully respond to a spill simultaneously in all operating environments within the required time standards.

In determining the quantity of boom required for sheltered waters, the following should be considered:

- a) Shoreline protection of environmental sensitivities; and

b) On-water containment – containing or controlling oil on open water, or trapped in bays, coves, harbours or along the shoreline, and deflecting oil in fast flowing waters to control points.

#### **4.3.3.9 Protection Boom**

The ERR's refer to Section 4.3 of this document as the methodology to determine equipment requirements for the RO's to meet 10,000 tonne capacity.

Protection boom is set as a static requirement of 5,000 meters to be available throughout the GAR. Unlike other elements such as recovery device capacity, storage capacity and containment boom capacity, protection booming is not subject to the calculations related to the proportioning of the operating environments listed in Schedule 2 of the regulations or to the time standards described in Section 24 of the regulations. That is to say that 5,000 meters of protection booming must be available for spills of all sizes and is not related to the time standards associated with recovery devices, storage units and other types of boom.

During the original discussions related to equipment requirements for RO's, it was suggested that protection booming be capped at 5,000 meters but the total amount should be available for deployment on site within 24 hours. This would allow for cascading of protection boom from other areas. At a minimum, RO's should plan to have 1,000 meters of protection boom available for spills at the up to 1,000 tonnes within a designated port (150 tonne and 1,000 tonne spill size) and plans in place to cascade the remaining 4,000 meters to the associated PAR within 24 hours of activation.

#### **4.3.3.10 Shoreline Recovery Boom**

Additional boom is required to prevent any oil washed or flushed off the shore during shoreline cleanup activities to prevent remobilization of oil. The use of boom will ensure that oil being flushed from the shore is contained and thus able to be recovered by on-water recovery techniques. As the RO is required to treat 500m of shoreline per day, as defined in 22(j) of the ERR, it can be reasoned that at least a minimum of 500m of boom must be deployed. To allow time for boom placement, and for boom to remain in place for a reasonable period after cleanup operation, any shoreline protection boom calculation should be based on a minimum of two (2) days cleaning operation, resulting in a requirement of 1,000m.

#### **4.3.3.11 Derating Factor Used for Recovery Device Calculations**

When calculating recovery capacity, a de-rating factor must be used in consideration of factors such as the type and condition of oil, encounter rate, environmental conditions, operator error and inaccurate name plate figures. For planning purposes, a default derating of 20% from the nameplate capacity shall be applied, unless alternative evidence is provided and approved by the Minister.

Response organizations must send a request to Transport Canada to propose the use of a different de-rating factor. Information should include the types of recovery devices, scientific data proving that derating factor could be increased, the operating environments and types of oil that would be applicable for the increased efficiency as well as the factors considered.

#### 4.3.3.12 Calculations Example

##### 10,000 tonne Pollution Incident in the Primary Area of Response (PAR)

For this requirement, the scenarios should reflect the 72 hours for delivery on scene within the PAR or ERA. To meet this requirement, the RO must have the required personnel and appropriate equipment to respond to a 10,000-tonne spill. A scenario should reflect this situation and describe all the steps the organization will follow in responding to an incident, including communications, organizational structure, and logistics, etc.

##### Assumptions

- Recovery devices are derated to 20% of nameplate capacity.
- Operational time frame is 10 days.
- Primary storage is based on the total nameplate capacity of the recovery devices per operational day.
- Secondary storage capacity is based on two times the amount of primary temporary storage.
- Oil thickness is 1 cm.
- Specific gravity of oil spilled to be 1.0.
- One large free-floating slick in unsheltered waters.
- Oil impacts all three operating environments.
- Storage is calculated based on the amount of oil and oily water waste recovered during the response. As the amount of oil recovered by recovery devices is derated by 20% of the device nameplate capacity, it is assumed that the other 80% recovered would be water.

##### Recovery devices

Operating Environment	Percentage of Operating Environment	Recovery Requirement (tonnes)	Total Recovery by Environment	Daily Recovery Requirement	Total Requirement
Shoreline	40%	4,000	x 10% = 400	÷ 50 days = 8	8 Tonnes/day
Sheltered	30%	3,000	3,000	÷ 10 days = 300	300 tonnes/day
Unsheltered	30%	3,000	3,000	÷ 10 days = 300	300 tonnes/day

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Total	100%	10,000	6,400	608	608 tonnes/day
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**Boom**

Operating Environment	Percentage of Operating Environment	Recovery Requirement	Formula	Calculation	Total
Shoreline	40%	4,000	500m per Day	500m X 2 days	1,000m
Sheltered-Containment Protection	30%	3,000	$1.25 \times 3,000 + 0.625m \times 3000$	5,625m	5,625m
Protection	N/A	N/A	5,000m (Static)	5,000m	5,000m
Unsheltered	30%	3,000	400m per Sweep System	400m X 2 sweep systems (for example only)	800m
Total	100%	10,000	N/A	12,425m	12,425m

**Storage**

Operating Environment	Percentage of Operating Environment	Recovery Requirement	Storage Required (Oil) (tonnes)	Total oil and water waste	Daily Requirement (tonnes)
Shoreline	40%	4,000	X 10% = 400T	$400T \div 20\% = 2,000$	$\div 50 \text{ days} = 40$
Sheltered	30%	3,000	3,000	$3,000 T \div 20\% = 15,000$	$\div 10 \text{ days} = 1,500$
Unsheltered	30%	3,000	3,000	$3,000 T \div 20\% = 15,000$	$\div 10 \text{ days} = 1,500$
Total	100%	10,000	6,400	32,000	Primary Storage = 3,040
Total secondary storage					Primary Storage X 2 = 6,080
Total primary and secondary storage					9,120 tonnes

**4.4 PROCEDURES –GENERAL**

Section 22 of the ERR requires that an RO's response plan includes a description of:

- the treatment and recovery procedures that will be implemented in response to an oil pollution incident
- the procedures, equipment, and resources that will be used for the different shoreline types within their geographical area.

In the context of the ERR's, procedures may refer to several types of processes including but not limited to:

- Documented successive step by step procedures to conduct an activity in accordance with a standard.
- Strategies
- Methodologies
- Guidelines.
- Standard Operating Procedures (SOPs)
- Policies, Techniques or Measures that inform activities to be conducted.

TC recognizes that each pollution event will be unique in nature and that specific strategies and tactics are difficult to pre-assign to any oil type or any geographic area. Response organizations may be asked to employ many operational procedures during pollution response operations.

There are many effective countermeasures and technologies available to the industry that can be adopted for use by an RO.

The RO response plan should describe the methodology by which procedures, strategies and tactics are developed that might be employed in their geographic area in response to an oil pollution incident, to protect and treat areas of environmental sensitivities within the affected operating environment.

The response plan should include or make reference to:

- A description of response strategies, containment, protection, recovery measures they are trained and equipped to deploy.
- Consideration should be given to the types of oil present in their GAR and to the appropriate measures for use on those products.
- A description of the measures appropriate for all operating environments including:
  - Unsheltered Waters
  - Sheltered Waters
  - Shoreline

When developing area response plans, ROs can make reference to these various response measures which might be applied to sensitivities in a defined geographic area.

#### **4.4.1 On-Water Containment And Recovery**

##### **10-day planning standards**

RO's must plan to complete on-water recovery operations within ten days of a pollution incident up to a maximum of 10,000 tonnes, as described in section 23 of the ERR. For planning purposes, the 10 days commence when the equipment is deployed or delivered on scene depending on the location as described in Section 24 of the Regulations. Section 4.3.4 describes the calculations associated with the 10-day planning process to achieve a daily recovery rate.

Response organizations should consider that the recovery rate is not constant over time. In fact, it is well known that the first days are crucial for recovering oil on water, since after a few days, the oil starts to emulsify, disperse, and becomes harder to recover. With this information, ROs should concentrate their resources for on-water recovery operations as soon as possible to ensure maximum recovery.

When planning their on-water response recovery operations, the ROs should take into account their operational hours as defined in section 18(1)(q) of the ERR.

On-water recovery rates can be influenced by other factors such as the type of oil, priorities (environmental sensitivities, cultural sites, fisheries) and environmental conditions. Response organizations should take these factors into account when planning their on-water response. Consideration for these factors should be reflected in their planning strategies and scenarios.

#### **4.4.1.1 Strategies Appropriate for All Operating Environments**

Response organizations shall have in their plan appropriate strategies when responding in different operating environments. In their scenarios, they should be able to demonstrate that the equipment is appropriate for the operating environments in which it's being used.

Transport Canada may request that an RO provides evidence of a specific strategy included in their response plan in order to assess its effectiveness, as defined in section 33 of the ERR. This will only be requested if TC has reasonable doubt that a specific element of the response plan might not be suitable for the task identified in the plan. This may include testing specific elements (strategies, equipment tactics) of the plan in specific operating environments. Transport Canada will work with the RO to develop the best method to validate the element in question.

Evidence to support the validation may include scientific data such as manufacturer or independent field testing. Should these types of reports not be available, then preference will be given to include this testing in regular exercises or training events.

TC will consider any financial impact on the RO and strive to work in conjunction with the RO to develop the most reasonable approach to satisfy the validation of the strategy.

#### **4.4.2 Treat and Protect Environmental Sensitivities**

##### **Procedures, equipment, and resources to protect sensitivities**

Availability of information on sensitivities may vary from one region to another through an RO's GAR. Areas of environmental or socio-economic sensitivity may be identified by the RO's own processes or planning processes led by the government or other organizations. It is recommended that the ROs work with provincial and federal governments as well as communities to better define the areas of environmental

sensitivities in their GAR. The information does not need to be included in their response plan but should be described in area response plans.

In the case of the procedures that will be used to protect and treat areas of environmental and socioeconomic sensitivities within an affected operating environment, the response plan or the area response plans may reference other documents or manuals.

Response organizations' response plans should include or refer to:

- (a) Procedures to identify areas of environmental and/or socio-economic sensitivities; and
- (b) Resources in place to protect and treat areas of environmental and/or socio-economic sensitivities within an affected operating environment, including but not limited to pre-planning procedures such as:
  - Protection booming;
  - Diversion;
  - Deflection;
  - Equipment;
  - Methodology on determination of quantity of equipment; and
  - Logistic considerations.

As mentioned above, specific information on sensitivities and/or available resources in the GAR might be best positioned in area response plans, databases, or documentation as they are developed. Specialized resources that may be available for use should be identified in relation to the areas in which they might be put into use.

If the RO employs the use of GIS systems in the acquisition, storage or analysis of sensitivity data or in the development of related planning functions, then that should be explained in the response plan.

#### **4.4.3 Shoreline Treatment**

Shoreline treatment options will vary widely depending on a range of variables including oil type, shoreline type, degree of shoreline oiling and the environmental sensitivities present in the shoreline environment. Accordingly, the RO should demonstrate an understanding of the need for a range of treatment options. Various technical documents are available for use by RO's in reference to shoreline treatment including those produced by ASTM International, the International Petroleum Industry Environmental Conservation Association (IPIECA), and ECCO. Environment and Climate Change Canada's *Shoreline Cleanup Assessment Technique (SCAT) Manual* and other publications provide pertinent information on the assessment and different techniques available for use for shoreline cleanup. For planning purposes, RO's are expected to have knowledge of treatment options for the shoreline types that are present in their GAR, as required under 22(c) of the ERR.

The ERR require that the procedures to be implemented with respect to an oil pollution incident of a specified quantity of oil in a geographical area described in an RO's response plan include:

- (a) A minimum of 500 metres of shoreline is treated per day; and
- (b) On-water recovery associated with shoreline treatment is completed within 50 operational days after the day on which the equipment is first deployed or delivered in the affected operating environment(s).

Transport Canada recognizes that shoreline treatment options may be determined by ECCC's Science Table in the event of a real incident. However, for planning purposes, TC recommends that all RO's make use of ECCC's *Marine (or Freshwater) Shoreline Field Guide and Shoreline Cleanup and Assessment Team Manual* for industry consistency. These documents provide classification of shoreline types and techniques available to improve the efficiency of shoreline treatment. As these documents are amended by ECCC periodically, they provide up to date information on shoreline treatment. Response organizations have the option to use other resources that are available as well.

#### **4.4.4 Simultaneous Response in All Operating Environments**

An RO's response plan must include procedures to ensure a simultaneous response can be conducted in all operating environments, such as unsheltered waters, sheltered waters and shoreline.

- (a) The ROs must account for the percentage of operating environments.
  - i. ROs must consider the operating environments described in Schedule 2 of the ERR when planning their recovery operations.
  - ii. Equipment must be suitable to the environmental conditions, maneuverable, and compatible with recovery devices with which they are intended for use.
- (b) The ROs must account for the requirement to be able to complete on-water response and shoreline treatment operations within 10 days and 50 days, as defined in sections 23 of the ERR.
  - i. For calculation purposes, it is assumed that 10% of the oil that makes landfall will be recovered by means of on-water operations. That is to say that 10% of oil present in the shoreline operating environment will be flushed or returned to the water way by some other means of re-mobilization. For planning purposes, ROs should plan to recover this quantity as part of their requirement to complete all on-water recovery operations within 50 days.
  - ii. For the remaining 90% of oil trapped on the shoreline, it is assumed that other methods of recovery will be used which would not include re-entry of the product into the waterway. This will likely produce large volumes of solid waste that must be stored, handled, or transported prior to disposal. Response organizations should include provisions in their response plan for the collection, transporting to and temporary storage of contaminated solids.

#### 4.4.5 Temporary storage equipment standard

Response Organizations must have planning procedures in place to meet the daily capacities for storage of oil and oil water waste describe in Section 23 of the regulations. More information is provided in section 4.5 of this document.

#### 4.4.6 Bird Hazing

Birds are often the most impacted of all animals when oil is present in the marine environment. The Regulations are intended to ensure ROs are equipped and trained to conduct bird hazing as a preventative measure in protecting this wildlife resource. Response organizations may be requested by the polluter to develop and/or support the implementation of wildlife management plans if those requirements are imposed on the polluter by the lead agency or an authority with this type of jurisdiction.

As noted in the Regulations in Sections 18 and 22, ROs must describe in their plans:

- (a) A list of the equipment, procedures and resources for scaring off birds from an oil spill location.
  - A description of resources the ROs have at their disposal, and that they are able to sustain, in terms of the necessary equipment and qualified personnel to carry out bird hazing.
- (b) Measures to be made available in support of other bird and wildlife activities of other parties.
  - This could include accommodating logistics or logistic supplies such as PPE, capture boxes, providing staging areas and facilities as requested but not to be kept in inventory.
  - Response organizations should provide a list of the organizations that will provide bird related rescue and rehabilitation activities within the GAR and possible centers for rescued and rehabilitated birds.

Approvals from provincial and federal governments may be required to conduct bird hazing. Response organizations should ensure that they have procedures in place to quickly obtain these authorizations or ensure that the contractors listed for this type of operation have the permissions in place.

The RO would work closely with ECCC and the Science Table during an incident to determine which resources are needed and the location to conduct bird hazing.

For information on bird hazing and support of bird rehabilitation activities, response organizations could refer to the ECCC National Wildlife Emergency Response Framework.

#### 4.4.7 Submerged oil

The underwater environment, poor visibility, and irregular behavior of submerged oils present significant response challenges to the oil spill response community in comparison to surface-oriented oil spills. Standard response techniques such as

containment and skimming operations, have been proven to be inadequate and are difficult to apply for an oil spill where most of the oil is submerged below the surface or has sunk to the bottom, termed submerged oil.

In their response plans, ROs should:

- (a) Describe response strategies for the treatment of submerged oil;
- (b) Describe the resources required to implement response strategies for submerged oil; and
- (c) Describe how the RO will implement those response strategies.

#### **4.4.8 Provide Equipment and Resources**

Procedures must include a description of how equipment and resources will be made available to the persons managing the response including a description of how the equipment will be deployed or delivered within the time standards listed in Section 24 of the regulations.

#### **4.4.9 Coordination of Response Operations**

An RO's plans and procedures must consider elements from other jurisdictions as described in section 22(i). As defined in the ERR, the response must be managed in coordination with the CCG and other federal, provincial, or municipal partners, and any other bodies responsible for, or involved in, the protection of the environment. For planning purposes, ROs should identify agencies that would be involved during an oil spill response and define the relationship between the RO and those agencies, if applicable.

Response organizations should have knowledge of the roles and responsibilities of the various agencies which may be encountered during response operations. This could include those agencies which have functional roles in response such as the CCG or jurisdictional authorities such as provincial environment departments.

In their plans, ROs should describe:

- (a) the roles and responsibilities of various agencies with which the RO may interact during a response, including their interactions with the different agencies (notification only, ICS integration, liaison); and
- (b) how the RO will interact with the polluter during an incident.

#### **4.4.10 Treat 500 Meters of Shoreline per Day**

Planning procedures must describe the RO's ability to treat 500 meters of shoreline per day. RO's should describe the method by which impacted areas are assessed for treatment and the types of strategies, equipment, personnel and resources that might be employed in order to treat an area of this size. More information on shoreline treatment is available in Section 4.4.3 of this document.

#### 4.4.11 Two Hours Activation

Activation begins when an RO has been requested to respond to an oil pollution incident at the request of a vessel or the operator of an OHF with which the RO has an arrangement, as described in 171(e) of CSA, 2001. Verification of an arrangement must be validated by the RO before the activation period commences.

An activation period includes the initial actions the RO would take to notify and mobilize personnel, equipment, and resources to be transported to the incident site. For all response levels and areas of response, an RO will be expected to complete this activation or 'initial mobilization' of personnel, equipment, and resources within the first two hours of the associated time standards described in section 24 of the ERR.

An RO would need to demonstrate to TC that they have the planning procedures in place to activate the organization to initiate the response to an oil pollution incident within two hours of being contracted. Elements of activation should include, but not limited to:

- notification of personnel;
- initial assessment of the incident;
- equipment planning; and
- initial safety considerations and potential hazards.

#### 4.4.12 Beaufort 4

The procedures related to on-water operations must describe the measures to ensure that the equipment can be operated in conditions up to Beaufort-4.

Environment and Climate Change Canada's website describes Beaufort 4 sea conditions as follows:

- **Wind speed:** 11–16 knots (20-28 km per hour)
- **Waves:** Small waves that are becoming longer
- **White caps:** Fairly frequent white caps
- **Wind effects:** Raises dust and loose paper. Small branches are moved.

## 4.5 PROCEDURES -DAILY CAPACITIES

### 4.5.1 Deployment and Delivery of Equipment and Resources

Time standards and operating environments were incorporated into regulations to ensure ROs have equipment suitable for all types of conditions (up to and including Beaufort Force 4) and positioned throughout a GAR in manner that allows them to deploy or deliver response capability to the scene of an incident in a timely manner.

Deployment is defined as equipment and resources being in the water, ready to commence operations.

Delivery is completed when equipment and resources arrive on site at the oil pollution incident. On site can mean at a nearby staging area or on water near the oil pollution incident.

These time standards were created for planning purposes only. Actual events are impossible to predict; however, an RO should be able to demonstrate in their response plan that they are able to provide services to the defined sections of the GAR within the parameters outlined in the standards. Response organizations should plan to deploy or deliver resources in an effective and efficient manner using a "cascading" or tiered response structure, based on the time elapsed from activation.

For planning purposes, an RO must describe in their response plan how the equipment and resources will be deployed or delivered to the affected operating environment within the time standards defined in 24(1)(a) to (f) of the ERR.

In order to address Section 24(2) in their response plans, ROs should develop scenarios explaining how they will deploy or deliver the capacity assigned to each designated port, PAR and ERA. These scenarios should consider the position of the equipment, and the travel time required to get to the incident site. Information related to the scenarios could be displayed using tables, diagrams, maps or text.

These scenarios should be based on the calculations described in section 4.3.4 of the standards. Information provided should include but not limited to:

- Quantity and type of boom to meet regulatory requirements.
- Number of recovery devices and their derated capacity needed to meet regulatory requirements.
- Primary and secondary storage capacity to ensure uninterrupted on-water recovery operations.
- Equipment must be suitable for and apportioned in accordance with the operating environments listed in Schedule 2 of the ERR's.
- Travel time from the equipment location to the oil pollution incident location based on the values of average travel speeds presented in Section 24(3) of the ERR's.
- Number of vessels and trained responders as required; and
- Information should be specific for each operating environment.

The RO may cascade these resources from anywhere as long as the capacity can be delivered or deployed within the time standards required for each section of their GAR.

The RO should present scenarios in their response plan in table format that describes how they will meet the planning requirements for daily capacities set out in paragraphs 23(a)-(c) of the ERR and the time standards for deployment/delivery set out in paragraphs 24(a)-(f).

#### 4.5.2 Personnel

The success of any spill response operation depends on the capability of the people in the organization. In order for a response operation to be coordinated and effective, personnel and contractors require specialized training combined with periodic drills and exercises. Response organizations should assess local availability of responders for each PAR in respect to trained responders required to respond appropriately to an oil pollution incident.

The RO should explain in their response plan how they manage availability of responders (including contractors and personnel) to ensure they have adequate human resources available in each of their PARs to mount an adequate response during an oil pollution incident. This could be achieved through different methodologies, such as:

- Determining redundancy factors
- Regular notification exercises
- Monitoring contractor numbers

Response organizations should list the training their personnel has taken in relation to the positions they hold in the organization. Training should be directly linked to the roles the personnel will play during an oil pollution incident.

#### 4.5.3 Support Equipment

For the purposes of these standards, the primary equipment are skimmers, booms, and storage units. Support equipment is defined as equipment required for the primary recovery units to function. Support equipment could include vessels, ancillary equipment, trucks, generators, pumps used for other purposes than oil recovery, etc. The support equipment is also used for transportation and storage of the primary equipment. The RO should detail, in their response plan, the primary equipment that will be used for each oil quantity defined in section 23 (1) of the ERR. Support equipment does not have to be listed in the response plan. However, the support equipment inventory list could be requested by TC and may be verified during an inspection.

#### 4.5.4 Storage Equipment

Response organizations are required to calculate the capacity of primary and secondary storage equipment in accordance with technical formulas provided for the purpose of determining rated capacity of an RO's equipment, as defined in section 23 of the ERR.

“Primary storage capacity” means the temporary storage capacity required for the oil recovery units that are used during a response by an RO.

“Secondary storage capacity” means the temporary storage capacity required to consolidate and store all of the recovered oil and oily-water waste during a response by an RO before it is transported for final disposal.

“Tertiary Fluid Handling Capability” is the ability to provide a method of dealing with recovered fluids after the primary and secondary capacity has been consumed.

“Recovered materials” means oil and oily-water waste liquid and solid forms including oil contaminated solids and waste.

RO’s should take into account several considerations when planning storage capacity for recovered materials to ensure sufficient equipment and resources are available to maintain continuous recovery operations:

- (a) sufficient primary storage capacity is required to maintain on-water recovery operations of oil or oily-water waste continuously during one operational day and sufficient secondary temporary storage capacity is required to store at least twice the total quantity of oil or oily-water waste recovered in one operational day; where
  - i. An RO’s responsibility with respect to storage of recovered waste products is operational in nature to ensure recovery operations are not interrupted by lack of capacity to store recovered oil and oily wastewater.
  - ii. The intention of the regulations is to ensure there is capacity available to store oil and oily waste for up to 3 operational days of continuous operations. During this 3-day operational period, arrangements should be made to move recovered materials to tertiary storage in preparation for final disposal. Planning can be done for this capability in a general way in the oil spill response plan and details should be completed during the initial days of oil spill cleanup operations so that a seamless transition is available before the first two levels are fully utilized.
  - iii. Long term storage and final disposal of the recovered materials is the responsibility of the polluter. The RO may arrange for disposal, but this is only done at the request of the polluter.
- (b) Volume of storage required are determined using calculations explained in section 4.3.3. Primary storage capacity and secondary storage capacity that are less than those determined by calculations may be permitted where the efficiency of the oil recovery devices or the use of other methods (those enabled in Canadian law) reduce the amount of storage required to recover the calculated amount of oil and oily waste in each operating environment.
  - i. An RO should have enough equipment to address the needs of primary storage.
  - ii. Primary or secondary temporary storage equipment may be reduced if the RO is able to demonstrate the use of an effective waste management system which may include strategies to cycle storage equipment to larger on water devices or to onshore tanks for example. This methodology must be practical and efficient such that recovery operations would not be interrupted and should be clearly explained in their response plan.

## 4.6 AREA RESPONSE PLANS

An area response plan is an informational resource to help expedite a response. Details on the procedures, equipment and resources, including personnel and contractors, that would be used to control, contain, and recover an oil discharge in a specific geographic area should be identified.

Area response plans are intended to subdivide the GAR into smaller areas, be more specific in terms of the sensitivities and characteristics of the area and consider procedures, strategies and tactics that might be applied to those resources at risk.

Area planning is intended to enhance an RO's ability to respond to oil pollution incidents by pre-identifying equipment caches, environmental sensitivities, resources, specific challenges, access routes, facilities, or other characteristics of their GAR through the subdivision of the overall area into smaller defined geographic areas. Procedures, equipment and resources should be identified in each plan, including response strategies that might be employed within the defined areas. Each plan should also include a general description of the area and the methodology by which sensitivity data is obtained. Specific internal documents, external sources or other pertinent information relevant to each area can be referenced in the area plan to avoid duplication of information.

#### 4.6.1 Regulatory Requirements

Section 19 of the ERR lists six elements that must be included as content in the Area Plan:

- 1) **a description of the smaller area, including its operating environments and geographical boundaries:**
  - A description of the operating environments present in the area. This description should be general in nature. There is no intent to have the ROs describe percentages of operating environments such as those described in Schedules 2 and 3 of the ER standards. Rather, an overall view of what responders should prepare for when planning operations and what they should expect when they arrive at the site.
  - The geographic limits of the defined area. This can be accomplished by listing the limits in terms of geographic coordinates, physical features present in the area or by reference to baseline segmentation such as those used by ECCC in their sensitivity mapping products.
  - Response Organizations should identify primary areas of response and enhanced response areas located in the specific area.
  
- 2) **description of the types of vessels in each class described in section 2 that are located in the smaller area and of the types of oil transported within that area;**
  - A general description of the types of vessels that transit the area. There is no need to provide specific statistics on numbers of vessels of the various classes but moreover an overview of the type of traffic one might expect to transit the area.

- 3) **a list of any designated ports and oil handling facilities that are located in the smaller area;**
- The RO must include any designated ports found in the area, as defined in Schedule 1 of the Regulations.
  - A list of OHFs present in an area must be included. Furthermore, an RO should include a general description of the types of oil products that might be transferred at those facilities.
- 4) **the site where the equipment and resources necessary to treat the smaller area are located and the time required for the equipment and resources to be deployed or delivered to that area;**
- A description of where initial response equipment and resources would come from and how other resources might be cascaded into the area to meet the planning standards.
- 5) **the list of contractors and vessels referred to in paragraphs 18(1)(d) and (f), respectively, that may be requested to respond within the smaller area; and**
- A description of where initial contractors and vessels would come from and how other resources might be cascaded into the area to meet the planning standards.
- 6) **a description of the areas of environmental sensitivities within the smaller area, including shoreline types, and the measures to be taken for their treatment.**
- In some cases, an RO may want to list specific known sensitivities that must be addressed when responding to a particular area. For example, this might include protection of critical infrastructure such as a water intake for a power generation plant or a marshland identified as a Marine Protected Area (MPA).
  - TC recognizes that the responsibility for the collection and maintenance of sensitivity data is not an RO responsibility. An RO should describe the process by which they identify sensitivity data for a particular area. This can include references to internal and external sources such as GIS systems or government databases. As the information might become readily available, response organizations should explain the process how they will maintain the most accurate sensitivity information in their area plans.
  - During an actual oil pollution incident, the identification and prioritization of sensitivity protection will be driven by decisions made by the responsible agencies. In many cases a Science Table will be established to render those decisions.

#### 4.6.2 General Information:

In addition to the requirements found in section 19 of the ERR, other elements of an area response plan may include, but is not limited to:

- Description of shoreline type and shoreline segmentation, if available;
- Resources available such as launch ramps, docks, marinas, community halls, storage facilities;
- Availability of logistical support: Suppliers, rental agencies, accommodations, restaurants;
- Occupational Safety and Health (OSH) support - Clinics, hospitals, ambulance, etc.;
- List of possible trained responders near the area; and
- Best available routes for delivery of equipment and resources.

Transport Canada recognizes that these types of assessments are ongoing, and defined areas may change as time passes and more data is collected, or new risks are identified.

An RO must have an area response plan(s) and corresponding maps covering its entire area of response—the number of areas and content of the plan will be up to the discretion of an RO. The ERR do not set limits with respect to size or shape of the defined areas. Response organizations will decide the most practical and efficient way to divide their GAR.

In some cases, RO's may make use of Global Information Systems (GIS) to store the information and mapping products associated with area plans. If this is the case, the use of the GIS should be well explained in the introduction section on area plans. Regardless of the format, the content requirements set out in Section 19 of the ERR's must be met.

In each area response plan in the PAR, an RO should describe the location of equipment and resources in the area, how they would meet time standards requirements, the equipment dedicated to this area (if applicable) and how resources might be transported to the area to meet the time standard.

The area plans do not have to be included in the response plan. Response organizations are expected to explain the process of how they subdivide their GAR into smaller areas. This is most likely best achieved by providing a map of the overall GAR showing the border limits of each area plan in their response plan. Reference to individual plans may be made throughout the document if it helps to give context to any material in the response plan.

Area response plans themselves can reference other documents and operating procedures, rather than having to repeat content that exist elsewhere (e.g., manuals and external guidance such as ECCC's SCAT Manual). There is no need to repeat information that is included in the response plan as well. Reference can be made to the RO's documents to further clarify any information in the area plan.

These area response plans will not be reviewed as part of certification. The only regulatory requirement that will be considered during the certification process will be the requirement to have such plans and to include a description of the process to develop such plans in the response plan. Transport Canada ER MSIs will verify adherence to this regulation during inspections conducted over the course of the 3-year certification period. Plans should be made available upon request by a TC ER MSI.

Response organizations should work as much as possible with other federal, provincial and municipal authorities, First Nations and coastal communities, and any other groups to develop their area response plans. Regional knowledge should be taken into consideration when developing the area plans to identify specific elements, such as environmental sensitivities and available resources.

Response organizations should develop a process to maintain and update these area plans. As time passes and more information is gathered, it is possible the area plans have distinct challenges or sensitivities that would require differing response strategies or tactics. It is recommended that the content of the area plan should be verified and updated at least every 5 years. This information does not have to be included in the oil spill response plan but could be requested during an inspection.

Response organizations should list, in their area response plans or their response plans, the shoreline types that are present in their GAR and briefly describe the procedures to treat them.

Response organizations should explain the methodology they will use to identify shoreline types within their GAR and how the strategies to treat various shoreline types are developed. Reference to internal documents or external documents would be acceptable. All documents should be accessible to TC at any time.

Transport Canada recognizes that during an incident, actual response methods will likely be determined by conducting shoreline clean-up assessment techniques (SCAT) and decisions made by a lead agency or through the Science Table who may select the best methodology and priority.

#### **4.7 TRANSPORT CANADA NOTIFICATION OF RESPONSE ACTIVATION**

Response organizations are often requested to assist or respond to pollution incidents that fall outside the scope of CSA 2001, such as non-ship-source spills from land-based facilities, pollution from offshore operations to which *CSA2001* does not apply or other incidents that do not involve prescribed vessels or oil handling facilities.

Transport Canada is responsible for ensuring that the preparedness capacity defined in CSA 2001 always remains available. Whenever an RO is activated, a notification should

be sent to TC as soon as feasible. However, it is understood that the information might be sensitive or might not be readily available in the early stages of an oil pollution incident. Information should be provided when it becomes available.

Transport Canada must be notified anytime that an RO has been activated to

- (a) A ship-source oil pollution incident; or,
- (b) A non-ship-source oil pollution incident that impacts equipment or resources listed in the RO's oil pollution response plan and that could potentially affect their response capacity.

The TC regional ER office should be notified by email no later than 6 hours after the RO is activated, if feasible. Transport Canada is aware that not all the information might be available during the initial notification. This notification must occur as soon as feasible and the information should include, if available:

- (a) the date, time and location of the pollution incident;
- (b) the identity of the polluter involved;
- (c) the nature of the pollution incident, including the type and estimated quantity of oil involved if known;
- (d) a description of the response actions underway or to be taken;
- (e) list of resources deployed or to be deployed by the RO;
- (f) on-scene conditions; and
- (g) any other relevant information.

Transport Canada is aware that some information might be confidential, as per non-disclosure agreements with industry, and could not be shared with TC. However, TC should be made aware of all other relevant information.

For a response to an oil pollution incident outside of the CSA 2001, the RO should confirm that their response capacity has not been impacted with respect to the 10,000-tonne requirements. If the RO no longer meets their level of certification, a written confirmation should be sent to TC ER program regional office and headquarters to further explain the extent to which they are not meeting the requirements, and the actions proposed to return to a state of compliance.

## 4.8 TRAINING

Training is an important element of responder development and is essential improving preparedness in responding to oil pollution incidents. Training should be offered to personnel, contractors and short-notice hires.

An RO's response plan should include a description of the training program highlighting the skills and knowledge that are necessary to undertake responsibilities during an oil pollution incident. This could include management training, specific training on equipment, and any other appropriate training.

Response Organizations will determine the training requirements for each role a responder could play during a response. There are no prescriptive training requirements in the regulations that will identify specific courses that a responder must take. Instead, it is up to the ROs to develop a training program to prepare a responder to undertake their roles during an oil pollution incident.

#### **4.8.1 Training Program**

As defined in section 171(c) of CSA 2001, every RO shall provide or arrange for prescribed training to prescribed classes of persons. Response organizations must train a person who may be requested to respond to an oil pollution incident to undertake specific roles in the response.

Response organizations should provide a training plan for RO personnel, contractors and short notice hires that covers the duration of the certificate of designation that includes:

- 1) a list of the courses, including any refresher courses for retraining, and the period of validity for each course;
- 2) a description of the type and level of training that is required for each response activity;
- 3) a list of the classes of persons who are scheduled to take the training and the level of training to be provided for each class of persons consistent with the responsibilities that they might be requested to undertake in a response to an oil pollution incident; and
- 4) in the case of a support vessel used in on-water recovery, a description of the training to be provided in respect of response equipment.

A training schedule for the classes of persons, including any schedule of retraining may be requested by the Minister upon request.

#### **4.8.2 Record of Training**

In delivering its training program, an RO must maintain a record of the training delivered including the course dates and names and positions of the persons who have received the training.

This information does not need to be included in the response plan; however, the information must be maintained and provided to the Minister upon request.

Inspectors may review training records during an inspection or the NRB may request a copy of training records during the certification process. Response organizations must keep the training records for a minimum of five years. The expiry date of any training must be included in the training record.

## 4.9 EXERCISE PROGRAM

### 4.9.1 Notification And Oil Pollution Incident Simulation Exercise Requirements

The RO exercise program is intended to demonstrate response preparedness capabilities and confirm the functionality of procedures, equipment and resources. Response organizations should endeavor to conduct exercises with members (prescribed vessels and/or OHFs), TC, CCG, and other government and/or external agencies. Response organizations must consider the participation of Indigenous groups and stakeholders, e.g., industry, contractors, other levels of government, and other agencies involved in oil pollution response when available and pertinent to the exercise objectives.

Key objectives of the exercise program are to:

- (a) Demonstrate and evaluate the effectiveness of the operational capability of RO procedures, equipment, and resources;
- (b) Support the development of RO personnel, contractors, and trained responders through participation in simulated response scenarios;
- (c) Identify areas within the Incident Management System, training programs, and response protocols that can be improved;
- (d) Maintain levels of competence of trained staff/contractors responders in preparation for real events
- (e) Provide a platform for community and stakeholder approach to exercising
- (f) Identify areas of common risk and test them. (Risk-based exercising).

### 4.9.2 Oil Pollution Incident Simulation Exercises

An RO exercise program should include, but not limited to, the following elements:

- a. Scenarios must always be related to a CSA-type oil pollution event (discharge from a prescribed vessel or discharge from an OHF during loading/unloading operations);
- b. A minimum of eight exercises per each PAR must be conducted;  

Simulated oil pollution incident exercises include table-top, discussion-based, and operations-based exercises.
- c. The exercise program must include at least one exercise for each of the quantities listed in sub-paragraph 26(3)(a) of the ERR over the certification cycle. The exercise program should include at least one exercise of each of these quantities:
  - i. For a level 1 (150 T), at least 120 tonnes of oil
  - ii. For a level 2 (1,000 T), at least 800 tonnes of oil
  - iii. For a level 3 (2,500 T), at least 2,000 tonnes of oil
  - iv. For a level 4 (10,000 T), at least 8,000 tonnes of oil
- d. A minimum of one exercise per ERA must be conducted per certification cycle (where applicable). Response organizations will decide which capacity level will

be exercised in the ERA. Transport Canada will accept this exercise as an equivalent to one of exercises required to be completed within the nearest PAR of the same level.

- e. The quantity of 8,000 tonnes must be exercised once over a three-year period commencing on the day on which their certificate was issued by TC. This will allow TC to evaluate the response capacity of all levels during the certification cycle. The intent of this regulation is to ensure ROs can mount an adequate response at the highest level of each relevant capacity and time standard requirement.
- f. The exercise program (planned exercises and tentative schedule) must be approved by the Minister during the certification process. Once approved, the RO must seek approval from TC to make any changes to the exercise schedule. The RO should contact the regional NRB representative to request such changes.
- g. The RO must provide an exercise schedule for the certification cycle when submitting their response plan during certification process. The schedule should include a description of the operational, discussion-based, and notification exercises that will be conducted in each year of the certification cycle indicating the capacity level of each. Providing the capacity level(s) and type of exercise (Table-top or operational) planned for each year of the three-year cycle will be sufficient during the certification process. This will allow TC to approve the exercise program, knowing that the dates might change over the course of the three years. The RO should plan a meeting with the TC ER regional office at the beginning of each year to plan their yearly exercise schedule as more firm dates are determined.
- h. The RO should make every effort to coordinate with the persons, entities or vessels/OHFs who would be involved in an oil pollution incident during their exercises to demonstrate various roles or functions they may be called upon to execute during an actual oil pollution incident. Exercises are a good tool to involve both public and private partners. Transport Canada realizes that it might be difficult to include simulated polluters during exercises due to their availability. However, invitations should be sent to various clients to request their participation in each exercise. Furthermore, invitations should be sent to federal, provincial, and municipal authorities, other agencies that play a key role during an oil pollution incident.
- i. Section 31 of the Regulations requires response organizations to invite local Indigenous communities and local stakeholders when conducting exercises. This can be accomplished by creating a policy framework to engage with these groups that includes regular invitations to Indigenous communities and other stakeholders. RO's may wish to have groups attend based on the scenario and objectives of the exercise. The regulations do not require all local groups to be invited to all exercises. Participation can range from being an observer to actively playing a role as a responder or adviser during the event.

- j. Transport Canada recognizes that the RO cannot control who attends from groups outside of their own organization however reasonable efforts must be made to invite these local groups. This can be in the form of phone calls, emails, or other written correspondence. An RO can leverage invitations sent by federal agencies such as the Canadian Coast Guard or ECCC. However, they should be mindful of the scope of stakeholders invited to attend. Records should be kept and ROs may be asked to present records of the invitation during an inspection.
- k. Transport Canada recommends that larger scale exercises such as the 2,000 and 8,000 tonne scenarios should not be planned in the last six months of the certification period. Ideally, any lessons learned, or corrective action plans will be completed prior to submission of the new response plan. This will allow enough time for the ROs to complete their post exercise report and to allow the Minister to provide comments on the exercise.
- l. Alternative exercise formats, such as workshops, focused sessions, etc., may be considered with prior approval from the Minister. The request along with information (scenario, format of exercise, objectives, sub-objectives, participants, etc.) should be sent to the NRB regional representative early in the planning phase for consideration to allow the NRB to review the proposal.
- m. Response Organization exercise program must include exercises to evaluate the effectiveness of the procedures, equipment and resources set out in the response plan referred to in Section 18 and the time standards referred in Section 24. Therefore, exercises must be conducted in designated ports, primary areas of response and enhanced response areas.
- n. ROs may request to conduct exercises in an area outside of the PAR and the ERA. The request should be made through the regional NRB representative and must be approved by the NRB. The exercise will be attributed to the nearest PAR from which the primary equipment would be mobilized.
- o. The flexibility in the exercise program allows ROs to conduct exercises anywhere in their GAR. This will ensure that the ROs can address any areas of risk or unique challenges by exercising scenarios in specific areas. This allowance is intended to increase their preparedness levels in the entire GAR.
- p. The following are definitions intended to guide RO's in the development of their oil pollution incident simulation exercises:

**Discussion-based exercises** are facilitated discussions that allow players to familiarize themselves with plans, policies, procedures, and explore their application in specific emergency scenarios. They include:

- **Seminars:** Seminars are a type of discussion-based exercise used to introduce and familiarize players with information and concepts. The focus is on ensuring all players have a common level of understanding.
- **Workshops:** Workshops are a type of discussion-based exercises used to draw information from players regarding a specific topic.

- **Table-Top Exercises:** A tabletop exercise is a type of discussion-based exercise in which players discuss and explore the response to a theoretical emergency scenario.
- **Immersive Simulations:** Immersive Simulations are exercises that use technology to model how an emergency scenario would unfold in response to player actions.

**Operations-based exercises** are exercises that validate training, plans, and procedures through the deployment of personnel, equipment, and other resources. They include:

- **Drills:** An exercise that validates and evaluates a single function at a single site.
- **Functional Exercise:** An exercise that validates and evaluates multiple functions at a single site.
- **Full-Scale Exercises:** An exercise that validates and evaluates multiple functions at multiple sites.

#### 4.9.3 Notification Exercises:

An RO must conduct at least four notification exercises in each PAR per year. Notification exercises are intended to test the RO's ability to contact personnel, contractors, responders, government agencies and other possible entities to ensure timely stand up of response resources as needed.

The notification exercises should be scenario-based and responses to the call out should be tracked and reported.

Transport Canada does not need to be involved in the development of these types of exercises; however, ROs are asked to send reports to TC within 45 days of the event. The reports should include:

- (a) Details of the scenario;
- (b) The name of the entities contacted;
- (c) Time contacted and call back time if no initial response; and
- (d) The nature of availability, such as:
  - i. The time required to arrive on site; and
  - ii. The number of responders available.

#### 4.9.4 Unannounced Exercises

Transport Canada may request the RO to undertake exercises whose scenario, objectives and timing are unknown to the staff and responders of the organization in order to evaluate preparedness levels of the RO.

Transport Canada will work with the RO's senior management to develop scenarios and objectives. In order for the unannounced exercise to be effective, it will be crucial that other RO personnel are not aware of the scenario. Exact dates for the unplanned exercise will not be divulged to the RO; however, TC and the RO senior management will work together to select a short range of dates for the event to occur in order to avoid disruption to the RO's normal operations such as training and maintenance (normally a one-week period).

Transport Canada will target 120-tonne or 800-tonne exercises in the PAR only in order to prevent excessive cost to the organization. Transport Canada may request an operational deployment of equipment as part of the objectives; however, the intent is that this type of operation would be scaled to ensure the RO could execute it using their internal resources. An RO may use a contractor if they choose to for efficiency purposes. The elements described above should form part of the planning discussions between TC and RO senior management prior to the event.

The unannounced exercise will count towards one of the required exercises of the same level for the PAR in which it is conducted.

#### **4.9.5 Development Of Objectives In Exercises**

As described in Section 29 of the ERR, an RO must involve TC in the development of their objectives and scenarios early in the planning phase of the exercises. This is not to say that TC should be involved in the overall design of the exercise program but at the regional level, TC should be invited to exercise planning meetings early in the development phase to provide input on any objectives or procedures that they would like to see tested during the exercise.

The ERR do not mandate the format to which this involvement has to be executed. For example, the RO may conduct planning meetings with TC and other entities present who may be participating in the event. As noted earlier, the RO should, where possible, coordinate exercises with persons, entities or vessels who might be involved during an actual pollution event.

At a minimum, TC should be notified 30 days in advance of an exercise. The notification should include key elements such as:

- Exercise date/time/location;
- Spill quantity;
- Scenario;
- Objectives;
- Response functions; and
- Key exercise participants.

As per Section 30 of the ERR, TC will have the authority to require an RO to add objectives or amend proposed objectives to an exercise, as necessary. The intent of the regulation is to allow TC the flexibility to request certain activities be demonstrated during an exercise when a deficiency, gap or lack of clarity has been identified in plans,

in previous exercises or during an actual response. The intent is not to give powers to an individual TC ER-MSI to ask for any objective to be exercised. Adding objectives to an exercise should be reviewed and approved by the NRB prior to the request to the RO to ensure consistency and fairness across regions and across the industry. A regional collaborative approach should be taken in developing these objectives. Response organizations should be given ample time to plan for the inclusion of the objective(s) in their regularly planned exercises.

#### **4.9.6 Exercise Reports**

As per Section 32 of the ERR's, a post exercise report must be sent to the Minister of Transport within 45 days following an exercise. This report must include:

- The date the exercise was conducted;
- A description of the exercise simulation;
- A description of the objectives of the exercise, the means used to meet the objectives and an indication of whether the objectives were met; and
- Any deficiencies that were identified, a description of the actions that are planned to address those deficiencies, and any possible improvements that could be made to the response plan or to future exercises.

Furthermore, exercise reports should include the following elements:

- A list of participants;
- A description of the equipment and resources that were utilized during the exercise;

Documentation may be included in the report or made available to TC upon request.

### **4.10 REMOVAL OF DESIGNATED PORT EQUIPMENT**

As defined in Section 36 of the ERR, 150-tonne incident equipment capacity cannot be removed without Ministerial approval. The request should be sent to the regional ER Manager for consideration. The request should include the following information:

- (a) Location of the spill and incident details;
- (b) The quantity of equipment already deployed;
- (c) The quantity of equipment that is required from the dedicated equipment capacity; and
- (d) The explanation why the equipment is required.

This equipment capacity (150 tonnes) is excluded from the 10,000-tonne capacity.

### **4.11 RESPONSE PLAN SUBMISSION**

#### **4.11.1 Electronic Submission**

During a new certification process, the new response plan should be submitted electronically to the chair of the National Review Board at least 90 days before the expiry date of the current certificate of designation.

Copies of the response plan should be written in both official languages when needed, where applicable. RO and TC will work together if TC receives a request to have plans in both official languages.

Annual plan updates should be submitted by email or file transfer to the chair of the NRB. If no changes are needed in the plan, an email should be sent to the chair of the NRB stating that no changes have been made to the previous version.

#### **4.11.2 Response Plan Reviews and Updates**

Section 20 of the ERR lays out certain criteria for the mandatory review and/or submission of the response plan.

There are several scenarios in which response plan must be reviewed:

- (a) Annually with updates as necessary
  - i. The plan should be submitted within one year of the previous submission.
  - ii. If there are no updates, the RO must notify TC as soon as the review is complete.
- (b) If one of the following events occurs:
  - i. If deficiencies are noted following an oil pollution incident or a simulation exercise
  - ii. If there are any changes to the information in any of paragraphs 18 (1)(i), (j) and (p) of the ERR or any other changes in the RO's operations that requires and increase in the quantity of equipment or resources that is currently not described in the response plan.

If a plan update is required following one of these events, the updated plan must be submitted to TC within 45 days of the occurrence of the event.

Note if no changes are required following a review after the events listed in Part (b) above then there is no requirement to notify TC.

The intent of these requirements is to capture changes that are more significant in nature such as the need to add personnel or increase the quantity or the capacity of response equipment which would require changes to the response plan.

A change to personnel does not require an immediate plan update but should be identified in the annual plan review. However, a notification should be sent to TC if a change to senior management occurs.

Normal movement of equipment for repair/replacement or maintenance does not require a plan update/submission.

If there are any other significant changes to the response plan such as the movement of major resources (large barges or major recovery devices for example), the RO should

notify the regional TC office as soon as feasible with a brief description of the changes. The chair of the NRB should be copied on any correspondence related to these changes.

As described in Section 21 of the ERR, an RO must keep the records of all plan updates for a minimum period of three years. Response organizations, when submitting their annual plan update or any plan revision during the certification process, should:

- (a) Include a revision log identifying all changes to the last version; and
- (b) Highlight all changes in the new plan submission.

#### **4.12 CERTIFICATE OF DESIGNATION**

The certification of designation is valid for a period of three years. The three-year period starts on the date the certificate of designation is issued.

The Minister has the ability to suspend or revoke a certification of designation if the Minister believes on reasonable grounds that the RO's response plan no longer meets the requirements of the regulation/standards.

During an inspection or a plan review, if an RO is deemed to be in non-compliance, TC will work with the RO to try to resolve the non-compliance issue. If an RO is not willing or able to return to a state of compliance, TC may suspend or cancel their certificate of designation or apply enforcement tools such as administrative monetary penalties as per the [Administrative Monetary Penalties and Notices \(CSA 2001\) Regulations](#).

#### **4.13 PUBLICATION OF FEES**

When ROs are updating their fees, the proposal needs to be published to ensure stakeholders are aware of the changes and provide a means for them to make comments or objections to the new fee proposal.

Response organizations are required to publish the new fee proposal in part 1 of the *Canada Gazette*. The implementation of the proposed fees will not take place until the notice of proposed fees is completed, as defined in section 170 (3) of the Act. A copy of the proposed notice should be sent to TC prior to publication in the *Canada Gazette*.

As a stakeholder may file an objection on the proposed fees, the proposed fee publication should include information on how to contact Transport Canada. Response Organizations should contact TC HQ office to obtain the appropriate contact information for publication in Canada Gazette.

## **SCHEDULES**

Schedule 1 – [Oil handling facility declaration at or south of 60°N](#)

Schedule 2 – [Oil handling facility declaration north of 60°N](#)

Schedule 3 – [Notification of proposed operations or notification of change to operations](#)

Schedule 4 – [Declaration for a vessel that is in waters at or south of 60°N](#)

Schedule 5 – [Declaration for a vessel that is in waters north of 60°N](#)